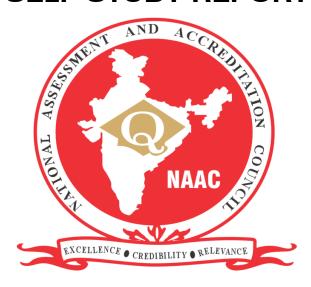
## INSTITUTIONAL ACCREDITATION SELF STUDY REPORT



## **Submitted to**

# NATIONAL ASSESSMENT AND ACCREDITATION COUNCIL (NAAC)

An Autonomous Institution of the University Grants Commission P.O. Box No.1075, Agarbhavi Bangalore-560072

By



Nashik District Maratha Vidya Prasarak Samaj's Karmaveer Adv. Baburao Ganpatrao Thakare College of Engineering, Nashik.

(Approved by AICTE, Affiliated to Savitribai Phule Pune University, Pune)
Udoji Maratha Boarding Campus, Gangapur Road, Nashik-422013,
Maharashtra.

Email: principal@kbtcoe.org Website: www.kbtcoe.org

Phone: 0253-2571439; Fax: 0253-2317016

#### COVERING LETTER FROM HEAD OF THE INSTITUTION



#### **NASHIK DISTRICT MARATHA VIDYA PRASARAK SAMAJ'S**

Karmaveer Adv. Baburao Ganpatrao Thakare

## **COLLEGE OF ENGINEERING**

Udoji Maratha Boarding Campus, Near Pumping Station Road, Gangapur Road, Nashik-422 013, Maharashtra - India

Phone: + 91 253-2571439, 2582891, 2314319, Fax: 0253-2317016 email: principal@kbtcoe.org website:www.kbtcoe.org

REF: NDMVPS/KBTCOE/OFFICE/ |59| /2016-17

DATE: 09/01/2017

To, The Director, National Assessment & Accreditation Council, P. O. Box No. 1075,Nagabhavi, Bangalore – 5600072

Subject: Submission of Self Study Report (SSR)

Respected Sir,

We are herewith submitting the Self Study Report (SSR) of NDMVPS Karmaveer Adv. Baburao Ganpatrao Thakare College of Engineering, Gangapur Road, Nashik-422013 (Maharashtra). We would like to inform you that, the copy of SSR is also uploaded on our institute website on 09/01/2017 for your kind perusal.

www.kbtcoe.org

http://kbtcoe.org/wpcontent/uploads/2017/01/NDMVPS\_KBTCOE\_NAAC\_SSR\_201617.pdf

You are kindly requested to accept our SSR for further processing.

This is for your kind information & consideration please.

Date: 09/01/2017

Place: Nashik

MASIK POPEN

Dr. K. S. Holkar

#Rhipripal

M.V.P. Samaj's K.B.G.T. College of Engineering
Udoji Maratha Boarding Compound
Gangapur Road, Nashik- 422 013

#### LIST OF ABBREVIATIONS

ABAP Advanced Business Application Programming

AC Air Conditioners

ACES Association of Computer Engineering Student AICTE All India Council for Technical Education

AMC Academic Monitoring committee ARC Application Receiving Center

ASCE The American Society of Civil Engineers
ASME American Society of Mechanical Engineers
BCUD Board of College and University Development

BoS Board of Studies

CAP Centralized Admission Process

CESA Civil Engineering Student Association

CRT Cathod Ray Tube

CSI Computer Society of India

CSI-ACE Computer Society of India -Association of Computer

Engineers

Dept. Department

DTE Directorate of Technical Education
DST Department of Science & Technology
E & TC Electronics & Tele-Communication

ED Employment Development
ERP Enterprise Resource Planning
FDP Faculty Development Program

GATE Graduate Aptitude Test HoD Head of Department

HRD Human Resource Development

IAB Industry Advisory Board

IAENG International Association of Engineers

ICONS Instrumentation and Control Student Association ICT Information and Communications Technology IEEE Institute of Electrical and Electronics Engineers

IEI Institution of Engineers India

IET Institution of Engineering and Technology

IETE Institution of Electronics and Telecommunication Engineers

IIIC Industry Institute Interaction cell
IIT Indian Institute of Technology

IoE Institute of Education

ISA Instrumentation Systems and Automation
ISO International Organization for Standardization

ISOI Instrument Society of India

ISRMTT Indian Society for Rock Mechanics and Tunneling Technology

ISTE Indian Society for Technical Education

ITI Industrial Training Institute

ITSA Information Technology Student Association

KBTCOE Karmaveer Advocate Baburao Ganpatrao Thakare College of

Engineering

LAN Local Area Network
LCD Liquid Crystal Display
LED Light Emitting Diode

LPD Liters Per Day

MBA Masters of Business Administration MCA Master of Computer Applications

ME Masters of Engineering

MESA Mechanical Engineering Student Association
MHRD Ministry of Human Resource Development

MoU Memorandum of Understanding

NMEICT National Mission on Education through Information and

Communication Technology

NPTEL The National Programme on Technology Enhanced Learning

NRI Non-Resident Indian
NSS National Service Scheme
OBE Outcome Base Education
OHP Over Head Projector

OPAC Online Public Access Catalog

PAES Progressive Association of Electronics and telecommunication

student

PBL Project Based Learning

PEO Program Educational Objectives

PG Post Graduate
PO Program Outcome

PUC Pollution Under Control

PV Photo- Voltaic

QIP Quality Improvement Programme

R&D Research and Development

SAE Society of Automotive Engineers.
SAP Systems, Applications, Products
SPPU Savitribai Phule Pune University

SPV Solar Photo Voltaic

STTP Short Term Training Program

TA/DA Travelling Allowance and Dearness Allowance

TPO Training and Placement Officer

UG Under Graduate

UPS Uninterrupted Power Supply

## NAAC STEERING COMMITTEE

| Sr<br>No | Name of Staff<br>Member | Designation            | Designation for Steering<br>Committee |
|----------|-------------------------|------------------------|---------------------------------------|
| 1        | Dr. K. S. Holkar        | Principal              | Chairman                              |
| 2        | Dr. N. S. Patil         | Vice Principal         | Vice Chairman                         |
| 3        | Prof. V. C. Shewale     | Associate<br>Professor | Coordinator                           |
| 4        | Prof. B. N. Shinde      | Associate<br>Professor | Co-coordinator                        |
| 5        | Prof. R. R. Shewale     | Assistant<br>Professor | Member                                |
| 6        | Prof. S. V. Bachhav     | Assistant<br>Professor | Member                                |
| 7        | Dr. S. J. Kokate        | Assistant<br>Professor | Member                                |
| 8        | Prof. S. P. Jadhav      | Assistant<br>Professor | Member                                |
| 9        | Prof. S. M. Waysal      | Assistant<br>Professor | Member                                |
| 10       | Prof. Y. P. Patil       | Assistant<br>Professor | Member                                |
| 11       | Mrs. R. Y. Khairnar     | Registrar              | Member                                |
| 12       | Mr. R. D. Aher          | Office Superident      | Member                                |

#### **PREFACE**

It gives me immense pleasure to present the Self- Study Report (SSR) of NDMVPS's K. B. T. College of Engineering, Nashik to the National Assessment & Accreditation Council (NAAC), Bangalore for assessment and accreditation. The report has been prepared with utmost care and as per the guidelines given by NAAC. The report comprises three sections: Section I - Profile of the Affiliated College, Section II - Criterion-Wise Inputs, Section III- Evaluative Report of the Departments.

The college is established in 1999 having 7.5 acres in the heart of Nashik city called as Udoji Maratha Boarding Campus Gangapur Road Nashik. The college has well equipped laboratories, workshop & hostel facilities along with LAN, Internet, Wi-Fi & required software's. The college at present provides four-year Bachelor's Degree Courses in Engineering affiliated to Savitribai Phule Pune University. The various under graduate courses are Mechanical, Computer, Instrumentation and Control, Electronics and Telecommunication, Civil, Information Technology. Also post graduate courses in M.B.A, M.C.A, M.E (Civil- Construction Managment) and M.E. (Mechanical- Design Engineering)

We are committed to impart quality engineering education and create opportunities for urban and rural students to become able engineers and technocrats. This accreditation process will provide us an opportunity to know our strengths and weaknesses and to implement the suggestions given by the peer team.

It was difficult to complete this self-study report without the cooperation of entire team of KBT College of Engineering. At first, I would like to thank the members of the Steering Committee, the Heads of the Departments, the faculty and staff for their contribution in the preparation of SSR. I take this opportunity to thank our Management for their whole hearted support for this endeavor.

We are eagerly looking forward to welcome the peer team in the beautiful premises of K. B. T. College of Engineering, Nashik.

Dr. K. S. Holkar Principal

#### **EXECUTIVE SUMMARY**

## **Criterion I: Curricular Aspects**

NDMVPS's KBTCOE is an Institute affiliated to Savitribai Phule Pune University (SPPU). Institute's senior faculty members contribute their efforts in designing and developing curriculum at University level. Curriculum is designed and developed in consultation with industry experts, professional bodies to bridge the gap between academia and industry. The Institute received fund under BCUD/QIP schemes for various programmes for improving teaching practices and translating curriculum. The Institute provides ICT facility, smart classroom, well-equipped laboratories, e-learning resources, Internet connectivity with 155 Mbps, NMEICT center, Aakash and R & D center. The Institute has adopted and developed Outcome Base Education (OBE) framework for effective curriculum delivery and transaction on the curriculum provided by the University. The Institute has developed and mapped components like Program Educational Objectives (PEO), Program Outcomes (PO), Course objectives and Course Outcome (CO). Institute has done the mapping of each course outcome with the Program Outcomes to evaluate and achieve the teaching learning outcome. The Institute interacts with industries to identify the regional and global employment need, as well as conduct skill oriented programmes for students to make them industry ready. The Institute has started innovative programme MVP SAP which focus on improving employability skill among students. The Institute also provides value added programmes to make students employable and to increase life skill in students. Apart from curriculum skill oriented programmes are conducted and students have given academic flexibility to achieve their goals and objectives. The Institute has developed ERP system to monitor and facilitate the academic curriculum as well as overall functioning of the Institute. At the Institute level feedback are taken periodically from stakeholders and their statistical analysis is carried out by Academic Monitoring Committee (AMC) to achieve curriculum enrichment.

## **Criterion II: Teaching-Learning and Evaluation**

The Institute follows rules, regulations and guidelines specified by DTE. The Institute participates in centralized admission process (CAP) conducted by DTE by a transparent, well-administered mechanism, complying with all the norms of the concerned regulatory/governing agencies including state and central governments. Institute takes efforts to serve students of different back grounds and abilities, through effective teaching-learning experiences. The Institute follows government policies, rules & regulation specified by SPPU to cater to the needs of differentially-able students by providing facilities like Lift, Ramp. Institute assess the needs of students' in terms of knowledge, skills and conducts various soft skill classes, Expert Lectures, value added courses like SAP, PMKVY, guidance for competitive exams like GATE, Civil Services. Institute has established Training and Placement (T&P) cell & tutor/mentor scheme for students which provides academic support, personal and psycho - social support, guidance services, individual level counseling. Institute organizes conference, seminars, workshops, industrial visits, technical events like MECHANZA, INSTRUBOTICS, ELICIT, KSHITIJ, Poster competitions for students to expose their advanced level of knowledge and skills. Institute has Design Innovation Center (DIC), Aakash R&D and Remote Center, NMEICT Remote Center (IIT Mumbai), Automation Center, Young Engineers Lab to develop innovative & scientific temper among students & staff. Institute encourage faculty to adapt innovative teaching methods by organizing FDP & expert lectures. Various innovative

teaching methods adopted by the faculty like brain storming, group discussions, puzzle solving, case studies for effective teaching-learning. The faculty is encouraged to participate in training programmes /workshops/ seminars/conferences/FDPs to update knowledge and develop professional skills by providing duty leaves, registration fees etc. Institute has facilities like ICT enabled classrooms & labs, Internet (155 MBPS) facility, Wi-Fi Campus, Digital Library, NPTEL videos, e-Journals to enhance the teaching learning process. Institute has well organized teaching learning process. Institute has Academic Monitoring Committee (AMC) to monitor all the Academics, student performance, overall teaching learning process to achieve maximum academic performance of the students & institutional progress in quality education. Institute has also developed ERP system to monitor & facilitate the academics as well as overall functioning. Institute has effectively implemented the evaluation reforms of the SPPU. Institute has assigned Chief Exam Officer (CEO) for smooth conduction of University exam by providing a good IT infrastructural support. This evaluation process is reformed and is being evolved continuously. Institute has adopted effective formative & summative assessment process to evaluate attainment levels of student learning outcomes. Institute has implemented OBE as per the requirement. Institute has developed PEO, PO, CO, which are in accordance with the University. Institute has done mapping of the courses with PO. Institute regularly monitors the attainment of the same by an effective teaching learning & evaluation process and infrastructure to meet the above requirements.

## Criterion III: Research, Consultancy and Extension

The Institute promotes research culture amongst the faculty as well as students by facilitating and motivating them to participate in research and related activities. The institute has Aakash R&D Center, NMEICT Remote Center (IIT Mumbai) and First Design & Innovation Center - Spoke Center (in association with Savitribai Phule Pune University and MHRD New Delhi). The Dean R&D cell of the institute creates conducive environment for promotion of Research, Innovation and Consultancy activities in the Institute. Faculty and students are encouraged to publish their research work in reputed journals and conferences. Institute faculties have published total 139 papers in international journals and 8 papers in national journals. Faculty has presented total 106 papers at international conferences and 35 at national conferences in last four years. For up gradation of faculty and students knowledge 21 workshops, 03 Faculty Development Programs and 10 seminar programs were conducted in last four years. Students are also actively involved in innovative projects and participating in various competitions. State-of-art research facility and journals are available at the Institute to promote the research. Institute offers SAP certification courses. Institute has signed total 36 Memorandum of Understanding (MoU's) with the industries. To inspire faculty and students, Institute organizes meetings and interactions with eminent scientists and industrial persons by inviting them for expert talk. Institute has established First Automation Training Centre in collaboration with FOX Controls, Nashik. Currently six BCUD-SPPU minor research projects are ongoing and one SERB-DST, Govt. of India major project is ongoing whereas, four BCUD minor research projects are completed. Consultancy work of rupees 5.58 lakhs completed in last four year and this year around 65 lakhs consultancy work is under progress. To develop social responsibility, Institute has established National Service Scheme unit in 2004. NSS unit arranged the seven day residential camp in which almost 75 students (both boys and girls) participate to inculcate social responsibility.

## **Criterion IV: Infrastructure and Learning Resources**

Our Institute has got a beautiful campus and has distinctive architecture, which is located at the heart of Nasik city. Infrastructure at the campus is fully furnished and well equipped as per the requirements of AICTE norms. Our management always tries to provide the best infrastructure for the ease of teaching learning process for the faculty members and students. Infrastructure is build by keeping student as centre of focus. Care has always been taken in proper functioning of the various student activities. Maintenance of the infrastructure and equipment is carried out periodically to assure the best performance and quality functioning.

Institutes consist of various buildings among them building, 'A' as administrative office at the ground floor, library is on first and second floor, MBA department on third floor and MCA department on fourth floor. The building 'B' with Mechanical department on ground and first floor, Computer department on second and third floor. Building 'C' with Civil department on ground and first floor, Instrumentation and Control department on second floor, E&TC department on third and fourth floor and IT department on the fifth floor. All the class rooms are ICT enabled and various techniques are used for teaching. Girls Hostel is located inside Institute campus. Institute provides all the required amenities for the comfortable environment at the campus. Institute has in-campus cafetarea with appropriate food quality. Playground & Gymnasium is available for students to show their sports caliber in various sport competitions. The various security provisions are made available to maintain safety and discipline in campus. Total campus is kept under CCTV surveillance. Hence, Institute meets the entire infrastructure requirement for the proper functioning of the engineering education process.

## **Criterion V: Student Support and Progression**

Institute plays key role for student support and progression in various ways throughout the completion of course. Once the student's admits in the Institute, leaflet/ Prospectus are provided to know all about the institute. Institute helps the students regarding scholarship issued by the various government organizations. Institute provides academic support and facilities to SC/ST, OBC, EBC etc, and physically disable students. Institute takes initiative for over all development of students. Institute has established Tutor/Mentor scheme for counseling and motivating students to participate in various competitions. The TPO of Institute plays an important role for employability of student in various organizations. Institute has different dedicated grievance cells to resolve the issue of students. Institute has alumni association to preserves a better relationship. Institute has strong academics in the university. Institute conducts various curriculum enrichment programme for students to face the industry challenges. Institute has balanced facilities for academic and extracurricular activities. Institute has well equipped gymkhana. Institute also focuses on improvement of quality through a feedback system. Institute publishes "Abhivyakti" collage magazine to highlights the achievements of students and represent their skills other than academic. Institute has student council, student parliament and various department student associations for enhancement of overall skills.

## Criterion VI: Governance, Leadership and Management

All the UG and PG courses offered by the Institute are defined with the specific objective. Our management has stated clear vision and mission for the benefit of common masses. Institute has well defined organization structure which clearly indicates transparent academic and administrative functioning. Institute has implemented effective feedback mechanism to improve the overall quality of

institutional growth. Institute has policies for recruitment, performance appraisal, and welfare schemes for staff. Feedback and appraisal are implanted for corrective measures. Institute has established transparent procedures and process for planning and allocation of financial resources. Institute has budgetary provisions for academic and administrative activities. Every year, financial audit is carried out by external agencies. Institute has taken various initiatives for resource mobilization in research, consultancy and innovation amongst the staff. Institute has academic monitoring committee to monitor all the academics, students' performance, overall teaching learning process to achieve maximum academic performance of the students and institutional progress in quality education. IQAC is not presently implemented; its work is carried out by academic monitoring committee.

## **Criterion VII: Innovations and Best Practices**

The Institute and management are well conscious about environmental issues. The Institute is much sensitive for making the eco-friendly campus by adopting certain measures and practices. The Institute has been appreciated and awarded for "green building" initiative. The Institute has done green audit of campus. The Institute has taken due care for less energy consumptions, including electronic ballast tube lights, electronic regulators for fans, minimum use of AC's, buy-back schemes etc. Institute has implemented renewable practices in campus such as solar parking lights, solar water heater etc. The Institute has implemented rain-water harvesting, which has significantly contributed to increase ground water levels and water expenses. This system is also useful for bore/ well recharging. The Institute adopts distributed parking areas for staff, students and visitors, arranges PUC camp, no vehicle day, wormy compost plant for organic waste management etc to reduce carbon neutrality. The Institute adopted tree plantation policy name as "One Student, One Tree". E-waste management of biomedical lab instruments and UPS batteries are exchanged by buyback schemes. The Institute adopted different innovative practices such as Industry Advisory Board, e-learning and appreciation awards. Institute appreciates students during annual function for remarkable achievements in curricular and extra-curricular activities. The Institute motivates students to participate in university state level project competition like "Avishkar". The Institute has Design Innovation Centre, Robotics and Automation lab, E-governance with educational ERP software and various clubs for overall developments of students. The Institute promotes students to participate intra-department competitions like SAE SUPRA, Idea Sparks etc. The best practices of Institute include industry practices, collaborative counseling, mentoring practice, student parliament and research based practices. Industry practices bridge the gap between academic curriculum and industry expectations. Collaborative counseling, mentoring practice and student parliament is used to develop effective mentoring relationship that is characterized by mutual respect, trust and transparency. Professional counseling includes goal setting exercises, time management, asking thought-provoking key questions and study skills etc. Research based practices are used to motivate the faculty and student to conduct research activities. Institute organizes conferences, workshops, seminars and departmental technical events to create awareness among faculty and students about emerging trend in engineering and technology.

#### **SWOC - ANALYSIS**

## **Strengths:**

- Well Equipped Infrastructure
- Visionary Management
- Adequate Highly Qualified staff
- Centrally Located Campus
- Better Academic Result
- Systems in Place
- Funded R & D Projects
- Wi-Fi Campus
- Campus under CCTV surveillance
- DIC & SAP Centre
- MoU's
- Industry Institute Interactions
- ICT enabled Classrooms
- e- Journal resources
- Transparent and Discipline Campus
- Tobacco Free Campus

## **Opportunities:**

- To Start Research Center & PG Courses
- Interdisciplinary R & D Projects
- Resource utilization can be enhanced
- Good International Collaborations
- PMKVY / State Government Skill Development Programs can be enhanced

## Weaknesses:

- Research Centre
- Collaborations
- International Accreditation

## **Challenges:**

- To improve placements
- Academic System Development
- Collaboration with Industry

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## **Profile of the Affiliated / Constituent College**

## 1 Name and Address of the College:

| Name:                   | Nashik District Maratha Vidya Prasarak Samaj's<br>Karmaveer Adv. Baburao Ganpatrao Thakare College of<br>Engineering   |  |  |
|-------------------------|--|--|--|
| Address:                | Nashik District Maratha Vidya Prasarak Samaj's<br>Karmaveer Adv. Baburao Ganpatrao Thakare College of Engineering<br>Udoji Maratha Boarding Campus, Near Pumping Station<br>Gangapur Road,Nashik |  |  |
| City: Nashik            | Pin:422013 State: Maharashtra  |  |  |
| Website: www.kbtcoe.org |  |  |  |

## 2 For Communication:

| Designation                       | Name              | Mobile     | E-mail                   |
|-----------------------------------|-------------------|------------|--------------------------|
| Principal                         | Dr. K. S. Holkar  | 9822379056 | principal@kbtcoe.org     |
| Vice Principal                    | Dr. N. S. Patil   | 9922420198 | viceprincial@kbtcoe.org. |
| Steering Committee<br>Coordinator | Prof.V.C. Shewale | 9860190034 | deanacademic@kbtcoe.org  |

| Telephone with STD code | O: 0253-2571439, 2582891 |  |
|-------------------------|--------------------------|--|
| Fax                     | 0253-2317016             |  |

## 3 Status of the Institution:

| Affiliated College  | ٧ |
|---------------------|---|
| Constituent College |   |
| Constituent College |   |

## 4 Type of Institution:

## a. By Gender

| i   | For Men      |  |
|-----|--------------|--|
| ii  | For Women    |  |
| iii | Co-education |  |

## b. By Shift

| i.   | Regular | $\sqrt{}$ |
|------|---------|-----------|
| ii.  | Day     |           |
| iii. | Evening |           |

5 It is a recognized minority institution?

| Yes |  |
|-----|--|
| No  |  |

If yes specify the minority status (Religious/linguistic/ any other) and provide documentary evidence. NA

6 Sources of funding:

| Government     |           |
|----------------|-----------|
| Grant-in-aid   |           |
| Self-financing | $\sqrt{}$ |
| Any other      |           |

7

- a. Date of establishment of the college: 23/07/1998 (dd/mm/yyyy)
- b. University to which the college is affiliated /or which governs the college (If it is a constituent college)

Savitribai Phule Pune University

c. Details of UGC recognition:

| <b>Under Section</b> | Date, Month & Year<br>(dd-mm-yyyy) | Remarks(If any) |
|----------------------|------------------------------------|-----------------|
| i. 2 (f)             | NA                                 | NA              |
| ii. 12 (B)           | NA                                 | NA              |

(Enclose the Certificate of recognition u/s 2 (f) and 12 (B) of the UGC Act)

d. Details of recognition/approval by statutory/regulatory bodies other than UGC (AICTE, NCTE, MCI, DCI, PCI, RCI etc.)

| Under<br>Section/<br>clause | Recognition/Approval<br>details Institution/<br>Department<br>Programme | Day, Month<br>and Year (dd-<br>mm-yyyy) | Validity                    | Remarks |
|-----------------------------|---|---|-----------------------------|---------|
| i.                          | AICTE   | 25-04-2016                              | One Academic year (2016-17) |         |

(Enclose the recognition/approval letter)

|  | he affiliating university zed by the UGC), on its  | -   |   | (40)                   |
|--|--|---|---|------------------------|
| reedgiii                               | Yes $\sqrt{}$  | No  |   |                        |
|  |  |   |   |                        |
| If                                     |  | _   | g the autonomous status?                                      |                        |
|  | Yes  | No  | $\sqrt{}$   |                        |
| 9 Is the c                             | ollege recognized By UGC as a College  | with Potential fo   | or Excellence (CPE)?  |                        |
|  | Yes  | No  | $\boxed{ \   }$   |                        |
|  | If yes, date of recognit   | ion:NA  | (dd/mm/yyyy)  |                        |
| b                                      | for its performance by   | any other gover   | rnmental agency?  |                        |
|  | Yes √  | No  |   |                        |
|  |  |   |   |                        |
|  | yes, Name of the agency  |   |   |                        |
| D                                      | ate of recognition: 28/07  | /1998 (dd/mm/ <u>y</u>  | yyyy)   |                        |
|  |  |   |   |                        |
| 10 Locatio                             | n of the campus and area   | a in sq.mts:  |   |                        |
| 10 Locatio                             | <u>-</u>   | <u>-</u>  | 1   |                        |
| 10 Locatio                             | Location *   | Urban   |   |                        |
| 10 Locatio                             | <u>-</u>   | <u>-</u>  |   |                        |
|  | Location *  Campus area in sq. mts  Built up area in sq. mts   | <b>Urban</b> 43838 sq.m.  |   |                        |
| (*                                     | Location *  Campus area in sq. mts  Built up area in sq. mts  Urban)   | Urban 43838 sq.m. 24905 sq.m  |   | 1                      |
| (*<br>11 Faciliti<br>or othe           | Location *  Campus area in sq. mts  Built up area in sq. mts  Urban)  es available on the campus details at appropriate p  | Urban 43838 sq.m. 24905 sq.m  ous (Tick the avlaces) or in cas                          | vailable facility and provide<br>the institute has an agree   | ment with              |
| (* 11 Facilitie or other a             | Location *  Campus area in sq. mts  Built up area in sq. mts  Urban)  es available on the campus details at appropriate pagencies in using any of  | Urban 43838 sq.m. 24905 sq.m  ous (Tick the avlaces) or in case of the listed fa        | • •   | ment with              |
| 11 Facilitie or other a facilitie      | Location *  Campus area in sq. mts  Built up area in sq. mts  Urban)  es available on the campus details at appropriate progencies in using any consistence of the campus covered under the agreement of the campus covered under the | Urban 43838 sq.m. 24905 sq.m  ous (Tick the avlaces) or in case of the listed farement. | e the institute has an agree<br>acilities provide information | ment with<br>on on the |
| (* 11 Facilitie or other a             | Location *  Campus area in sq. mts  Built up area in sq. mts  Urban)  es available on the campus details at appropriate progencies in using any cost covered under the agree Auditorium/seminar control of the control of the control of the control of the campus details at appropriate progenities in using any cost covered under the agree Auditorium/seminar control of the campus details at appropriate progenities in using any cost covered under the agree and the campus details at appropriate progenities are control of the campus details at appropriate progenities are control of the campus details at appropriate progenities are control of the campus details at appropriate progenities are control of the campus details at appropriate progenities are control of the campus details at appropriate progenities are control of the campus details at appropriate progenities are control of the campus details at appropriate progenities are control of the campus details at appropriate progenities are control of the campus details at appropriate progenities are control of the campus details at appropriate progenities are control of the campus details at appropriate progenities are control of the campus details are control of the campus details are control of the campus details at appropriate progenities are control of the campus details are control of the campus de | Urban 43838 sq.m. 24905 sq.m  ous (Tick the avlaces) or in case of the listed farement. | e the institute has an agree<br>acilities provide information | ment with              |
| 11 Facilities or other a facilities i. | Location *  Campus area in sq. mts  Built up area in sq. mts  Urban)  es available on the campus details at appropriate progencies in using any of scovered under the agree Auditorium/seminar consports facilities  | Urban 43838 sq.m. 24905 sq.m  ous (Tick the avlaces) or in case of the listed farement. | e the institute has an agree<br>acilities provide information | ment with<br>on on the |
| 11 Facilities or other a facilities i. | Location *  Campus area in sq. mts  Built up area in sq. mts  Urban)  es available on the campus details at appropriate progencies in using any cost covered under the agree Auditorium/seminar control of the control of the control of the control of the campus details at appropriate progenities in using any cost covered under the agree Auditorium/seminar control of the campus details at appropriate progenities in using any cost covered under the agree and the campus details at appropriate progenities are control of the campus details at appropriate progenities are control of the campus details at appropriate progenities are control of the campus details at appropriate progenities are control of the campus details at appropriate progenities are control of the campus details at appropriate progenities are control of the campus details at appropriate progenities are control of the campus details at appropriate progenities are control of the campus details at appropriate progenities are control of the campus details at appropriate progenities are control of the campus details at appropriate progenities are control of the campus details at appropriate progenities are control of the campus details are control of the campus details are control of the campus details at appropriate progenities are control of the campus details are control of the campus de | Urban 43838 sq.m. 24905 sq.m  ous (Tick the avlaces) or in case of the listed farement. | e the institute has an agree<br>acilities provide information | ment with<br>on on the |
| 11 Facilities or other a facilities i. | Location *  Campus area in sq. mts  Built up area in sq. mts  Urban)  es available on the campus details at appropriate progencies in using any of scovered under the agree Auditorium/seminar consports facilities  | Urban 43838 sq.m. 24905 sq.m  ous (Tick the avlaces) or in case of the listed farement. | e the institute has an agree<br>acilities provide information | ment with<br>on on the |

| iii.  | Hostel   | Hostel         |           |  |  |  |  |  |  |
|-------|--|----------------|-----------|--|--|--|--|--|--|
|       | Boys' hostel   |                | ,         |  |  |  |  |  |  |
|       | 1 Number of hostels  | 01             |           |  |  |  |  |  |  |
|       | 2 Number of inmates  | 50             |           |  |  |  |  |  |  |
|       | 3 Facilities (mention available facilities) Well-furnished room with table chair and cupboard  |                |           |  |  |  |  |  |  |
|       | Girls' hostel  | √ \            |           |  |  |  |  |  |  |
|       | 1 Number of hostels  | 01             |           |  |  |  |  |  |  |
|       | 2 Number of inmates  | 232/240        |           |  |  |  |  |  |  |
|       | Facilities (mention available facilities) Well-furnished room with table chair and cupboard  | √              |           |  |  |  |  |  |  |
|       | Working women's hostel   | NA             |           |  |  |  |  |  |  |
|       | 1 Number of hostels  | NA             |           |  |  |  |  |  |  |
|       | 2 Number of inmates  | NA             |           |  |  |  |  |  |  |
|       | 3 Facilities (mention available facilities)  | NA             |           |  |  |  |  |  |  |
| iv.   | Residential facilities for teaching and non-teachinumbers available — cadre wise)  | ng staff (give | NA        |  |  |  |  |  |  |
| v.    | Cafeteria  |                |           |  |  |  |  |  |  |
| vi.   | Health Centre First aid, Inpatient, Outpatient, Emergency Ambulance Health Centre staff  | care facility, | 1         |  |  |  |  |  |  |
|       | Qualified doctor       Full Time       NA       Part Time       √         Qualified Nurse       Full Time       NA       Part Time       √ |                |           |  |  |  |  |  |  |
| vii.  | Facilities like banking, post office, book shops   |                | <b>V</b>  |  |  |  |  |  |  |
| viii. | Transport facilities to cater to the needs of students   | s and staff    | V         |  |  |  |  |  |  |
| ix.   | Animal house   |                | NA        |  |  |  |  |  |  |
| X.    | Biological waste disposal  | 1.41           | \<br>.l   |  |  |  |  |  |  |
| xi.   | Generator or other facility for management/electricity and voltage.  | regulation of  | $\sqrt{}$ |  |  |  |  |  |  |
| xii.  | Solid waste management facility  | _              | V         |  |  |  |  |  |  |

| xiii. | Waste water management | √ |
|-------|------------------------|---|
| xiv.  | Water harvesting.      | V |

## 12 Details of programmes offered by the college (Give data for current academic year)

| Sr. | Progra           | Name of the  | Dura-   | Entry  | Medium            | Sanction-           | No. of        |
|-----|------------------|--|---------|--|-------------------|---------------------|---------------|
| No  | -mme             | Programme/   | tion    | Qualifica -  | of                | ed/                 | students      |
|     | Level            | Course   |         | tion   | instruct-<br>tion | Approved            | admi-<br>tted |
|     |                  |  |         |  |                   | Student<br>strength |               |
| 1   |                  | Mechanical<br>Engineering                            | 4 Years | HSC<br>Science<br>(50% Marks<br>in PCM)            | English           | 120                 | 116           |
| 2   |                  | Computer<br>Engineering                              | 4 Years | HSC<br>Science<br>(50% Marks<br>in PCM)            | English           | 60                  | 63            |
| 3   | Under-<br>Gradua | Information<br>Technology                            | 4 Years | HSC<br>Science<br>(50% Marks<br>in PCM)            | English           | 60                  | 53            |
| 4   | te               | Electronics and<br>Telecommunicat<br>ion Engineering | 4 Years | HSC<br>Science<br>(50% Marks<br>in PCM)            | English           | 60                  | 42            |
| 5   |                  | Instrumentation<br>and Control<br>Engineering        | 4 Years | HSC<br>Science<br>(50% Marks<br>in PCM)            | English           | 40                  | 12            |
| 6   |                  | Civil<br>Engineering                                 | 4 Years | HSC<br>Science<br>(50% Marks<br>in PCM)            | English           | 60                  | 60            |
| 7   | Post-<br>Gradua  | M.E. (Design<br>Engineering)                         | 2 Years | B.E  | English           | 24                  | 17            |
| 8   | te               | M.E.(Constructi<br>on<br>Management)                 | 2 Years | B.E  | English           | 24                  | 24            |
| 9   |                  | Master of<br>Business<br>Administration              | 2 Years | Graduate in any discipline with minimum 50 % marks | English           | 60                  | 60            |
| 10  |                  | Master of<br>Computer<br>Applications                | 3 Years | Graduate in any discipline with minimum 50 % marks | English           | 60                  | 0             |

| 4 New progr             | amme                       | es introduced  | l in the co           | llege during | g the la             | st five yea         | ars if an          | y?                      |
|-------------------------|----------------------------|--|-----------------------|--------------|----------------------|---------------------|--------------------|-------------------------|
| Ye                      | s                          | <b>V</b>   | No                    |              |                      | Numb                | er                 | 02                      |
| Library, Podegree aw    | hysica<br>/arding<br>compt | ments: (responsible for the contraction of the cont | as departines. Simi   | ments, unle  | ess they<br>not list | are also<br>the dep | offerin<br>partmen | g academi<br>ts offerin |
| Faculty                 |                            | I  | Departme              | ents         |                      | UG                  | PG                 | Resear                  |
|                         |                            | (eg. Physics   | s, Botany             | , History e  | tc.)                 |                     |                    |                         |
| Science                 |                            |  |                       |              |                      |                     |                    |                         |
| Arts                    |                            |  |                       |              |                      |                     |                    |                         |
| Commerce                |                            |  |                       |              |                      |                     |                    |                         |
| Any Other               | Mechanical Engineering     |  |                       |              |                      | V                   | √                  |                         |
| (Specify)               |                            | Computer Engineering   |                       |              |                      |                     |                    |                         |
|                         | Iı                         | Instrumentation & Control Engineering  |                       |              |                      |                     |                    |                         |
|                         |                            | Electronics  | & Teleco<br>Engineeri |              | on                   | √                   |                    |                         |
|                         |                            | Ci   | vil Engine            | ering        |                      | √                   | √                  |                         |
|                         |                            | Information  | Technolo              | gy Enginee   | ring                 | V                   |                    |                         |
|                         |                            |  | M.B.A                 |              |                      |                     | √                  |                         |
|                         |                            |  | M.C.A                 |              |                      |                     | √                  |                         |
| 6 Number of<br>BSc, MA, | _                          | rammes offe  | ered under            | (Programi    | me mea               | ns a degr           | ree cour           | se like BA              |
|                         |                            |  |                       |              |                      |                     |                    |                         |

13 Does the college offer self-financed Programmes?

| b. | semester system  | 10 |
|----|------------------|----|
| c. | trimester system |    |

## 17 Number of Programmes with

| a. | Choice Based Credit System              | 01             |
|----|---|----------------|
| b. | Inter/Multidisciplinary Approach        |                |
| c. | Any other (specify and provide details) | UG-06<br>PG-03 |

| 18 Doe | s the | college offer UG and/or PG programmes in Teacher Education?                     |
|--------|-------|---|
|        | Ye    | s No √  |
|        | If    | yes,  |
|        | a.    | Year of Introduction of the programme(s)(dd/mm/yyyy)                            |
|        |       | and number of batches that completed the programme                              |
|        | b.    | NCTE recognition details (if applicable)  |
|        |       | Notification No.:   |
|        |       | Date: (dd/mm/yyyy)  |
|        |       | Validity:   |
|        |       |   |
|        | c.    | Is the institution opting for assessment and accreditation of Teacher Education |
|        |       | Programme separately?   |
|        |       | Yes   |
| 19 Doe | s the | college offer UG or PG programme in Physical Education?                         |
|        | Ye    |   |
|        | If y  | ves,  |
|        | a.    | Year of Introduction of the programme(s) (dd/mm/yyyy)                           |
|        |       | and number of batches that completed the programme                              |
|        | b.    | NCTE recognition details (if applicable)  |
|        |       | Notification No.:   |
|        |       | Date: (dd/mm/yyyy)  |
|        |       | ( 33337   |

|    | Validity:  |         |               |             |
|----|--|---------|---------------|-------------|
| c. | Is the institution opting for assessment Education | ent and | accreditation | of Physical |
|    | Programme separately?                              |         |               |             |
|    | Yes  | No      | $\sqrt{}$     |             |

20 Number of teaching and non-teaching positions in the Institution

|   | Teaching faculty |    |                        |    |                        |    | Non-              |    | Taskasiasi         |    |
|---|------------------|----|------------------------|----|------------------------|----|-------------------|----|--------------------|----|
| Positions   | Professor        |    | Associate<br>Professor |    | Assistant<br>Professor |    | teaching<br>staff |    | Technical<br>staff |    |
|   | *M               | *F | *M                     | *F | *M                     | *F | *M                | *F | *M                 | *F |
| Sanctioned by the UGC / University / State Government Recruited             | 05               |    | 15                     | 03 | 61                     | 38 | 48                | 12 | 44                 | 16 |
| Yet to recruit  |                  |    |                        |    |                        |    |                   | _  |                    |    |
| Sanctioned by the Management/ society or other authorized bodies  Recruited |                  |    |                        |    | 04                     | 01 |                   |    |                    |    |
| Yet to recruit  |                  |    |                        |    |                        |    |                   | -  |                    |    |

<sup>\*</sup>M-Male \*F-Female

21 Qualifications of the teaching staff:

| Highest       | Professor |        | Associate<br>Professor |          | Assi<br>Prof | Total  |     |
|---------------|-----------|--------|------------------------|----------|--------------|--------|-----|
| qualification | Male      | Female | Male                   | Female   | Male         | Female |     |
|               |           | Pe     | rmanent                | teachers |              |        |     |
| D.Sc./D.Litt. |           |        |                        |          |              |        |     |
| Ph.D.         | 05        | 00     | 04                     | 01       | 03           |        | 13  |
| M.Phil.       |           |        |                        |          |              |        |     |
| PG            |           |        | 11                     | 02       | 58           | 38     | 109 |
|               |           | Te     | emporary               | teachers |              | 1      |     |
| Ph.D.         |           |        |                        |          |              |        |     |
| M.Phil.       |           |        |                        |          |              |        |     |
| PG            |           |        |                        |          |              |        |     |
| BE            |           |        |                        |          | 04           | 01     | 05  |
|               |           | P      | art-time               | teachers |              |        |     |
| Ph.D.         |           |        |                        |          |              |        |     |
| M.Phil.       |           |        |                        |          |              |        |     |
| PG            |           |        |                        |          |              |        |     |

22 Number of Visiting Faculty /Guest Faculty engaged with the College.

12

23 Furnish the number of the students admitted to the college during the last four academic years.

| Categories | Year 2015-16 |        | Year 2014-15 |        | Year 2 | 2013-14 | Year 2012-13 |        |
|------------|--------------|--------|--------------|--------|--------|---------|--------------|--------|
| Categories | Male         | Female | Male         | Female | Male   | Female  | Male         | Female |
| SC         | 25           | 14     | 19           | 10     | 21     | 17      | 16           | 23     |
| ST         | 9            | 4      | 10           | 6      | 11     | 8       | 6            | 8      |
| OBC        | 126          | 102    | 93           | 82     | 110    | 94      | 83           | 88     |
| General    | 115          | 76     | 130          | 86     | 130    | 80      | 155          | 90     |
| Others     | 29           | 20     | 24           | 24     | 29     | 15      | 33           | 27     |

24 Details on students enrollment in the college during the current academic year:

| Type of students  | UG   | PG  | M. Phil. | Ph.D. | Total |
|---|------|-----|----------|-------|-------|
| Students from the same state where the college is located | 1720 | 215 | -        | 1     | 1935  |
| Students from other states of                             | 22   | 5   | -        | -     | 27    |

| India            |      |     |   |   |      |
|------------------|------|-----|---|---|------|
| NRI students     | 0    | 0   | - | - | 0    |
| Foreign students | 0    | 0   | - | - | 0    |
| Total            | 1742 | 220 | - | - | 1962 |

| 25 Dropout ra | 5 Dropout rate in UG and PG (average of the last two batches) |    |        |  |  |
|---------------|---|----|--------|--|--|
| UG            | 5.85 %  | PG | 1.84 % |  |  |

26 Unit Cost of Education

NA

(Unit cost = total annual recurring expenditure (actual) divided by total number of students enrolled)

a. Including the salary component 52,327.59

a. Including the salary component
b. excluding the salary component
27,553.20

27 Does the college offer any programme/s in distance education mode (DEP)?

| 27 Does the con | lege offer any programmers in distance education mode (DLI):                                  |
|-----------------|---|
| Yes             | No $\sqrt{}$  |
| If yes,         |   |
| a)              | is it a registered centre for offering distance education programmes of another University NA |
|                 | Yes No  |
|                 |   |

b) Name of the University which has granted such registration.

|    | •             |                                | J                        |
|----|---------------|--------------------------------|--------------------------|
| d) | Programmes ca | arry the recognition of the Di | stance Education Council |
|    | Yes           | No                             |                          |

28 Provide Teacher-student ratio for each of the programme/course offered

c) Number of programmes offered

| Sr. No. | Name of Course                                   | Teacher-Student Ratio |
|---------|--|-----------------------|
| 1       | Mechanical Engineering                           | 1:18                  |
| 2       | Computer Engineering                             | 1:14                  |
| 3       | Information Technology                           | 1:14                  |
| 4       | Electronics and Telecommunication<br>Engineering | 1:15                  |

| 5 | Instrumentation and Control Engineering | 1:12 |
|---|---|------|
| 6 | Civil Engineering                       | 1:14 |
| 7 | Master of Business Administration       | 1:20 |
| 8 | Master of Computer Applications         | 1:30 |

| 9 Is the college applying for   |  |
|---|--|
| Accreditation : Cycle1 Cycle2 Cycle3 Cycle4 Cycle4  |  |
| Re-Assessment: (Cycle 1refers to first accreditation and Cycle 2, Cycle 3 and Cycle 4 refers to   |  |
| re- accreditation)  |  |
| Date of accreditation* (applicable for Cycle 2, Cycle 3, Cycle 4 and re-assessment only)  |  |
| Cycle1: NA (dd/mm/yyyy) Accreditation Outcome/ResultNot Available  Cycle 2: NA (dd/mm/yyyy) Accreditation Outcome/Result  Cycle 3: NA (dd/mm/yyyy) Accreditation Outcome/Result |  |
| * Kindly enclose copy of accreditation certificate(s) and peer team report(s) as an annexure.   |  |
| Number of working days during the last academic year 293 days.  |  |
|   |  |
| Number of teaching days during the last academic year 182 days  |  |
| 2 Number of teaching days during the last academic year 182 days  (Teaching days means days on which lectures were engaged excluding the examination days)                      |  |
| (Teaching days means days on which lectures were engaged excluding the  |  |
| (Teaching days means days on which lectures were engaged excluding the examination days)  |  |
| (Teaching days means days on which lectures were engaged excluding the examination days)  3 Date of establishment of Internal Quality Assurance Cell (IQAC)                     |  |
| (Teaching days means days on which lectures were engaged excluding the examination days)  3 Date of establishment of Internal Quality Assurance Cell (IQAC)  IQACNA             |  |
| (Teaching days means days on which lectures were engaged excluding the examination days)  3 Date of establishment of Internal Quality Assurance Cell (IQAC)  IQACNA             |  |
| (Teaching days means days on which lectures were engaged excluding the examination days)  Bate of establishment of Internal Quality Assurance Cell (IQAC) IQACNA                |  |
| (Teaching days means days on which lectures were engaged excluding the examination days)  Bate of establishment of Internal Quality Assurance Cell (IQAC) IQACNA                |  |

35 Any other relevant data (not covered above) the college would like to include. (Do not include explanatory/descriptive information)

## CRITERION I: CURRICULAR ASPECTS

## 1.1 Curriculum Planning and Implementation

1.1.1 State the vision, mission and objectives of the institution, and describe how these are communicated to the students, teachers, staff and other stakeholders.

## Vision and Mission of the Institution

#### Vision

To be internationally accredited, Multidisciplinary and Multi-collaborative institute working on technology enabled platform fostering innovations and patents through state-of-art academic system designed by highly qualified faculty for the development of common masses at large.

#### Mission

To educate and train common masses through undergraduate, post graduate, research programmes by inculcating the values for discipline, quality, transparency and foster career and professional development for employment thereby contributing to the development of society.

## **Goals of the Institution**

#### **Short Term Goals**

- Implement Project Based Learning (PBL).
- Application for National Board of Accreditation (NBA).
- Pradhan Mantri Kaushal Vikas Yojana
- Setting smart classroom at Institute.
- Enhancing E-learning facilities.
- MoU's/Collaboration with industry and Research Center.
- Preparing Research funding proposal forwarded to University/AICTE/DST.
- Attracting /deputing teaching faculty for the higher education.
- Adopt training programme for staff and faculty.
- Developing quality manual /handbook for Institute, Staff and students.
- Fostering/Promoting research culture.
- Establishing network with sistern Institutes and Industry.
- Attracting research scholars to institute.
- Organizing scientific events.
- To develop interdisciplinary projects.

## **Long Term Goals**

- Learning content management system environment.
- Portfolio development.
- ISO 29990.
- Virtual classroom.
- Starting Ph.D Center.
- Collaboration with foreign university/organizations.
- International Accreditation.

- Faculty enrichment programme.
- Research enrichment programme.
- Incubators.
- Provision of admission to UG/PG/R&D for NRI Students.

## Vision and Mission of the Institution are communicated to stakeholders:

- The vision and mission statements of the institute are displayed at prominent places like Principal office, department floors, classrooms, laboratories, Hostel, Library, college website, college brochure, department leaflet.
- The vision and mission statements of the institute are communicated through parents meet, student meetings, Alumni meets, Faculty orientation, Induction programmes, department meetings with faculty and staff.
- The vision and mission statements are published regularly in Institute prospectus/leaflet, Annual Institute Magazine, Departmental leaflets and other Institute publications.
- Vision, Mission and Objectives of the institute displayed at college websitewww.kbtcoe.org as shown in Fig 1.1.1



Fig 1.1.1 Vision, Mission and Objectives of the Institute

1.1.2 How does the institution develop and deploy action plans for effective implementation of the curriculum? Give details of the process and substantiate through specific example(s).

## Planning for effective implementation of the curriculum:

- Curriculum and Academic calendar are designed and published as per the Savitribai Phule Pune University (SPPU) instructions.
- At the beginning of each academic year, the University gives guidelines about the curriculum dates-
  - Commencement of the semester
  - End of the semester

- In Semester, End Semester Examinations
- Online Examinations
- Oral, Practical, Project Examinations
- Vacation for faculty
- Relieve faculty for CAP
- Accordingly, Dean Academic of the institute prepares Academic calendar, Activity calendar in consultation with the Principal. It is communicated to the Dean, HOD and faculty of the departments.
- Head of the department (HOD) distributes the subject by considering the subject choice form filled by the faculty members in order to have smooth conduction of curriculum, HOD allocates the working hours according to the competency of faculty. The activity is carried out immediately after the end of the current semester so faculty members get sufficient time for the preparation of the next semester subject.
- Time Table coordinator of each department prepares department Academic calendar, Activity calendar in consultation with Head of the Department. After subject distribution, Theory and Practical teaching plan entered in ERP by respective course faculty considering the academic calendar schedule.
- Faculty attends Short Term Training Programme, Faculty development programme, workshop, seminars conducted by the University.
- Institute also conducted programmes to develop teaching-learning skill among the faculty.

## **Deployment of Action plans:**

- Academic Monitoring Committee (AMC) monitors all the academics, student feedback, and overall teaching learning process to achieve maximum academic performance of the students.
- Regularly lectures are monitored by the academic monitoring committee. Corrective actions are taken by the head of the department in consultation with Principal, whenever it is needed.
- The Institute has developed ERP system to monitor and facilitate the academics as well as overall functioning of the Institute.
- The effective implementation of curriculum is ensured by conducting expert lectures, seminars, workshops, Training programmes etc.
- Additionally assignments, class tests are conducted to assess the knowledge of the students.
- Institute departments conduct mock test exams at the end of semester to assess the student progress in particular course.
- The overall performance and evaluation of students is properly done through continuous assessment of students in the semester/academic year.

Example: Institute design Academic calendar from University calendar and each department design own activity calendar and follow these schedules for effective implementation of the curriculum.

- University calendar
- Institute Academic calendar
- Department activity calendar
- Teaching plan

## Savitribai Phule Pune University

(Formerly University of Pune)



## ACAEMIC CALENDER FOR VARIOUS ACTIVITES FOR ENGINEERING COURSES FOR THE YEAR 2015-2016

## FIRST TERM

| Sr.<br>No. | Details of Activities               | Year  | Date                     |
|------------|-------------------------------------|---|--------------------------|
| 1          | Commencement of Teaching            | S.E/T.E/B.E. &MCA - II & III Year           | 15/06/2015               |
| 2          | Conclusion of Teaching              | S.E/T.E/B.E. &MCA - II & III Year           | 06/10/2015               |
| 3          | Commencement of Teaching            | M.E. II Year                                | 20/07/2015               |
| 4          | Conclusion of Teaching              | M.E. II Year                                | 07/11/2015               |
| 5          | Practical/Oral/ Project Examination | S.E/T.E/B.E.                                | 12/10/2015 to 27/10/2015 |
| 6.         | Theory Examination                  | S.E/T.E/B.E. &MCA - II & III Year           | 02/11/2015 to 27/11/2015 |
| 7          | Vacation for Faculty                |   | 08/10/2015 to 07/11/2015 |
| 8          | Relieve the Faculty for CAP         |   | 09/11/2015 Onwards       |
|            |                                     | SECOND TERM                                 |                          |
| Sr.<br>No. | Details of Activities               | Year  | Date                     |
| 1          | Commencement of Teaching            | F.E/S.E/T.E/B.E. & MCA -I, II & III<br>Year | 14/12/2015               |
| 2          | Conclusion of Teaching              | F.E/S.E/T.E/B.E. & MCA -I, II & III<br>Year | 02/04/2016               |
| 3          | Commencement of Teaching            | M.E .I & II Year                            | 11/01/2016               |
| 4          | Conclusion of Teaching              | M.E .I & II Year                            | 18/01/2016               |
| 5          | Practical/Oral/ Project Examination | S.E/T.E/B.E. &MCA - II & III Year           | 06/04/2016 to 23/04/016  |
| 6          | Theory Examination                  | S.E/T.E/B.E. &MCA - II & III Year           | 02/05/2016 to 28/05/2016 |
| 7          | Practical Examination               | M.E.I & II Year                             | 25/04/2016 to 30/04/2016 |
| 8          | Theory Examination                  | M.E.I & II Year                             | 16/05/2016 to 28/05/2016 |
|            |                                     |   |                          |
| 9          | Vacation for Faculty                |   | 13/04/2016 to 23/05/2016 |

Ganeshkhind, Pune- 07 Ref. No. PGS/ 1702 Date: - 22/05/2015 Asstt. Registrar (P.G. Admission)

Fig 1.1.2(A) University Academic calender

NASHIK DISTRICT MARATHA VIDYA PRASARAK SAMAJ'S

## KARMAVEER ADV. BABURAO GANPATRAO THAKARE COLLEGE OF ENGINEERING

NASHIK - 13

Udoji Maratha Boarding Campus, Pumping Station, Gangapur Road, Nashik-422013, Maharashtra, India

Visit us at : www.kbtcoe.org

Ref. No. NDMVPSKBTCOE/Acad/01 /2016-17

Date: 06/06/2016

## Academic Calendar (S.E., T.E., B.E. all branches) for year 2016-17 (Semester-I)

| Sr.<br>No. | Details of Activity  | Day       | Date                     |
|------------|--|-----------|--------------------------|
| 1          | Commencement of Teaching   | Wednesday | 15/06/2016               |
| 2          | Display of Attendance  | Friday    | 01/07/2016               |
| 3          | Ramzan-Id ( Holiday)   | Wednesday | 06/07/2016               |
| 4          | Display of Attendance  | Friday    | 15/07/2016               |
| 5          | Display of Attendance and letter to parents only for less than 75% attendance    | Monday    | 01/08/2016               |
| 6          | Independence Day   | Monday    | 15/08/2016               |
| 7          | Display of Attendance  | Tuesday   | 16/08/2016               |
| 8          | Pateti ( Holiday)  | Wednesday | 17/08/2016               |
| 9          | Samaj Din  | Friday    | 19/08/2016               |
| 10         | Display of Attendance & letters to parents of all students                       | Wednesday | 31/08/2016               |
| 11         | Ganesh Chaturthi ( Holiday)  | Monday    | 05/09/2016               |
| 12         | Bakari-Id ( Holiday)   | Monday    | 12/09/2016               |
| 13         | Display of Attendance  | Thursday  | 15/09/2016               |
| 14         | Display of Attendance & Department wise class coordinator meeting with HOD       | Wednesday | 05/10/2016               |
| 15         | Display of final detention list and letters to parents in case detained students | Thursday  | 06/10/2016               |
| 16         | Conclusion of Teaching   | Thursday  | 06/10/2016               |
| 17         | Karmaveer Dr. Vasantrao N Pawar Punyatithi                                       | Friday    | 07/10/2016               |
| 18         | Dasara ( Holiday)  | Tuesday   | 11/10/2016               |
| 19         | Last date for term work submission   | Wednesday | 12/10/2016               |
| 20         | Practical / Oral / Project Examination   |           | 13/10/2016 to 27/10/2016 |
| 21         | Theory Examination   |           | 04/11/2016 to 30/11/2016 |
| . 22       | Commencement of the II Semester  | Thursday  | 15/12/2016               |

\* Note: S.E online and T.E & B.E offline examination will be as per university schedule.

Prof. Vinod C Shewale Coordinator (Academics)

Dr. Jayant T Pattiwar

Fig. 1.1.2(B) Institute Academic calender

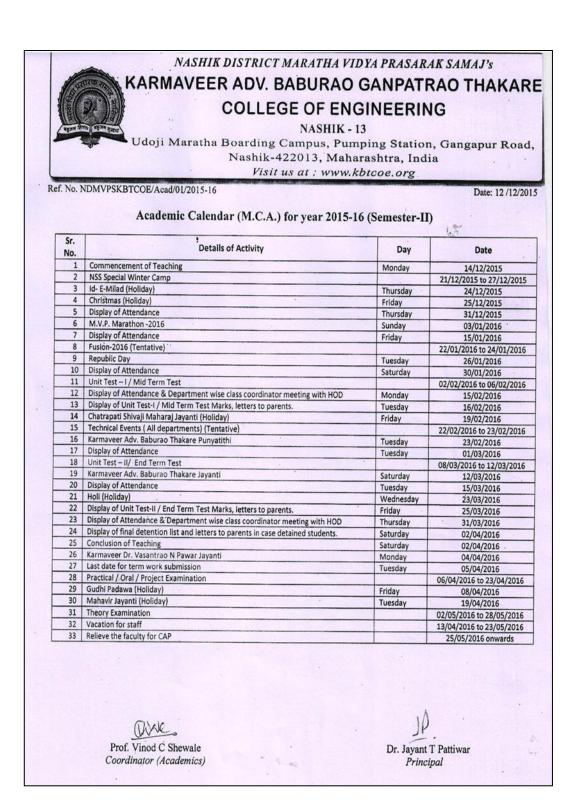


Fig. 1.1.2(C) Department Academic calender

## NASHIK DISTRICT MARATHA VIDYA PRASARAK SAMAJ'S



Udoji Maratha Boarding Campus, Near Pumping Station Road, Gangapur Road, Nashik-422013, Maharashtra - India Phone: +91 253-2571439, 2314319, Fax: 0253-2317016 email: principal@kbtcoe.org website: www.kbtcoe.org

## Academic Monitoring Cell

#### Staff Teaching Plan

Date: 09/12/2016

Academic Year: 2016-2017

ed by AICTE New Delhi

Course: UG

Branch: ELECTRONICS AND TELE

Year: BE

Semester: 7 TH SEM

Section: A

Sub Code: VLSI

Subject Type: THEORY

Subject: VLSI DESIGN AND TECHNOLOGY Emp ID: ETC009

Emp Name: GAWAI VIKAS PRALHAD

| Sr.No. | Unit | Topic Code | Expected Date | Topic Description                               |
|--------|------|------------|---------------|---|
| 1      | 1    | 1.1        | 15/06/2016    | DATA OBJEC<br>TS, DATA TYPES                    |
| 2      | 1    | 1.2        | 16/06/2016    | ENTITY, ARCHITECTURE & TYPES OF MODELING,       |
| 3      | 1    | 1.3        | 20/06/2016    | SEQUENTIAL STATEMENTS,<br>CONCURRENT STATEMENTS |
| 4      | 1    | 1.4        | 21/06/2016    | PACKAGES, SUB PROGRAM                           |
| 5      | 1    | 1.5        | 22/06/2016    | ATTRIBUTE                                       |
| 6      | 1    | 1.6        | 23/06/2016    | VHDL TEST BENCH,                                |
| 7      | 1    | 1.7        | 27/06/2016    | TEST BENCHES USING<br>TEXT FILES                |
| 8      | 1    | 1.8        | 28/06/2016    | VHDL MODELING OF COMBINATIONAL,                 |
| 9      | 1    | 1.9        | 29/06/2016    | SEQUENTIAL LOGICS & FSM                         |
| 10     | 1    | 1.10       | 30/06/2016    | METASTABILITY                                   |
| 11     | 2    | 2.1        | 04/07/2016    | PROM, PLA, ARCHITECTURES AND APPLICATIONS       |
|        |      |            |               |   |

Fig. 1.1.2(D) Sample copy of course Teaching Plan

What type of support (procedural and practical) do the teachers receive (from the University and/or institution) for effectively translating the curriculum and improving teaching practices?

The support provided by the affiliating University:

The University provides funds under various BCUD/QIP schemes for various grants such as seminar, workshop, Research project and National Conferences.

- University syllabus is changed after every 4 years to bridge the gap between Industry and Institute.
- Once syllabus is changed University or Board of Studies (BOS) conducts many syllabus orientation programmes jointly by the affiliated institutes to understand the new curriculum and to create awareness among teachers.
- In syllabus copy of University, unit wise text book and reference books are mentioned so students get benefit to easily search the content of syllabus.
- In syllabus structure of university Unit wise marks are assigned for each course unit.
- Guidelines for setting question papers are provided by University.
- To assess university papers, paper solution of respective course are provided by the University.
- Institute got funds under various schemes of BCUD/ DST QIP for research Details are shown in Table 1.1.3(A)

Table 1.1.3(A) Institute received funds under BCUD/QIP schemes

| Year    | Department                              | Name of Programme (BCUD/ QIP)  | Fund<br>Received |
|---------|---|--|------------------|
| 2013-14 |   | Two days state level seminar on<br>Tribological Aspects in Design<br>Engineering.  | 25,000/-         |
| 2014-15 | Mechanical<br>Engineering               | Research grant for Investigation of mechanical and wear properties of yttrium oxide and titanium carbide particle reinforced Aluminum matrix composites. | 2,00,000/-       |
| 2015-16 |   | Research grant for Heat Transfer<br>Enhancement using brine based nano<br>fluids.  | 19,02,850/-      |
| 2016-17 |   | Research grant for Performance study of Spherical Cavity Receiver of Solar Concentrator.   | 2,10,000/-       |
| 2016-17 |   | Two days National level workshop on<br>Conditioning Monitoring of Rotating<br>Machinery.   | 2,00,000/-       |
| 2013-14 | E & TC                                  | Equipment Grant (EQP 13185002)<br>Agilent Make 6 <sup>1/2</sup> Digit Digital<br>Multimeter.   | 60000/-          |
| 2014-15 | Engineering                             | Equipment Grant (EQP 141850001) Precision LCR-Q Meter  | 100000/-         |
| 2013-14 | Master of<br>Business<br>Administration | 1 <sup>St</sup> -National Conference on "Management Horizons in Business Innovation & Environment: Vision & Challenges"-2013.                            | 50000/-          |
| 2015-16 |   | National Conference on- " Entrepreneurship Development A Road Map to Make in India"-2016   | 115388/-         |
| 2016-17 |   | Research Project-: A Study on Impact of<br>Brand Building of Village with Special<br>Reference to Vadner Bhairao, Nashik.                                | 100000/-         |

| 2016-17 |   | Research Project: An Empirical Study on Financial Literacy & Financial Educational Awareness Among Farmers in Remote Area Around Nashik Region. | 200000/-   |
|---------|---|---|------------|
| 2013-14 | Civil                                   | BCUD Research Proposal  | 2,80,000/- |
| 2011-12 | Engineering                             | BCUD Research Proposal  | 2,60,000/- |
| 2016-17 | Instrumentation and control engineering | BCUD Research Proposal  | 1,40,000/- |

## The support provided by Institute:

- The Institute has adopted Outcome Base Education (OBE) framework. The institute has followed systematic and strategic approach in designing and developing OBE framework.
- The Institute also encourages the faculties to attend faculty development programme, short term training programmes (STTP), seminars, and workshops to enrich their subject knowledge.
- The Institute provides financial support to faculty to attend STTP, FDPs, workshops, seminars etc. to improve teaching competencies. The Institute also conducts such a kind of programmes for effectively translating the curriculum and to improve teaching practices.
- The Institute has conducted different programmes like Mission 10X, Faculty development programme to develop teaching skills and understand teaching methodology.
- The Institute provides various educational aid like OHP, LCD projectors etc.
- The Institute has high speed internet connectivity with 155 Mbps lease line.
- In Institute Wi-Fi facilities are provided throughout the campus.
- The Institute also provides Wi-Fi facility in Girls hostel campus.
- The institute has a well established central library as well as each department has a separate department library.
- The digital Library gives access to e-learning resources, video lectures from NPTEL, e-journals, magazines, subscriptions & transactions like ASCE, ASME, IEEE-ASPP, J-gate, Springer, Elsevier etc. It helps faculties as well as students to carry out research work.
- Information about all these learning resources is accessible throughout the campus via IP based and Online Public Access Catalog [OPAC].
- Subscribed e-resources are accessible through OPAC and users can access full text of required material from their department and classroom. This facility helps in planning lecture and preparing lecture notes/ presentations.
- Institute Received grant under National Mission on Education through ICT (NMEICT) (MHRD, Govt. of India) for Aakash and R& D center.
- The Institute encourages faculty and provide financial support for up-gradation of their academic qualification.
- In Institute various department has chapter of professional societies and it helps the faculties and students to bridge the gap between academic and industry. It also helps faculties in understanding emerging trends and recent technology in the field of engineering.

- The Institute has ICT enabled classrooms, well equipped laboratories, Robotics lab etc.
- Facilities provided by Institute are shown in Fig. 1.1.3(A)

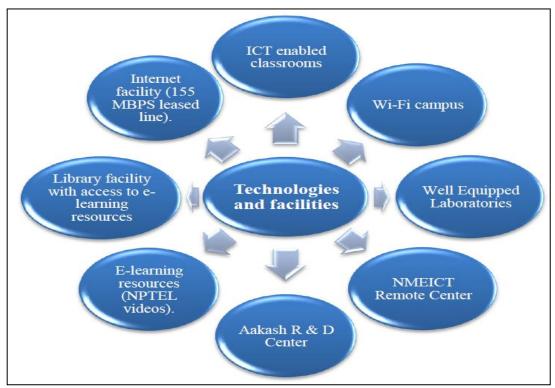


Fig. 1.1.3(A) Facilities provided by the Institute

• Institute has done the mapping of each course outcome with the Program Outcomes to evaluate and achieve the teaching learning outcome.

## Example:

Mapping of Course Design of Machine Element II (TE Mechanical Engineering) with the Program Outcomes.

- Course: Design of Machine Element II (TE Mechanical Engineering)
- Course Outcomes:
  - 1. Ability to design and analyze Mechanical transmission systems
  - 2. Ability to design and select different types of bearings from manufacturer's catalogue.
  - 3. Enhancement in proficiency of CAD software for design and analysis so that students are capable to generate production drawing.

Table 1.1.3 (B) Mapping of Course Outcome with Program Outcome Rating (2- High Rating, 1- Low rating, 0- No rating)

| Course  | Program Outcome |         |         |         |         |         |      |         |         |          |          |          |
|---------|-----------------|---------|---------|---------|---------|---------|------|---------|---------|----------|----------|----------|
| Outcome | PO<br>1         | PO<br>2 | PO<br>3 | PO<br>4 | PO<br>5 | PO<br>6 | PO 7 | PO<br>8 | PO<br>9 | PO<br>10 | PO<br>11 | PO<br>12 |
| 1       | 1               | 1       | 2       | 0       | 0       | 1       | 0    | 0       | 2       | 2        | 0        | 1        |
| 2       | 1               | 1       | 2       | 0       | 0       | 1       | 0    | 0       | 2       | 2        | 0        | 1        |
| 3       | 0               | 0       | 0       | 0       | 2       | 0       | 0    | 0       | 2       | 1        | 0        | 1        |

Programmes conducted by Institution/department on academic curriculum to improving teaching practices shown in Table 1.1.3(C)

Table 1.1.3(C) Programmes conducted by the Institution

| Year        | Name of<br>Programme   | Need of Assessment  | Duration                       | Resource<br>Person/Location  |
|-------------|--|---|--------------------------------|--|
| 2013-<br>14 | Two Week<br>ISTE Main<br>Workshop on<br>Computer<br>Networking             | The aim of the programme is to Provide an outstanding opportunity for academic communities to address the emerging technologies and challenges. | 30/6/2014<br>to<br>05/07/2014  | Remote center at<br>NDMVPS's KBT<br>COE Organized by<br>IIT Bombay |
| 2013-       | Two Week ISTE Main Workshop on Computer Programming                        | To provide an outstanding opportunity for academic communities to address the emerging technologies and challenges.                             | 12 /5/2014<br>to<br>18/5/2014  | Remote center at<br>NDMVPS's KBT<br>COE Organized by<br>IIT Bombay |
| 2014-15     | Two Week<br>ISTE Workshop<br>on Introduction<br>to Design of<br>Algorithms | To provide opportunity for academic communities to address the emerging technologies Discovery and Computational Intelligence.                  | 25/5/2015<br>to<br>1/06/2015   | Remote center at<br>NDMVPS's KBT<br>COE Organized by<br>IIT Bombay |
| 2014-<br>15 | Two week ISTE workshop on Fluid Mechanics                                  | To understand the basic concepts of Fluid Mechanics   | 20/5/2014<br>to<br>30/05/2014  | IIT Kharagpur<br>funded by<br>NMEICT,MHRD,<br>Govt. of India       |
| 2014-<br>15 | Two week ISTE workshop on Control system                                   | To understand basic concept of control system design.   | 02/12/2014<br>to<br>12/12/2014 | IIT Khragpur<br>funded by<br>NMEICT,MHRD,<br>Govt. of India        |
| 2014-       | Faculty Development Programme  | To create the awareness about entrepreneurship among the students.  | 18/12/2014<br>to<br>30/12/2014 | MCED, DSTA,<br>Govt. of India                                      |
| 2014-       | Two days<br>workshop on<br>Research<br>Methodology                         | To learn how to do research by systematic approach to establish facts or principles.  | 14/2/2015<br>to<br>15/02/2015  | NDMVPs COE by<br>Dr. Manish<br>Kokare, SGGS<br>Nanded              |

| 2014-       | Two week ISTE                    | To study different                    | 27/4/2015     | NDMVPS's KBT       |
|-------------|----------------------------------|---------------------------------------|---------------|--------------------|
| 15          | workshop on                      | algorithms                            | to            | COE, Nashik.       |
|             | Introduction to                  |                                       | 30/04/2015    |                    |
|             | Design of                        |                                       |               |                    |
|             | Algorithms                       |                                       |               |                    |
| 2014-       | Two Week                         | To provide                            | 10/7/2014     | NDMVPS's KBT       |
| 15          | ISTE Workshop                    | outstanding                           | to            | COE, Nashik.       |
|             | on Cyber                         | opportunity in cyber                  | 20/07/2014    |                    |
| 2014        | Security                         | security.                             | 20/6/2014     | NDM WDCL WDT       |
| 2014-       | Two Week                         | The aim of the                        | 30/6/2014     | NDMVPS's KBT       |
| 15          | ISTE Main                        | programme is to Provide an            | to 05/07/2014 | COE, Nashik.       |
|             | Workshop on Computer             | outstanding                           | 03/07/2014    |                    |
|             | Networking                       | opportunity for                       |               |                    |
|             | Networking                       | academic                              |               |                    |
|             |                                  | communities to                        |               |                    |
|             |                                  | address the emerging                  |               |                    |
|             |                                  | technologies.                         |               |                    |
| 2014-       | Two Week                         | To gain knowledge of                  | 20/5/2014     | NDMVPS's KBT       |
| 15          | ISTE Main                        | programming.                          | to            | COE, Nashik.       |
|             | Workshop on                      |                                       | 21/06/2014    |                    |
|             | Computer                         |                                       |               |                    |
|             | Programming                      |                                       |               |                    |
| 2015-       | Four Week                        | To provide an                         | 14 /5/2016    | Remote center at   |
| 16          | AICTE                            | outstanding                           | to            | NDMVPS's KBT       |
|             | approved FDP                     | opportunity for                       | 05/06/2016    | COE, Nashik.       |
|             | by IIT Bombay<br>on - Use of ICT | academic                              |               |                    |
|             |                                  | communities to                        |               |                    |
|             | in Education for Online and      | address the emerging technologies and |               |                    |
|             | Blended                          | challenges                            |               |                    |
|             | Learning                         | Chancinges                            |               |                    |
| 2015-       | Faculty                          | To create the                         | 11/3/2016     | MCED, DSTA,        |
| 16          | Development                      | awareness about                       | to            | Govt. of India     |
|             | Programme                        | entrepreneurship                      | 22/03/2016    |                    |
|             |                                  | among the students                    |               |                    |
| 2016-       | Two week                         | To gain knowledge                     | 04/1/2016     | Remote Center-     |
| 17          | STTP on                          | about structural                      | to            | Mr. S. K.          |
|             | Introduction to                  | engineering                           | 09/01/2016    | Bhattacharya Prof. |
|             | Structural                       |                                       |               | Baidurya           |
|             | Engineering.                     |                                       |               | Bhattacarya, Dr.   |
|             |                                  |                                       |               | Sushant            |
|             |                                  |                                       |               | Chakraborty, CEO,  |
| 2016        | T1-                              | To made t d                           | 02/5/2016     | IIT Kharagpur.     |
| 2016-<br>17 | Two week<br>STTP on              | To understand                         | 02/5/2016     | IIT Bombay         |
| 1 /         | Introduction to                  | concept of Structural analysis        | to 10/07/2016 |                    |
|             | Structural                       | anarysis                              | 10/07/2010    |                    |
|             | Engineering.                     |                                       |               |                    |
|             | Lugincering.                     |                                       |               |                    |

# 1.1.4 Specify the initiatives taken up or contribution made by the institution for effective curriculum delivery and transaction on the Curriculum provided by the affiliating University or other statutory agency.

- The Institute has adopted Outcome Base Education (OBE) framework.
- The components like Program Educational Objectives (PEO), Program Outcomes (PO), Course objectives and course outcomes are developed and mapped.
- The teaching, learning assessment strategies are design for attainment of Course objectives (CO) and Program Outcomes (PO).
- In Institute ICT facilities are provided in the classroom.
- Smart class rooms are developed at institute.
- Following are some initiative taken in this direction:
  - Remedial classes are conducted for slow learners as well as for dropper and backlog students.
  - Institute is having ample number of subscription of e- books, e-journals, to cope up with recent trends and demand of industry.
  - Online tests, mock test are conducted for practice.
  - Monthly class tests are conducted on unit to check the depth of understanding.
  - Time to time result is communicated to the students for their improvement.
  - Multiple Choice Questions (MCQ's) are provided to FE/SE students for practice of online examination.
  - Syllabus gets covered above 90%.
  - Monthly attendance reports of students are sent to the parents regularly in each semester.
  - Progress of theory and lab assignments are continuously evaluated through evaluation sheets.
  - Institute conduct Tutor/ Mentor meet under which individual level counselling is done for students.
- Institute is a remote center of Indian Institute of Technology, Bombay and Kharagpur under NMEICT initiative by ministry of HRD. Staff members attend Faculty Development Programmes (FDP's) conducted under this scheme.
- Institute Received grant under National Mission on Education through NMEICT (MHRD, Govt. of India) for Aakash and R & D Center.
- Institute central library provide book bank facility to the students.
- Institute Central Library is open in day and night shift for students.
- Every department has a separate departmental library which has sufficient number of books, old seminar report and project reports for reference.
- FDP's are conducted at college level and department level for effective teaching learning process.
- Every department prepares their Program Educational Objectives.
- For every course separate course objective and outcomes are specified by SPPU, Pune. One such an example is provided below.

## **Example:**

## **Outcome Base Education (OBE) Framework:**

One such example of Program Educational Objectives (PEO) and Outcomes of Mechanical Engineering are stated Table 1.1.4(A)

#### **Vision of Mechanical Engineering**

To be the center for excellence and center of learning for innovation, incubation and research in the domain of product design, thermal engineering and manufacturing technology thereby path finder for professionalism, entrepreneurship and new knowledge contributing to the common masses.

#### **Mission of Mechanical Engineering**

To educate and train undergraduate and post graduate students in Mechanical Engineering by inculcating the values for discipline, quality and transparency and professional development in the job and self-employment emphasis industry based practices.

#### Program Education Objectives (PEO) of Mechanical Engineering

- PEO1: To prepare technocrats that can satisfy the need of mechanical and allied industries.
- PEO2: To develop critical thinking, problem solving skills, research aptitude and carrier and professionalism among the students.
- PEO3: To improve and expand technical and professional skills of students through effective teaching, learning and industry interaction.

Table 1.1.4(A) Program Outcome of Mechanical Engineering

| Course | Course title                           | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 | PO11 | PO12 |
|--------|--|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|
| code   |  |     |     |     |     |     |     |     |     |     |      |      |      |
| 102013 | Basic Mechanical Engineering           | 2   | 1   | -   | -   | -   | 1   | 1   | -   | -   | -    | -    | -    |
| 102014 | Engineering Graphics II                | 1   | -   | 1   | -   | 2   | -   | -   | -   | -   | -    | -    | -    |
| 107008 | Engineering Mathematics III            | 3   | 2   | -   |     | 1   | -   | -   | -   | -   | -    | -    | 2    |
| 202041 | Manufacturing Process-I                | 2   | -   | -   | -   | -   | 2   | 1   | -   | -   | -    | -    | -    |
| 202042 | Computer Aided Machine Drawing         | -   | -   | -   | -   | 3   | -   | -   | -   | -   | 1    | -    | -    |
| 202043 | Thermodynamics                         | 2   | 3   | 1   | 2   | 1   | 1   | -   | -   | -   | 1    | -    | -    |
| 202044 | Material Science                       | 1   | -   | 1   | -   | 1   | 1   | 2   | -   | -   | -    | -    | -    |
| 202051 | Strength of Materials                  | 3   | 1   | 1   | 3   | -   | 1   | -   | -   | -   | 1    | -    | -    |
| 202045 | Fluid Mechanics                        | 2   | 2   | 1   | 2   | 1   | -   | -   | -   | -   | 1    | -    | -    |
| 202047 | Soft Skills                            | -   | -   | -   | -   | -   | -   | -   | 3   | 3   | 2    | -    | 2    |
| 202048 | Theory of Machines–I                   | 3   | 2   | 1   | -   | -   | 1   | -   | -   | -   | 1    | -    | -    |
| 202049 | Engineering Metallurgy                 | -   | -   | 1   | -   | 1   | 1   | 2   | -   | -   | 1    | -    | -    |
| 202050 | Applied Thermodynamics                 | 2   | 1   | 2   | 1   | _   | 1   | 2   | -   | -   | 1    | -    | 1    |
| 203152 | Electrical and Electronics Engineering | 2   | 1   | -   | -   | _   | -   | -   | -   | 2   | -    | -    | -    |
| 202053 | Machine Shop – I                       | -   | -   | -   | -   | -   | 1   | 1   | -   | -   | -    | -    | -    |
| 302041 | Design of Machine Elements – I         | 3   | 1   | 3   | 1   | 1   | 1   | 2   | -   | 2   | 1    | 1    | 1    |
| 302042 | Heat Transfer                          | 3   | 2   | 2   | -   | 1   | -   | 1   | -   | -   | 1    | -    | 1    |
| 302043 | Theory of Machines-II                  | 2   | 1   | 1   | -   | -   | 1   | -   | -   | -   | -    | -    | -    |
| 302044 | Metrology and Quality Control          | 1   | 1   | 1   | -   | 1   | 1   | 1   | -   | -   | 1    | -    | -    |
| 302045 | Hydraulics and Pneumatics              | 1   | 1   | 1   | -   | 1   | 1   | -   | -   | -   | -    | -    | -    |
| 302046 | Skill Development                      | -   | -   | -   | -   | _   | -   | -   | 2   | -   | 2    | -    | -    |
| 302047 | Numerical Methods and Optimization     | 3   | 2   | -   | 1   | 2   | -   | -   | -   | -   | _    | -    | 1    |
| 302048 | Design of Machine Elements -II         | 2   | 2   | 3   | 1   | 1   | 1   | 2   | -   | 1   | 1    | 1    | 1    |
| 302049 | Turbo Machines                         | 2   | 2   | 1   | 1   | _   | -   | 2   | -   | _   | -    | -    | -    |
| 302050 | Mechatronics                           | -   | 1   | 1   | 1   | 1   | 1   | _   | -   | 2   | -    | -    | -    |

| Course | Course title                           | PO1 | PO2 | PO3 | PO4 | PO5 | <b>PO6</b> | PO7 | PO8 | PO9 | PO10 | PO11 | PO12 |
|--------|--|-----|-----|-----|-----|-----|------------|-----|-----|-----|------|------|------|
| code   |  |     |     |     |     |     |            |     |     |     |      |      |      |
| 302051 | Manufacturing Process-II               | -   | -   | 1   | -   | 1   | 1          | 1   | -   | -   | -    | -    | -    |
| 302052 | Machine Shop -II                       | -   | -   | -   | -   | 1   | 1          | 1   | -   | -   | -    | -    | -    |
| 302053 | Seminar                                | -   | 2   | -   | -   | -   | -          | -   | 3   | 2   | 3    | -    | 2    |
| 402041 | Refrigeration and Air Conditioning     | 2   | 1   | 2   | -   | 1   | 1          | 2   | -   | -   | 1    | 1    | 1    |
| 402042 | CAD/ CAM Automation                    | 2   | 2   | 2   | 2   | 2   | 1          | -   | -   | -   | -    | -    | -    |
| 402043 | Dynamics of Machinery                  | 3   | 2   | 2   | 1   | 1   | 1          | 1   | -   | -   | 1    | -    | 1    |
| 402044 | Tribology (Elective-I)                 | 3   | 2   | 2   | 1   | -   | -          | 2   | -   | -   | -    | -    | 1    |
| 402045 | Advanced Manufacturing Processes       | -   | -   | 1   | -   | 1   | 2          | 1   | -   | -   | -    | -    | 1    |
|        | (Elective-II)                          |     |     |     |     |     |            |     |     |     |      |      |      |
| 402046 | Project –I                             | -   | 2   | -   | -   | -   | -          | 1   | 2   | 3   | 3    | 3    | 2    |
| 402047 | Power Plant Engineering                | 2   | 1   | 1   | -   | -   | -          | 2   | 1   | -   | 1    | -    | 1    |
| 402048 | Mechanical System Design               | 2   | 1   | 3   | 1   | 1   | 1          | 2   | -   | 2   | 1    | -    | 2    |
| 402049 | Industrial Engineering (Elective -III) | -   | _   | _   | -   | -   | 1          | ı   | -   | -   | -    | 1    | 1    |
| 402050 | Finite Element Analysis (Elective-IV)  | 3   | 3   | 2   | 3   | 2   | 1          | ı   | -   | -   | -    | -    | -    |
| 402051 | Project – II                           | 2   | 2   | -   | -   | -   | -          | -   | -   | 3   | 3    | 3    | 3    |

## 1.1.5 How does the institution network and interact with beneficiaries such as industry, research bodies and the university in effective operationalisation of the curriculum?

- Institute has established Industry Institute Interaction cell (IIIC) to promote the close interaction of industry and various departments of the institute to bridge the gap between industry and institute by undertaking expert lectures, industrial visit and industrial training.
- HR meet is organized by the institute where it liaisons with a large number of industries.
- Industry expert gives valuable inputs that help in aligning academic activities with the trends of new technology.
- Institute has a very strong interaction with a large number of industries including corporate, government, semi government, public and private sectors.
- Industrial visits are organized by Institute/department. The efforts in this direction are shown in the below Table 1.1.5(A)
- Institute arranged expert talk on SAP, ERP shown in Table 1.1.5(B)
- Institute has conducted training programme shown in Table 1.1.5(C)

#### **Institute Interaction with University for effective Curriculum operationalization:**

- Institute Head of department attend meeting with the vice chancellor or BOS affiliated to SPPU Pune.
- Institute senior faculty members contribute their efforts in designing and developing curriculum at University level.
- Meetings of faculty members with subject Chairman.
- Contribution of faculty in designing and implementing open elective curriculum.
- Faculty is involved in the process of University syllabus revision, paper setting, and paper assessment etc.
- Faculty contribution in university oral, practical examination, CAP duties.
- Institute Received grant under BCUD/QIP Schemes.
- Faculties from all departments attend the programme conducted by University.
- Institute served as a Central Assessment Programme (CAP) center for Second Year, Third Year Engineering and MCA Engineering.

Table 1.1.5 (A) Industrial visit organized by Institute/ Department

| Sr. | Name of | Academic | Date       | Details such as topic, speaker, location |
|-----|---------|----------|------------|--|
| No. | Departm | Year     |            |  |
|     | ent     |          |            |  |
| 1   |         |          | 18/07/2013 | Central Railway Workshop, Manmad.        |
| 2   |         |          | 28/08/2013 | Sewage Treatment Plant, Nashik           |
| 3   |         |          | 30/08/2013 | Manjarpada tunnel, Nashik                |
| 4   |         |          | 13/09/2013 | Peninsula Project, Nashik                |
| 5   | CIVIL   | 2013-14  | 17/09/2013 | MHADA Project Site, Pathardi, Nashik     |
| 6   |         |          | 1/10/2013  | Shapoorji and Pallonji, Construction     |
|     |         |          |            | Site, Nashik                             |
| 7   |         |          | 3/10/2013  | Hydro Power Plant, Vaitarna Dam,         |
|     |         |          |            | Nashik.                                  |
| 8   |         |          | 09/10/2013 | MHADA Project Site,Pathardi, Nashik      |

| 9  |      |         | 09/01/2014 | Metrological Station KTHM College,<br>Nashik            |  |  |  |  |
|----|------|---------|------------|---|--|--|--|--|
| 10 |      |         | 15/01/2014 | Water Treatment Plant, Nashik                           |  |  |  |  |
| 11 |      |         | 27/01/2014 | Ozar Airport, Nashik                                    |  |  |  |  |
| 12 |      |         | 06/02/2016 | Ashok residency, Satpur, Nashik.                        |  |  |  |  |
| 13 |      |         | 04/03/2014 | Jain Irrigation System Ltd. Jalgoan                     |  |  |  |  |
| 14 |      |         | 09/09/2014 | Hydro-Electric Power Plant, Vaitarna Dam, Nashik.       |  |  |  |  |
| 15 |      |         | 12/02/2015 | Water Treatment Plant, Nashik                           |  |  |  |  |
| 16 |      | 2014-15 | 18/03/2015 | Remote Sensing and GIS Division, Meri,<br>Nashik        |  |  |  |  |
| 17 |      |         | 23/03/2015 | Sun Infrastructure Pvt. Ltd. Nashik                     |  |  |  |  |
| 18 |      |         | 03/07/2015 | Metrological Station, NDMVP's College                   |  |  |  |  |
|    |      |         |            | of Agriculture, Nashik                                  |  |  |  |  |
| 19 |      |         | 03/07/2015 | Water Resource Engineering Division, MERI, Nashik       |  |  |  |  |
| 20 |      |         | 10/07/2015 | Central Railway Workshop Manmad.                        |  |  |  |  |
| 21 |      |         | 31/07/2015 | Sewage Treatment Plant, Nashik                          |  |  |  |  |
| 22 |      |         | 20/08/2015 | Pune –Nashik Highway Project                            |  |  |  |  |
| 23 |      |         | 29/09/2015 | Sun Infrastructure Pvt. Ltd. Nashik                     |  |  |  |  |
| 24 |      | 2015-16 | 26/10/2015 | Amit Enterprises Housing Ltd. Pathardi<br>Phata, Nashik |  |  |  |  |
| 25 |      |         | 27/10/2015 | Ultra-Tech RMC Plant, Satpur, Nashik                    |  |  |  |  |
| 26 |      |         | 11/01/2016 | GhatGar Dam, Ahmednagar.                                |  |  |  |  |
| 27 |      |         | 16/01/2016 | Sardar Sarovar Dam, Gujrat                              |  |  |  |  |
| 28 |      |         | 10/02/2016 | Bhandardara Dam, Nashik.                                |  |  |  |  |
| 29 |      |         | 17/02/2016 | Sun Infrastructure Ltd., Nashik                         |  |  |  |  |
| 30 |      |         | 11/03/2016 | Water Treatment Plant, Nashik                           |  |  |  |  |
| 31 |      |         | 31/08/2016 | Sewage Treatment Plant, Nashik                          |  |  |  |  |
| 32 |      |         | 21/09/2016 | Nashik- Pune Highway                                    |  |  |  |  |
| 33 |      |         | 10/07/2016 | Central Railway Workshop Manmad                         |  |  |  |  |
| 34 |      | ••••    | 27/09/2016 | Gangapur Dam, Nashik                                    |  |  |  |  |
| 35 |      | 2016-17 | 06/10/2016 | Sun Infrastructure Pvt. Ltd, Nashik                     |  |  |  |  |
| 36 |      |         | 12/10/2016 | Bagad Properties, Nashik                                |  |  |  |  |
| 37 |      |         | 22/11/2016 | Ultra-Tech RMC Plant, Satpur, Nashik                    |  |  |  |  |
| 38 |      |         | 28/07/2016 | Deolali Railway Station, Nashik                         |  |  |  |  |
| 1  |      |         | 17/01/2014 | Industrial Visit to GMRT Narayangaon,                   |  |  |  |  |
| 2  |      | 2013-14 | 11/09/2013 | Monk Automation Pvt. Ltd. MIDC Ambad, Nashik            |  |  |  |  |
| 3  | E&TC |         | 16/01/2015 | Industrial Visit to GMRT Narayangaon,<br>Pune           |  |  |  |  |
| 4  |      | 2014-15 | 23/01/2015 | Industrial Visit to GMRT Narayangaon ,Pune              |  |  |  |  |
| 5  |      |         | 04/02/2015 | Reliance Power Plant Dhanu, Thane.                      |  |  |  |  |

| 6 |        |         | 17/09/2016               | Traffic Awareness Training Programme at Children Traffic Education Park,              |
|---|--------|---------|--------------------------|---|
|   |        | 2016-17 |                          | Nashik  |
| 7 |        |         | 29/07/2016               | Dharampur Science Center, Gujarat   |
| 1 |        | 2013-14 | 02/09/2013               | Watson Pharma Pvt. Ltd; Ambarnath.  |
| 2 |        | 2014-15 | 18/09/2014               | National Horticultural Research and Development Foundation, Chitegaon Phata., Nashik. |
| 3 | INSTRU | 2015-16 | 11/01/16                 | Hindustan Coca Cola Beverages Pvt.<br>Ltd. Nashik                                     |
| 4 |        | 2016-17 | 01/09/2016               | Reliance Electronics, Nashik  |
| 5 |        | 2016-17 | 07/09/2016               | Kribhco Ltd, Surat  |
| 1 |        | 2013-14 | 16/09/2013               | Visvesvaraya Industrial and Technological Museum, Banglore                            |
| 2 | IT     |         | 19/01/2013               | Persistent Systems ,Pune  |
| 3 |        | 2014-15 | 28/02/2015               | Persistent Systems ,Pune  |
| 4 |        | 2015-16 | 6 /03/ 2015              | Altruist Technologies, Chandigarh   |
| 5 |        | 2016-17 | 26/09/2016               | C –DAC Kharghar, Mumbai   |
| 1 |        | 2015-16 | 09/09/2015               | SE Computer 34 Student Visit to C-DAC, Mumbai   |
| 2 | COMP   | 2016-17 | 28/09/2016               | TE Computer 49 Student Visit to Seed info-tech, Mumbai                                |
| 3 | COMP   |         | 28/09/2016               | BE Computer 42 Student Visit to Seed info-tech, Mumbai                                |
| 4 |        |         | 26/09/2016               | SE Computer 34 Student Visit to C-DAC, Mumbai   |
| 1 |        | 2014-15 | 09/03/2015<br>10/03/2015 | Ispat industries ltd at Mumbai  |
| 2 |        |         | 23/03/2015<br>24/03/2015 | Baif Kaju Processing Unit at Dapoli,<br>Ratnagiri                                     |
| 3 |        |         | 27/08/2014               | Sarda Farms at Nashik   |
| 4 |        |         | 03/02/2015               | Glenn mark Pharmaceuticals Ltd, Nashik.   |
| 5 | MBA    | 2015-16 | 12/08/2015               | Sarda Farm, Sahyadri Agro,Mohadi<br>Nashik  |
| 6 |        |         | 10/03/2016               | Jahagirdar Bekers , Nashik  |
| 7 |        |         | 13/10/2015               | KVIC Nashik   |
| 8 |        | 2016-17 | 23/08/2016               | Sahyadri Agro, Mohadi ,Nashik   |
| 9 |        |         | 31/08/2016               | Biaf , Jawahar, Palghar.  |
| 1 |        | 2013-14 | 13/3/2014                | ESDS Software Solution, Nashik  |
| 2 | MCA    | 2015-16 | 6/10/2015                | UMS Tech Labs. Nashik.  |
| 1 |        | 2016-17 | 25/07/2016               | Seva Automotive PVT LTD Nashik  |
| 2 |        | 2016-17 | 30/08/2016               | Narang Cold Storage, Nashik.  |
| 3 | MECH   | 2016-17 | 08/09/2016               | Nashik Engineering Cluster, Nashik.   |
| 4 |        | 2016-17 | 04/10/2016               | Reliance Thermal Power Station Dahanu   |

Table 1.1.5(B) Expert talk arranged by Institute

| Name of the      | Department     | No. of        | Resources                     |
|------------------|----------------|---------------|-------------------------------|
| Programme        |                | student       | Institute/Person/Location     |
|                  |                | beneficiaries |                               |
| Expert talk On   | All department | 400           | Satish namjoshi SAP Corporate |
| SAP ERP          |                |               | head Mahindra and Mahindra    |
|                  |                |               | from Corporate office         |
|                  |                |               | Mahindra, Nashik              |
| Expert talk On   | All department | 400           | Vinayak jawadekar MD VACS     |
| SAP ERP          |                |               | Global Pvt Ltd.               |
| Expert talk On   | All department | 400           | G Mauleesharan Delivery Head  |
| SAP ERP          |                |               | SAP India Pvt Ltd, Banglore   |
| Expert talk On   | All department | 400           | Denis Philip SAP India,       |
| SAP ERP          |                |               | Mumbai                        |
| Expert Talk On   | All department | 300           | Synergy ,Delhi                |
| UPSC             |                |               |                               |
| competitive Exam |                |               |                               |

### Industry Institute Interaction Cell activities and students training organized by T&P cell

Institute organizes training programme for students to prepare them for global employment of the market.

Table 1.1.5(C) Training programme attended by Students

| Sr.no | Academic year | Name of company                | No .of Student |
|-------|---------------|--------------------------------|----------------|
| 1     | 2016-17       | Zensar technology, Pune        | 28             |
|       | 2016-17       | Winjit Technology, Nashik      | 45             |
|       | 2016-17       | Visionary Technologies, Nashik | 28             |
|       | 2016-17       | FOX Control, Nashik            | 11             |
| 2     | 2015 - 16     | Zensar technology, Pune.       | 27             |
|       | 2015 - 16     | Times Pvt. Ltd., Nashik        | 61             |
| 3     | 2014 - 15     | Zensar technoloy, Pune.        | 25             |
|       | 2014 - 15     | Times Pvt. Ltd., Nashik        | 30             |

Table 1.1.5(D) Industry based/ sponsored projects

| Sr.<br>no | Academic<br>year | Department             | No. of sponsored project group |
|-----------|------------------|------------------------|--------------------------------|
| 1         |                  | Mechanical engineering | 19                             |
|           | 2013-14          | E & T C Engineering    | 01                             |
|           |                  | Computer Engineering   | 03                             |

|   |         | Instrumentation and Control                | 06 |
|---|---------|--|----|
| 2 |         | Mechanical Engineering                     | 19 |
|   |         | E & T C Engineering                        | 04 |
|   | 2014-15 | Computer Engineering                       | 08 |
|   |         | Instrumentation and Control                | 05 |
|   |         | Information Technology                     | 03 |
| 3 |         | Mechanical Engineering                     | 27 |
|   | 2015-16 | Instrumentation and Control<br>Engineering | 08 |
|   |         | Computer Engineering                       | 06 |
| 4 |         | Mechanical Engineering                     | 25 |
|   |         | E & T C Engineering                        | 04 |
|   |         | Computer Engineering                       | 07 |
|   | 2016-17 | Instrumentation and Control                | 06 |
|   |         | Information Technology                     | 06 |
|   |         | MCA Engineering                            | 05 |
|   |         | MBA  | 06 |

**Faculty Contribution and Participation:** Every year, faculties from various departments participated and contributed in various events like FDP, STTP, Workshops, and Seminars to improve teaching learning practices.)

Table 1.1.5(E) Faculty Contribution and Participation

| Details of faculty participation in workshops /  |             | Number of faculty |             |             |  |  |  |
|--|-------------|-------------------|-------------|-------------|--|--|--|
| Seminars / Conferences   | 2016-<br>17 | 2015-<br>16       | 2014-<br>15 | 2013-<br>14 |  |  |  |
| Invited as resource persons in workshops/<br>Seminars/ Conferences organized by external<br>professional agencies          | 3           | 4                 | 3           | 7           |  |  |  |
| Participated in external Workshops / Seminars/<br>Conferences recognized by national/ international<br>professional Bodies | 18          | 50                | 45          | 64          |  |  |  |
| Presented papers in Workshops/ Seminars/<br>Conferences conducted or recognized by<br>professional agencies                | 18          | 31                | 47          | 61          |  |  |  |

1.1.6 What are the contributions of the institution and/or its staff members to the development of the curriculum by the University?(number of staff members/departments represented on the Board of Studies, student feedback, teacher

### feedback, stakeholder feedback provided, specific suggestions etc.) Faculty of the institute contributes for the development of curriculum in the following ways.

- Faculty members are working as board of studies members as well as technical committee of SPPU Pune.
- Institute senior faculty members contribute their efforts in designing and developing curriculum at University level.
- Senior faculty members of the college are actively involved in syllabus revision process of the university.
- Senior faculty members of Institute are actively involved in university paper setting and paper assessment process.
- Institute served as a Central Assessment Programme (CAP) center for Second Year, Third Year Engineering and MCA Engineering.
- Following Faculty members have contributed in the development of curriculum at University level shown in Table 1.1.6(A)

Table 1.1.6(A) Contribution of Faculty at University level

| Year    | Name of Faculty         | Contributed as  |
|---------|-------------------------|---|
| 2016-17 | Dr. B. B. Musmade       | BOS Member of Instrumentation & Control Engg. SPPU Pune.  |
|         |                         | BOS Member of Instrumentation Engg. GCOE Jalgaon.   |
| 2014-16 | Dr. D. T. Khairnar      | BOS Member of SPPU for Production and Operation Management, Pune.                               |
| 2016-17 | Dr. D .T. Khairnar      | BOS Member of Sandip University for Commerce & Management, Nashik.                              |
| 2016-17 | Dr. S. R. Pachorkar     | Appointed As A Subject Chairman for Export and Import Procedure Theory Paper –PGDBM SPPU, Pune. |
| 2015-16 | Dr. S. B. Sonawane      | Subject Chairman (Energy audit and management)<br>Mechanical Engg., SPPU Pune.                  |
| 2016-17 | Prof. V. M. Birari      | Chairman for Paper Setting of Computer Network for Final year E & TC Engg., SPPU Pune.          |
| 2015-16 | Prof. A. P<br>Meshram   | Chairman of Digital Electronics for second year E & TC Engg., SPPU Pune.                        |
| 2012-13 | Dr. V. S. Pawar         | Subject Chairman (Data structure and Files), SPPU Pune.   |
| 2014-15 | Prof. D. R. Gatne       | Syllabus revision committee, SPPU Pune.   |
| 2011-12 | Prof. B. S. Tarle       | Second Year Engineering CAP Director, SPPU Pune.  |
| 2015-16 | Dr. N.S. Patil          | Third Year Engineering CAP Director, SPPU Pune.   |
| 2016-17 | Prof. M. P.<br>Chougale | Subject chairman (Geo Technical Engineering),<br>Civil Engg. SPPU Pune.                         |

| 2016-17 | Dr. A. B. Saner   | Third Year Engineering CAP Director, SPPU Pune.                            |
|---------|-------------------|--|
| 2016-17 | Prof. A. A. Kapse | Third Year Engineering CAP Director, SPPU Pune.                            |
| 2016-17 | Prof. Y. P. Patil | Subject Chairman (Process Loop Components, Applied Electronics), SPPU Pune |

# 1.1.7 Does the institution develop curriculum for any of the courses offered (other than those under the purview of the affiliating university) by it? If 'yes', give details on the process ('Needs Assessment', design, development and planning) and the courses for which the curriculum has been developed.

- Yes, Institute offered courses other than those under the purview of the affiliating university shown in Table 1.1.7(A)
- Industry Experts are invited to aware the students for new technologies in the respective domains.
- The Institute attracts meritorious students by providing value added courses such as:
  - **SAP**: Various modules are run under SAP like Material management, ABAP, Sales and distribution, Human Resource etc.
  - **Design Innovation Center (DIC)**: The various courses are conducted under Design Innovation Center like Design and development of signal conditioning and sensor technology, advanced techniques for Environment watershed Management, Post graduate Diploma in Computer-aided Product Designs.

Table 1.1.7(A) Course offered by the institute other than curriculum

| Year    | Name of Course  | Assessment for need  | Design/<br>Structure                            | Development and<br>Planning                                |
|---------|---|--|---|--|
| 2016-17 | Pradhanmantri Kaushal Vikas Yojana, Govt.of India Skill Development Courses in 1]Iron and steel- Machinist 2] Plumbing Industry | To fabricate product components by studying their designs/ sample parts and fabricating the components using the appropriate tools and dies. | ISC/N0901-<br>ISC/N0909<br>Total Marks-<br>1000 | Theoretical concepts, trainings on operation of machinery. |

### 1.1.8 How does institution analyze/ensure that the stated objectives of curriculum are achieved in the course of implementation?

Steps taken by the Institute to monitor and ensure the achievement of the stated objectives of curriculum:

 Institute has adopted Program Educational Outcomes, Program Outcomes, Course Objectives and Course Outcomes, which are in accordance with the University.

- Institute has implemented Outcome base education (OBE) framework as per the requirement.
- Mapping of courses with PO is carried out.
- Institute develops teaching learning process and infrastructure to meet the above requirement.
- Institute regularly monitors the attainment of the same. It may modify the academic process to meet the outcomes.
- Institute focus on feedback and suggestions of stakeholders to improve quality of teaching learning practices.
- Content beyond syllabus are covered through different activities like expert lectures, Guest lectures, Industrial Visits.

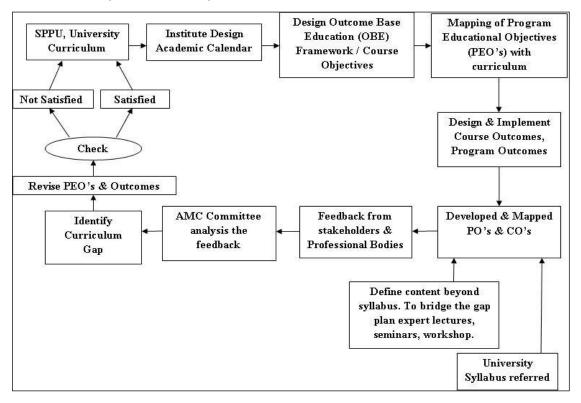


Fig. 1.1.8 (A) OBE Framework

#### **Role of Academic Monitoring Committee (AMC):**

- This committee is chaired by Principal of the Institute. All Dean and head of all departments is member of this committee. AMC used to monitor all the academics, student feedback and overall teaching learning process to achieve maximum academic performance of the students.
- AMC checks course files, theory and practical attendance sheets, Lab manuals, staff feedback etc. in every semester. Also this committee monitors the classes and interacts with students and faculty regularly.
- Mentor meeting are conducted to counsel the students and to discuss issues related to academics, hostel, personal issues, mess issues etc.
- AMC monitors all issues and take corrective measures with the consulation of Principal.
- The analysis and suggestions by AMC will benefit the institutional progress in quality education and research. It will also make sure about keeping the

- transparency in faculty, staff and management with respect to objectives towards attainment of mission and vision of the Institute.
- AMC create a mechanism to integrate various academic activities, enhance supportive administrative tasks and effectively communicate to achieve quick actions and get impact on quality objectives of the Institute.

#### **Academic Monitoring Committee (AMC)**

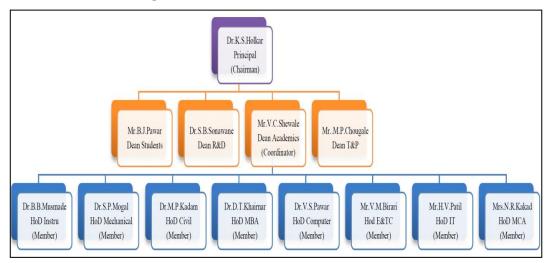


Fig. 1.1.8 (B) Academic Monitoring Committee (AMC)

#### Example 1:

Institute has done the mapping of each course outcome with the Program Outcomes to evaluate and achieve the teaching-learning outcome shown in Table 1.1.8(A) and Table 1.1.8(B)

Program Education Objectives (PEO) of Mechanical Engineering

- PEO1: To prepare technocrats that can satisfy the need of mechanical and allied industries.
- PEO2: To develop critical thinking, problem solving skills, research aptitude and carrier and professionalism among the students.
- PEO3: To improve and expand technical and professional skills of students through effective teaching-learning and industry interaction.

Table 1.1.8(A) Example of Mapping of the courses of Mechanical department with the PO

| Course | C 441-                                 | DO1 | PO2 | DO2 | DO4 | DO5 | DO( | DO7 | DOG | DOO | DO10 | DO11 | PO12 |
|--------|--|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|
| code   | Course title                           | PO1 | POZ | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 | PO11 | PO12 |
| 102013 | Basic Mechanical Engineering           | 2   | 1   | -   | -   | -   | 1   | 1   | -   | -   | -    | -    | _    |
| 102014 | Engineering Graphics II                | -   | -   | 1   | -   | 2   | -   | -   | -   | -   | -    | -    | -    |
| 107008 | Engineering Mathematics III            | 3   | 2   | -   | -   | 1   | -   | -   | -   | -   | -    | -    | 2    |
| 202041 | Manufacturing Process-I                | 2   | -   | -   | -   | -   | 2   | 1   | -   | -   | -    | -    | -    |
| 202042 | Computer Aided Machine Drawing         | -   | -   | -   | -   | 3   | -   | -   | -   | -   | 1    | -    | -    |
| 202043 | Thermodynamics                         | 2   | 3   | 1   | 2   | 1   | 1   | -   | -   | -   | 1    | -    | -    |
| 202044 | Material Science                       | 1   | -   | 1   | -   | 1   | 1   | 2   | -   | -   | -    | -    | -    |
| 202051 | Strength of Materials                  | 3   | 1   | 1   | 3   | -   | 1   | -   | -   | -   | 1    | -    | -    |
| 202045 | Fluid Mechanics                        | 2   | 2   | 1   | 2   | 1   | -   | -   | -   | -   | 1    | -    | -    |
| 202047 | Soft Skills                            | -   | _   | -   | -   | -   | -   | _   | 3   | 3   | 2    | -    | 2    |
| 202048 | Theory of Machines–I                   | 3   | 2   | 1   | -   | -   | 1   | _   | -   | -   | 1    | -    | _    |
| 202049 | Engineering Metallurgy                 | -   | -   | 1   | -   | 1   | 1   | 2   | -   | -   | 1    | -    | -    |
| 202050 | Applied Thermodynamics                 | 2   | 1   | 2   | 1   | -   | 1   | 2   | -   | -   | 1    | -    | 1    |
| 203152 | Electrical and Electronics Engineering | 2   | 1   | -   | -   | -   | -   | -   | -   | 2   | -    | -    | -    |
| 202053 | Machine Shop – I                       | -   | _   | -   | -   | -   | 1   | 1   | -   | -   | -    | -    | _    |
| 302041 | Design of Machine Elements – I         | 3   | 1   | 3   | 1   | 1   | 1   | 2   | -   | 2   | 1    | 1    | 1    |
| 302042 | Heat Transfer                          | 3   | 2   | 2   | -   | 1   | -   | 1   | -   | -   | 1    | -    | 1    |
| 302043 | Theory of Machines-II                  | 2   | 1   | 1   | -   | -   | 1   | -   | -   | -   | -    | -    | -    |
| 302044 | Metrology and Quality Control          | 1   | 1   | 1   | -   | 1   | 1   | 1   | -   | -   | 1    | -    | -    |
| 302045 | Hydraulics and Pneumatics              | 1   | 1   | 1   | -   | 1   | 1   | -   | -   | -   | -    | -    | -    |
| 302046 | Skill Development                      | -   | -   | -   | -   | -   | -   | -   | 2   | -   | 2    | -    | -    |
| 302047 | Numerical Methods and Optimization     | 3   | 2   | -   | 1   | 2   | -   | -   | -   | -   | -    | -    | 1    |
| 302048 | Design of Machine Elements -II         | 2   | 2   | 3   | 1   | 1   | 1   | 2   | -   | 1   | 1    | 1    | 1    |
| 302049 | Turbo Machines                         | 2   | 2   | 1   | 1   | _   | _   | 2   | _   | -   | -    | -    | _    |
| 302050 | Mechatronics                           |     | 1   | 1   | 1   | 1   | 1   | -   | -   | 2   | -    | -    | -    |
| 302051 | Manufacturing Process-II               | -   | _   | 1   | -   | 1   | 1   | 1   | -   | -   | -    | -    | -    |

| Course code | Course title                           | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 | PO11 | PO12 |
|-------------|--|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|
| 302052      | Machine Shop -II                       | -   | -   | -   | -   | 1   | 1   | 1   | -   | -   | -    | -    | -    |
| 302053      | Seminar                                | -   | 2   | -   | -   | -   | -   | -   | 3   | 2   | 3    | -    | 2    |
| 402041      | Refrigeration and Air Conditioning     | 2   | 1   | 2   | -   | 1   | 1   | 2   | -   | -   | 1    | 1    | 1    |
| 402042      | CAD/ CAM Automation                    | 2   | 2   | 2   | 2   | 2   | 1   | -   | -   | -   | -    | -    | -    |
| 402043      | Dynamics of Machinery                  | 3   | 2   | 2   | 1   | 1   | 1   | 1   | -   | -   | 1    | -    | 1    |
| 402044      | Tribology (Elective-I)                 | 3   | 2   | 2   | 1   | -   | -   | 2   | -   | -   | -    | -    | 1    |
| 402045      | Advanced Manufacturing Processes       | -   | -   | 1   | -   | 1   | 2   | 1   | -   | -   | -    | -    | 1    |
|             | (Elective-II)                          |     |     |     |     |     |     |     |     |     |      |      |      |
| 402046      | Project –I                             | -   | 2   | -   | -   | -   | -   | -   | 2   | 3   | 3    | 3    | 2    |
| 402047      | Power Plant Engineering                | 2   | 1   | 1   | -   | -   | -   | 2   | 1   | -   | 1    | -    | 1    |
| 402048      | Mechanical System Design               | 2   | 1   | 3   | 1   | 1   | 1   | 2   | -   | 2   | 1    | -    | 2    |
| 402049      | Industrial Engineering (Elective-III)  | -   | -   | -   | -   | -   | 1   | -   | -   | -   | -    | 1    | 1    |
| 402050      | Finite Element Analysis (Elective -IV) | 3   | 3   | 2   | 3   | 2   | 1   | -   | -   | -   | -    | -    | -    |
| 402051      | Project – II                           | 2   | 2   | -   | -   | -   | -   | -   | -   | 3   | 3    | 3    | 3    |

Institute has done the mapping of each course outcome with the Program Outcomes to evaluate & achieve the teaching learning outcome.

Mapping of Course Design of Machine Element-II (TE Mechanical Engineering) with the Program Outcomes.

#### Example 2:

- Course: Design of Machine Element-II (TE Mechanical Engineering)
- Course Outcomes:
  - 1. Ability to design and analyze Mechanical transmission systems
  - 2. Ability to design and select different types of bearings from manufacturer's catalogue.
  - 3. Enhancement in proficiency of CAD software for design and analysis so that students are capable to generate production drawing

Table 1.1.8(B) Mapping of Course Outcome with Program Outcome Rating (2- High Rating, 1- Low rating, 0- No rating)

| Course  | Program Outcome |         |         |         |         |         |             |         |         |          |          |          |
|---------|-----------------|---------|---------|---------|---------|---------|-------------|---------|---------|----------|----------|----------|
| Outcome | PO<br>1         | PO<br>2 | PO<br>3 | PO<br>4 | PO<br>5 | PO<br>6 | <b>PO</b> 7 | PO<br>8 | PO<br>9 | PO<br>10 | PO<br>11 | PO<br>12 |
| 1       | 1               | 1       | 2       | 0       | 0       | 1       | 0           | 0       | 2       | 2        | 0        | 1        |
| 2       | 1               | 1       | 2       | 0       | 0       | 1       | 0           | 0       | 2       | 2        | 0        | 1        |
| 3       | 0               | 0       | 0       | 0       | 2       | 0       | 0           | 0       | 2       | 1        | 0        | 1        |

#### 1.2 Academic Flexibility

### 1.2.1 Specifying the goals and objectives give details of the certificate/diploma/skill development courses etc., offered by the institution.

- The provision of academic autonomy is provided to the final year students. Apart from the academic curriculum of university, Institute/departments offers certification courses which helps in development of employability skill of the student.
- Institute conducted various programmes to fulfill need of academic and Industry.
- Institute focus on Center of excellence in various stream of engineering.
- Institute consistently takes efforts to improve placement for students.
- Apart from the programme affiliated to SPPU, institute offered certification courses like SAP which basically serve the purpose of value addition. These courses enhance the employability skill of the students.

Table 1.2.1(A) Programmes conducted by Departments

| Sr. | Training/workshop | Conducted by           | Department    | Date /year    |
|-----|-------------------|------------------------|---------------|---------------|
| No. | details           |                        |               |               |
| 1   | Training program  | FOX Control Pvt. Ltd., | Instru. &     | 29/12/2016 to |
|     | on DCS and PLC    | Nashik                 | Control Dept. | 30/12/2016    |
|     | for faculty and   |                        | _             |               |
|     | students          |                        |               |               |

| 2  | Training program on DCS and PLC for faculty and students                | FOX Control Pvt. Ltd.,<br>Nashik                               | Instru. &<br>Control Dept. | 16/12/2016 to<br>17/12/2016 |
|----|---|--|----------------------------|-----------------------------|
| 3  | Winter Training Program for Instrumentation Engineering Students        | Rashtriya Chemicals<br>and Fertilizers Ltd.<br>Chembur, Mumbai | Instru. & Control Dept.    | 05/12/2016 to<br>15/12/2016 |
| 4  | Training program<br>on "Automation<br>Technology Covers<br>PLC & SCADA" | Prolific System, Pune.   | E&TC Dept                  | 21/06/2016 to<br>24/09/2016 |
| 5  | Workshop on "Electronics Products"                                      | NDMVPS's KBTCOE,<br>Nashik                                     | E&TC Dept                  | 08/09/2016                  |
| 6  | Workshop on " C<br>Programming"   | NDMVPS's KBTCOE,<br>Nashik                                     | E&TC Dept                  | 28/06/2016 to 30/06/2016    |
| 7  | Embedded System   | NDMVPS's KBTCOE,<br>Nashik                                     | E&TC Dept                  | 21/07/2016                  |
| 8  | VLSI Workshop   | NDMVPS's KBTCOE,<br>Nashik                                     | E&TC Dept                  | 15/07/2016 to<br>16/07/2016 |
| 9  | Workshop on "PCB Design"  | NDMVPS's KBTCOE,<br>Nashik                                     | E&TC Dept                  | 05/02/2016 to 06/02/2016    |
| 10 | Entrepreneurship<br>Training Program                                    | NDMVPS's KBTCOE,<br>Nashik                                     | E&TC Dept                  | 14/07/2016 to<br>16/07/2016 |
| 11 | Workshop on "C<br>Programming"  | NDMVPS's KBTCOE,<br>Nashik                                     | E&TC Dept                  | 23/07/2016 to 24/07/2016    |
| 12 | Vocational training program on Study of PLC and Instrumentation         | TAACT, MIDC,<br>Nashik.  | Instru. &<br>Control Dept  | 5/2016                      |
| 13 | STTP on Introduction to Structural Engineering.                         | NDMVPS's KBTCOE,<br>Nashik                                     | Civil Dept                 | 4/1/2016                    |
| 14 | PLC Training Program.   | NDMVPS's KBTCOE,<br>Nashik                                     | Instru. &<br>Control Dept  | 19/9/2016 to 20/9/2016      |
| 15 | One week training on Delta VDCS   | NDMVPS's KBTCOE,<br>Nashik                                     | Instru. & Control Dept     | 15/06/2015 to<br>19/06/2015 |
| 16 | Six Days STTP on "C" Programming  | NDMVPS's KBTCOE,<br>Nashik                                     | Instru. &<br>Control Dept  | 29/92016 to<br>8/10/2016    |
| 17 | Inbound Training Program on Personality Development                     | Arya Hycinth –Pune   | MBA Dept.                  | 27/9/2016                   |
| 18 | Training program  | NDMVPS's KBTCOE,   | E & TC Dept                | 15/7/2016                   |

|    | on VLSI           | Nashik             |               |               |
|----|-------------------|--------------------|---------------|---------------|
| 19 | Training program  | Arya Technology,   | E & TC Dept   | 5/2/2016      |
|    | on "PCB Design"   | Nashik.            | Z et le z ept | 0,2,2010      |
|    | Conducted         | T (district        |               |               |
| 20 | Java Training     | Zensar technology, | IT Dept       | 2015-2016     |
|    |                   | Pune               |               |               |
| 21 | Hibernate and     | NDMVPS's KBTCOE,   | MCA Dept.     | 8/10/2016     |
|    | spring MVC        | Nashik             | 1             |               |
|    | workshop          |                    |               |               |
| 22 | UI Designing      | NDMVPS's KBTCOE,   | MCA Dept.     | 13/8/2016     |
|    | Sessions          | Nashik             |               |               |
| 23 | Software testing  | NDMVPS's KBTCOE,   | Computer      | 9/ 2016       |
|    | Sessions          | Nashik             | Dept          |               |
| 24 | Android App       | NDMVPS's KBTCOE,   | Computer      | 17/9/2016 to  |
|    | Development       | Nashik             | Dept          | 1/10/2016     |
| 25 | Applied CS with   | NDMVPS's KBTCOE,   | Computer      | 24/10/2016 to |
|    | Android workshop  | Nashik             | Dept          | 26/10/2010    |
| 26 | Android App       | NDMVPS's KBTCOE,   | Computer      | 17/09/2016 &  |
|    | development       | Nashik             | Dept          | 19/09/2016    |
|    | Workshop          |                    | 1             |               |
| 27 | One day workshop  | NDMVPS's KBTCOE,   | Computer      | 08/02/2016    |
|    | on Python         | Nashik             | Dept          |               |
| 28 | One Day-Outbound  | Gordon Noronha     | MBA Dept      | 02/02/2016    |
|    | Training          |                    |               |               |
|    | Programme         |                    |               |               |
| 29 | Inbound Training  | Arya Hycinth, Pune | MBA Dept      | 27/09/2016    |
|    | Program           |                    |               |               |
| 30 | Bigdata- Hadoop   | NDMVPS's KBTCOE,   | IT Dept       | 14/02/2015    |
|    | workshop          | Nashik             |               |               |
| 31 | Entrepreneurship  | NDMVPS's KBTCOE,   | MBA Dept      | 14/02/2015    |
|    | Training          | Nashik             |               |               |
|    | Programme         |                    |               |               |
| 32 | Embedded System   | NDMVPS's KBTCOE,   | E&TC Dept     | 03/08/2015    |
|    |                   | Nashik             |               |               |
| 33 | Workshop on       | NDMVPS's KBTCOE,   | E&TC Dept     | 13/02/2015 to |
|    | "Ardino Processor | Nashik             |               | 14/02/2015    |
|    | ,Latex ,PCB       |                    |               |               |
|    | Design"           |                    |               |               |
| 34 | Virtual Reality   | NDMVPS's KBTCOE,   | MCA Dept      | 29/7/2015     |
|    | Sessions          | Nashik             |               |               |
| 35 | One Day-Outbound  | By Shubhangi       | MBA Dept      | 04/10/2015    |
|    | Training          | Kundalkar & Gordon |               |               |
|    | Programme         | Noronha            |               |               |
| 36 | Inbound Training  | Arya Hycinth, Pune | MBA Dept      | 08/10/2015    |
|    | Program           |                    |               |               |
| 37 | ERP Software      | NDMVPS's KBTCOE,   | Civil Dept    | 2015          |
|    | Training          | Nashik             |               |               |
| 38 | Auto-CAD          | NDMVPS's KBTCOE,   | Civil Dept    | 2015          |
|    | Software Training | Nashik             |               |               |

| 39 | Water Audit Course | NDMVPS's KBTCOE, | Civil Dept    | 12/2015       |
|----|--------------------|------------------|---------------|---------------|
|    | Water radit course | Nashik           | CIVII Dept    | 12/2015       |
| 40 | Summer/Winter      | BOSCH Ltd, MIDC, | Mechanical    | 2014-15       |
|    | Training           | Satpur, Nashik.  | Dept.         |               |
| 41 | Summer/Winter      | HAL, Ozar Nashik | Mechanical    | 2014-15       |
|    | Training           |                  | Dept k        |               |
| 42 | Summer/Winter      | Mahindra &       | Mechanical    | 2013-14       |
|    | Training           | Mahindra Ltd.    | Dept          |               |
| 43 | Google Apps        | NDMVPS's KBTCOE, | ComputerDept  | 21/10/2013    |
|    | Workshop           | Nashik           |               |               |
| 44 | ERP Software       | NDMVPS's KBTCOE, | Civil Dept    | 2013          |
|    | Training           | Nashik           |               |               |
| 45 | Training program   | Yokogawa Ltd,    | Instru. &     | 21 07/2014 to |
|    | on DCS             | Banglore.        | Control Dept. | 25/07/2014    |
| 46 | Four days Training | NDMVPS's KBTCOE, | Instru. &     | 02/09/2015 to |
|    | on Automation      | Nashik           | Control Dept. | 05/09/2015    |
|    | using PLC, SCADA   |                  |               |               |
|    | for students       |                  |               |               |

Table 1.2.1(B) SAP course offered by Institute

| Sr. | Name of the Students  | Department       | Du         | ration     |
|-----|-----------------------|------------------|------------|------------|
| No. |                       |                  | From       | To         |
| 1   | Mayur Gopal Gawari    | Mechanical Engg. | 20/06/2016 | 04/07/2016 |
| 2   | Tushar kailash Shinde | Mechanical Engg. | 20/06/2016 | 04/07/2016 |
| 3   | ChinmayB. Kothawade   | Mechanical Engg. | 20/06/2016 | 04/07/2016 |
| 4   | Saurabh S Gangurde    | Mechanical Engg. | 20/06/2016 | 04/07/2016 |
| 5   | Ajinkya R Chaudhari   | Mechanical Engg. | 20/06/2016 | 04/07/2016 |
| 6   | Vrushali L Khandizod  | Mechanical Engg. | 20/06/2016 | 04/07/2016 |
| 7   | Tushar G Bafna        | Mechanical Engg. | 20/06/2016 | 04/07/2016 |
| 8   | Shreyas C Ingale      | Mechanical Engg. | 20/06/2016 | 04/07/2016 |
| 9   | Mayur S Jagtap        | Mechanical Engg. | 20/06/2016 | 04/07/2016 |
| 10  | Rahul B Hire          | Mechanical Engg. | 20/06/2016 | 04/07/2016 |
| 11  | Dipak S Nikam         | Mechanical Engg. | 20/06/2016 | 04/07/2016 |
| 12  | Sagar Madhav Patil    | Mechanical Engg. | 20/06/2016 | 04/07/2016 |
| 13  | Himanshu Jankar       | Mechanical Engg. | 20/06/2016 | 04/07/2016 |
| 14  | Aditya Bodhare        | Mechanical Engg. | 20/06/2016 | 04/07/2016 |
| 15  | SarkarPreetam Sukumar | Mechanical Engg. | 20/06/2016 | 04/07/2016 |
| 16  | Dalwani Vicky Kishor  | Mechanical Engg. | 20/06/2016 | 04/07/2016 |
| 17  | Khole Vijay Sanjay    | Mechanical Engg. | 20/06/2016 | 04/07/2016 |
| 18  | Kunal Girish Potdar   | Mechanical Engg. | 20/06/2016 | 04/07/2016 |

| 19 | Dugad Darshan Hiralal | Mechanical Engg. | 20/06/2016 | 04/07/2016 |
|----|-----------------------|------------------|------------|------------|
| 20 | Thakur Shubham        | Instrumentation  | 20/06/2016 | 04/07/2016 |
| 21 | Rutuja Kshatriya      | Instrumentation  | 20/06/2016 | 04/07/2016 |
| 22 | Rishikesh Ukande      | MBA              | 20/06/2016 | 04/07/2016 |
| 23 | Mechkul sonal         | MBA              | 20/06/2016 | 04/07/2016 |
| 24 | Shraddha Virghat      | MCA              | 20/06/2016 | 04/07/2016 |
| 25 | Kartika Pillai        | MCA              | 20/06/2016 | 04/07/2016 |
| 26 | Shubhada Ranalkar     | MCA              | 20/06/2016 | 04/07/2016 |
| 27 | Prashant Vadnere      | E & T C          | 20/06/2016 | 04/07/2016 |
| 28 | Divya Zalte           | E & T C          | 20/06/2016 | 04/07/2016 |
| 29 | Pritam Purkar         | E & T C          | 20/06/2016 | 04/07/2016 |

### 1.2.2 Does the institution offer programmes that facilitate twinning /dual degree? If 'yes', give details.

- No, Institution does not offer any programme facilitating twinning / dual degree.
- 1.2.3 Give details on the various institutional provisions with reference to academic flexibility and how it has been helpful to students in terms of skills development, academic mobility, progression to higher studies and improved potential for employability. Issues may cover the following and beyond:
  - Range of Core/ Elective options offered by the University and those opted by the college
  - Choice Based Credit System and range of subject options
  - Courses offered in modular form
  - Credit transfer and accumulation facility
  - Lateral and vertical mobility within and across programmes and courses
  - Enrichment Courses

### Range of Core/ Elective options offered by the University and those opted by the college

- The Institute offers open elective subjects to final year students.
- Institute gives flexibility to final year students to choose Elective subjects.
- The Institute /department motivate students to select elective subject.
- Choice of electives is based on the requirements of industry and higher education for UG/PG programmes.

#### Choice Based Credit System and range of subject options

Institute offered Choice Based Credit System for PG courses.

#### Lateral and vertical mobility within and across programmes and Courses

 After completion of First year engineering students have given vertical mobility to change the programme as per guidelines by Director of Technical Education (DTE).

- Branch change facility is available for direct second year and regular admitted students as per guidelines by Director of Technical Education (DTE).
- Summary of students who take benefit of branch change facility shown in Table 1.2.3(A)
- Summary of Direct Second year branch wise admitted students shown in Table 1.2.3(B)

Table 1.2.3(A) Summary of students who took benefit of branch change facility:

| Sr. | Course                      | 2013-14 2014-1 |    | -15 | 15 2015-16 |     | 2016-17 |     |    |
|-----|-----------------------------|----------------|----|-----|------------|-----|---------|-----|----|
| No. | Course                      | Out            | In | Out | In         | Out | In      | Out | In |
| 1   | Mechanical Engineering      | -              | 4  | -   | 4          | -   | 6       | -   | -  |
| 2   | Computer Engineering        | 5              | -  | 1   | -          | 1   | 1       | -   | 2  |
| 3   | Civil Engineering           | -              | 2  | -   | 1          | -   | -       | -   | 1  |
| 4   | E & TC Engineering          | 1              | 1  | 4   | 1          | 5   | -       | -   | -  |
| 5   | Instrumentation and Control | 1              |    | -   | -          | -   | 2       | -   | 1  |
| 6   | Information Technology      | -              |    | 2   | 1          | 3   | -       | 4   | -  |

Table 1.2.3(B) Summary of Direct Second year Branch wise admitted Students

| Sr. | Name of the Department            | 2013- | 2014- | 2015- | 2016- |
|-----|-----------------------------------|-------|-------|-------|-------|
| No. |                                   | 14    | 15    | 16    | 17    |
| 1   | Mechanical Engineering            | 35    | 36    | 28    | 49    |
| 2   | Computer Engineering              | 25    | 19    | 24    | 18    |
| 3   | Civil Engineering                 | 12    | 27    | 12    | 23    |
| 4   | E & T. C.                         | 29    | 20    | 30    | 34    |
| 5   | Instrumentation and Control Engg. | 17    | 25    | 24    | 07    |
| 6   | Information Technology            | 21    | 23    | 34    | 34    |
| 7   | MCA                               | 16    | 56    | -     | -     |

#### **Enrichment Courses:**

Table 1.2.3(C) Enrichment Courses

| Department | Title of Programme                       | Date       | No. of participant |
|------------|--|------------|--------------------|
|            | Higher Education in foreign universities | 24/01/2014 | 60                 |
|            | Higher Education in foreign universities | 16/01/2015 | 60                 |
| Mechanical | Higher Education in Germany              | 31/07/2015 | 100                |
|            | Higher Education in Germany              | 01/08/2014 | 114                |
|            | Workshop on Advance java                 | 8/10/2016  | 17                 |
| MCA        | UI Designing Sessions                    | 13/08/2016 | 17                 |
|            | Software testing Sessions                | 09-2016    | 17                 |

|              | Virtual Reality Sessions   | 29/07/2015               | 50  |
|--------------|--|--------------------------|-----|
|              | IOT Interactive Sessions   | 11/2015                  | 51  |
|              | Web Development in PHP Sessions  | 2015                     | 50  |
| MCA          | .NET Sessions  | 28/02/2015               | 40  |
|              | Basics of Web Development  | 2015                     | 17  |
|              | Google Apps Workshop   | 21/10/2013               | 55  |
|              | Android App Development  | 17/09/2016 to            | 137 |
|              |  | 01/10/2016               |     |
| IT           | Big data & Hadoop  | 30/8/2016 to 02/9/2016   | 75  |
|              | Soft Skill session   | Aug 2016                 | 56  |
|              | Applied CS with Android workshop                                       | 24/10/2016 to            | 30  |
|              |  | 26/10/2010               |     |
|              | DST workshop on Entrepreneurship                                       | 14/07/2016 to            | 15  |
| Computer     | Development  | 16/07/2016               |     |
|              | One day workshop on Python   | 08/02/2016               | 120 |
|              | Hadoop-Big data workshop   | 14/02/2015               | 71  |
| Civil        | Entrepreneurship Development   | 16/09/2016               | 200 |
|              | View towards the life  | 12/01/2016               | 200 |
|              | MSP Software Training  | 2015                     | 24  |
|              | ERP Software Training  | 2015                     | 50  |
|              | Auto-CAD Software Training   | 2015                     | 100 |
|              | Water Audit Course   | 2015                     | 80  |
|              | ERP Software Training  | 2013                     | 80  |
| Instru.      | 5 Days training on Automation Using PLC,SCADA                          | 2/9/16 to 6/9/16         | 28  |
| &<br>Control | Six Days STTP on "C" Programming                                       | 29/9/16 to<br>8/10/16    | 11  |
|              | Workshop on "Automation Technology Covers PLC & SCADA"                 | 21/9/2016 to 24/09/2016  | 46  |
|              | Traffic Awareness Training Program at Children Traffic Education Park, | 17/09/2016               | 78  |
|              | Workshop on "Electronics Products"                                     | 08/09/2016               | 151 |
| E& TC        | Workshop on "C Programming"  | 28 /6/2016 to 30/6/2016  | 37  |
|              | Visit at Dharampur Science Center,<br>Gujrat.                          | 29/07/2016               | 70  |
|              | Workshop on Embedded System  | 21/07/2016               | 81  |
|              | VLSI workshop  | 15/07/2016 to 16/07/2016 | 56  |

|           | Workshop on "Personality Development"   | 16/02/2015                  | 59  |
|-----------|---|-----------------------------|-----|
|           | Workshop on "Ardino Procesor, Latex, PCB Design"  | 13/02/2015 to<br>14/02/2015 | 62  |
|           | Workshop on "Personality Development"   | 05/09/2014                  | 10  |
|           | AICTE –BSNL Employability<br>Enhancement Program  | 11/08/2014                  | 30  |
|           | Automation System   | 07/03/2014                  | 47  |
|           | Workshop on "Personal Power   | 22/02/2014                  | 74  |
|           | Power of MBA  | 13/02/2014                  | 127 |
|           | Emotional Freedom Technique EFT   | 31/01/2014                  | 118 |
|           | Campus to Corporate   | 14/09/2013                  | 129 |
|           | Etiquette & Manners   | 5/9/2013                    | 130 |
|           | Workshop on "Practical Oriented<br>Electronics Workshop on Industrial<br>Approach For Electronics | 30/08/2013 to<br>31/08/2013 | 68  |
|           | How to Crack GATE   | 27/07/2013                  | 66  |
|           | How to Crack GATE & CAT   | 25/7/2013                   | 67  |
|           | Practical Orientation on Industrial<br>Approach For Electronics                                   | 10/7/2013                   | 148 |
|           | Personality Development   | 6/7/2013                    | 80  |
| MBA       | Soft Skill Development By Nandita Ray   | 10/09/2013                  | 60  |
|           | Soft Skill Development By Neeta Nigam   | 01/09/2014                  | 60  |
|           | Inbound Training Program by<br>AryaHycinth  | 10/09/2014                  | 60  |
|           | 03-Days Outbound Training Program by<br>Arya Hycinth  | 25/02/2015 to 27/02/2015    | 20  |
|           | Soft Skill Development By Gordon Sir  | 05/03/2015                  | 60  |
|           | One Day-Outbound Training Programme<br>by Shubhangi Kundalkar & Gordon<br>Noronha                 | 04/10/2015                  | 60  |
|           | Inbound Training Program by Arya<br>Hycinth   | 08/10/2015                  | 60  |
| MBA       | One Day-Outbound Training Programme<br>by Gordon Noronha  | 02/02/2016                  | 60  |
| WIDA      | Inbound Training Program by Arya<br>Hycinth   | 27/09/2016                  | 60  |
|           | Soft Skill Development By Gordon<br>Noronha   | 22/08/2016                  | 60  |
|           | Zensar Training   | 2015-2016                   | 48  |
| Institute | Entrepreneurship Awareness Camp   | 2014                        | 10  |
|           | Entrepreneurship Awareness Camp   | 2016                        | 10  |

| Zensar Training                 | 2014-2015                   | 45 |
|---------------------------------|-----------------------------|----|
| Entrepreneurship Awareness Camp | 14/07/2016 to<br>16/07/2016 | 15 |
| Big data and Hadoop             | 01/09/2016 to 03/09/2016    | 77 |

## 1.2.4 Does the institution offer self-financed programmes? If 'yes', list them and indicate how they differ from other programmes, with reference to admission, curriculum, fee structure, teacher qualification, salary etc.

Yes, all programmes are self-financed.

- Institution Admission process is regulated by the guideline of Directorate of Technical Education board (DTE).
- Institute academic curriculum is prescribed by Savitribai Phule Pune University (SPPU).
- Institute Fees Structure is governed by "Shikshan Shulk Samiti" (SSS), Govt. of Maharashtra.
- Institute Teacher qualification and salary is decided and monitored as per the rules and regulation of All India Council of Technical Education (AICTE).

## 1.2.5 Does the college provide additional skill oriented programmes, relevant to regional and global employment markets? If 'yes' provide details of such programme and the beneficiaries.

Yes, Institute provides additional skill oriented programmes, which are relevant to regional and global employment markets. Details of such programme are shown in Table 1.2.5(A)

Table 1.2.5(A) Programmes conducted by department

| Department | Year    | Programme                     | Need and  | Design and | Resources  |
|------------|---------|-------------------------------|---|------------|--|
|            |         | Title                         | Assessment  | Planning   | Institute/Perso<br>n (Location)  |
|            | 2013-14 | BSNL<br>Training<br>Programme | To develop & learn the ability to select essential elements & practices needed using telecom sector | 40 hrs     | BSNL Training<br>Center, MIDC,<br>Satpur, Nashik,<br>Sponsored by<br>AICTE, New<br>Delhi |
| E & TC     | 2014-15 | BSNL<br>Training<br>Programme | To develop & learn the ability to select essential elements & practices needed using telecom sector | 40 hrs     | BSNL Training<br>Center, MIDC,<br>Satpur, Nashik,<br>Sponsored by<br>AICTE, New<br>Delhi |
|            | 2015-16 | PLC &<br>SCADA                | To develop & learn to implement the engineering Automation  | 40 hrs     | Prolific<br>Automation<br>Training<br>Center, Pune                                       |

|                         |         |              | using PLC        |            |                  |
|-------------------------|---------|--------------|------------------|------------|------------------|
|                         |         |              | approach.        |            |                  |
|                         | 2016-17 | PLC &        | To develop &     | 40 hrs     | Prolific         |
|                         | 2010 17 | SCADA        | learn to         | 10 1113    | Automation       |
| E & TC  Mechanical  MCA |         |              | implement the    |            | Training         |
|                         |         |              | engineering      |            | Center, Pune     |
|                         |         |              | Automation       |            | Contor, I une    |
|                         |         |              | using PLC        |            |                  |
| E & TC                  |         |              | approach.        |            |                  |
| 2 30 1 3                | 2016-17 | С            | To develop &     | Six days   | SEED Info        |
|                         |         | programming  | learn            |            | Tech, Nashik     |
|                         |         | with Data    | fundamentals &   |            | Division         |
|                         |         | Structure    | practical        |            |                  |
|                         |         |              | approach to      |            |                  |
|                         |         |              | Data Structure.  |            |                  |
|                         | 2014-15 | GATE         | For higher       | Every week | GATE Forum,      |
|                         |         | Training-    | education and    | end in a   | Nashik.          |
| Machanical              |         | GATE 2015    | opportunities in | year.      | Mr. Vishal Patil |
| Micchanical             |         |              | Government       |            | & Mr. Amit       |
|                         |         |              | jobs in favor of |            | Mane             |
|                         |         |              | the students     |            |                  |
|                         | 2013-   | Mozilla Inc. | To spread open   | One day    | Mr. Yoman        |
|                         | 2014    | Workshop     | web ideologies   |            | Patil, Mozilla   |
|                         |         |              |                  |            | Inc.             |
|                         |         | Google Apps  | To get familiar  | 3- hrs     | Mr.Shashank      |
|                         |         | Workshop     | with Google      |            | Todwal, UMS      |
|                         | 2011    | ) VIII       | apps             | 2-hrs      | Tech Labs.       |
|                         | 2014-   | .NET         | To know .NET     | Mr. Sudhir |                  |
|                         | 2015    | Sessions     | framework        |            | Gorade Sumago    |
|                         |         |              |                  |            | Infotech         |
|                         |         | Basics of    | To Know the      | 2-hrs      | Miss Yogita      |
|                         |         | Web          | basics of web    | 2-1113     | Shewale,         |
|                         |         | Development  | development      |            | Sile wate,       |
|                         | 2015-   | IOT          | to know IOT      | 2-hrs      | Mr. Prakash      |
|                         | 2016    | Interactive  | concepts &       | _          | Ekhande,         |
|                         |         | Sessions     | Implementations  |            | Emerging         |
| MCA                     |         |              | 1                |            | Technologies     |
|                         |         | Virtual      | to know VR       | 3-hrs      | Mr. Manas        |
|                         |         | Reality      | concepts &       |            | Gajre ,Zabuza    |
|                         |         | Sessions     | Implementations  |            | Labs             |
|                         |         | Web          | To get           | 2-hrs      | Mr. Rakesh       |
|                         |         | Development  | acquainted with  |            | Pawar,           |
|                         |         | in PHP       | Web              |            | Shankuntal       |
|                         |         | Sessions     | development      |            | Infotech         |
|                         |         |              | skill            |            |                  |
|                         | 2016-   | UI Designing | Enhance Front-   | One day    | Mr.Chaitnya      |
|                         | 2017    | Sessions     | end designing    |            | Dhomase,Fervo    |
|                         |         |              | skill            |            | ur Brother's     |
|                         |         |              |                  |            | Academy,         |
|                         | 201 -   | G C          | m +              | 2.1        | Nashik           |
|                         | 2016-   | Software     | To Assess        | 2-hrs      | Mr.Rajiv         |
|                         | 2017    | testing      | Software         |            | Shirsalkar,      |
|                         |         | Sessions     | Quality          |            | Lo-Tech Pro,     |

|      |                |   |   |                       | Nashik  |  |
|------|----------------|---|---|-----------------------|---|--|
|      | 2016-<br>2017  | Hibernate &<br>Spring MVC<br>Workshop           | To aware about<br>the Java<br>Development<br>Frameworks in<br>IT Firms  | One day               | Mr.Swapnil<br>Kulkarni,Kanak<br>a Softwares,<br>Pune  |  |
|      | 2016 -<br>2017 | Big Data &<br>Hadoop                            | Students will<br>understand the<br>concepts of the<br>Hadoop<br>framework and<br>its deployment<br>in a cluster<br>environment.   | Two days<br>work shop | Mr. Pankaj<br>Singh , Altron<br>Solution              |  |
| IT   | 2016 -<br>2017 | Android<br>App.<br>Development                  | To learn and develop applications in the latest operating system with practical implementation and begin managing your own cool applications like a professional at this workshop |                       | NDMVPS's<br>KBT<br>COE,Nashik                         |  |
|      | 2013-14        | .NET and<br>Cloud                               | To understand<br>concept of .NET<br>and Cloud   | One Day               | WINJIT  |  |
|      | 2013-14        | Cyber<br>Security and<br>Penetration<br>Testing | To understand concept of Cyber Security   | One Day               | Cybertech<br>Global learning<br>Solution New<br>Delhi |  |
|      | 2014-15        | Hadoop-Big<br>data                              | Students will<br>understand the<br>concepts of the<br>Hadoop and Big<br>Data  | One Day               | Pragma<br>Educorp                                     |  |
| COMP | 2015-16        | Workshop on<br>Python                           | To understand concept of Python   | One Day               | Mr. Ganesh<br>Gudekar                                 |  |
|      | 2016-17        | Big Data and<br>Hadoop                          | Students will<br>understand the<br>concepts of the<br>Big Data and<br>Hadoop  | Three Days            | Mr. Pankaj<br>Singh , Altron<br>Solution              |  |
|      | 2016-17        | Android app<br>Development<br>Workshop          | To understand concept of Android app Development  | Two Days              | Vijayeta Bhat<br>WINJIT                               |  |
|      | 2016-17        | Applied CS with Android                         | To Learn and understand   | Three Days            | Shubham<br>Totala                                     |  |

|                        |         | workshop                          | concept of<br>Applied CS with                           |                                     | Google(Under CS Education  |
|------------------------|---------|-----------------------------------|---|-------------------------------------|--|
|                        |         |                                   | Applied CS with Android                                 |                                     | Programme)   |
| MBA                    | 2015-16 | Inbound<br>Training<br>Programme  | Personality Development by Arya Hycinth - Pune          | One day<br>training<br>programme    | One day Inbound training is organized to improve Leadership qualities, group dynamics and teamwork among the students. |
|                        | 2015-16 | Workshop                          | Soft Skill<br>Development by<br>Gordon Sir              | One day<br>Workshop                 | To improve Soft Skill and Business Communication Programme to improve communication and stage daring.                  |
|                        | 2014-15 | Inbound<br>Training<br>Programme  | Personality Development by Arya Hycinth - Pune          | One day<br>training<br>programme    | To improve<br>Leadership<br>qualities, group<br>dynamics and<br>teamwork<br>among the<br>students.                     |
|                        | 2014-15 | Outbound<br>Training<br>Programme | Personality<br>Development by<br>Arya Hycinth -<br>Pune | Three days<br>training<br>programme | To improve<br>Leadership<br>qualities, group<br>dynamics and<br>teamwork<br>among the<br>students.                     |
| MBA                    | 2014-15 | Workshop                          | Soft Skill<br>Development by<br>Gordon Sir              | One day<br>Workshop                 | To improve Soft Skill and business communication programme to improve communication and stage daring.                  |
| Instru. and<br>Control | 2016-17 | Training<br>Program               | Training<br>Program on<br>DCS and PLC                   | Two days<br>training                | To Improve the skills practical hands on different kits.   |

Institute offered additional skill oriented programme for global employment of market shown in Table 1.2.5(B)

Table 1.2.5(B) Skill oriented programme offered by Institute

| Year    | Name of the            | No. of student | Resources Institute/     |
|---------|------------------------|----------------|--------------------------|
|         | Programme              | beneficiaries  | <b>Person</b> (Location) |
| 2014-15 | Campus Recruitment     | 61             | Mr. Krunal Dhakate       |
|         | Training Programme     |                | Center Director,         |
|         |                        |                | Time Nashik              |
| 2014-15 | Zensar Training        | 45             | Mr. Nadeem Shaikh        |
|         |                        |                | Zensar pvt. Ltd.,Pune.   |
| 2015-16 | Campus Recruitment     | 37             | Mr. Krunal Dhakate       |
|         | Training Programme     |                | Time Nashik              |
| 2015-16 | Zensar Training        | 48             | Mr. Aakash Thakur        |
|         |                        |                | Zensar pvt. Ltd., Pune.  |
| 2016-17 | Soft skill development | 90             | Dr.Vinod Parekh          |
| 2016-17 | Soft Skills            | 56             | Ms. Heena Jain Akshay    |
|         |                        |                | Study                    |
| 2016-17 | Big Data and Hadoop    | 44             | Mr. Pankaj Singh         |
|         |                        |                | Altron solution          |
| 2016-17 | SAP                    | 60             | Mr. Nishid Sharma        |
| 2016-17 | Zensar Training        | 28             | Mr. Nadeem Sayyed,       |
|         |                        |                | Pune                     |
| 2016-17 | Winjit Technology      | 45             | Mr. Ketan Lohar          |

Table 1.2.5(c) SAP Course offered by Institute

| Sr. No. | Name of the Students  | Department       | Duration   |            |  |
|---------|-----------------------|------------------|------------|------------|--|
| 1       | Mayur Gopal Gawari    | Mechanical Engg. | 20/06/2016 | 04/07/2016 |  |
| 2       | Tushar kailash Shinde | Mechanical Engg. | 20/06/2016 | 04/07/2016 |  |
| 3       | Chinmay Kothawade     | Mechanical Engg. | 20/06/2016 | 04/07/2016 |  |
| 4       | Saurabh S Gangurde    | Mechanical Engg. | 20/06/2016 | 04/07/2016 |  |
| 5       | Ajinkya R Chaudhari   | Mechanical Engg. | 20/06/2016 | 04/07/2016 |  |
| 6       | Vrushali L Khandizod  | Mechanical Engg. | 20/06/2016 | 04/07/2016 |  |
| 7       | Tushar G Bafna        | Mechanical Engg. | 20/06/2016 | 04/07/2016 |  |
| 8       | Shreyas C Ingale      | Mechanical Engg. | 20/06/2016 | 04/07/2016 |  |
| 9       | Mayur S Jagtap        | Mechanical Engg. | 20/06/2016 | 04/07/2016 |  |
| 10      | Rahul B Hire          | Mechanical Engg. | 20/06/2016 | 04/07/2016 |  |
| 11      | Dipak S Nikam         | Mechanical Engg. | 20/06/2016 | 04/07/2016 |  |
| 12      | Sagar Madhav Patil    | Mechanical Engg. | 20/06/2016 | 04/07/2016 |  |
| 13      | Himanshu Jankar       | Mechanical Engg. | 20/06/2016 | 04/07/2016 |  |
| 14      | Aditya Bodhare        | Mechanical Engg. | 20/06/2016 | 04/07/2016 |  |
| 15      | Sarkar Preetam        | Mechanical Engg. | 20/06/2016 | 04/07/2016 |  |

| 16 | Dalwani Vicky Kishor  | Mechanical Engg. | 20/06/2016 | 04/07/2016 |
|----|-----------------------|------------------|------------|------------|
| 17 | Khole Vijay Sanjay    | Mechanical Engg. | 20/06/2016 | 04/07/2016 |
| 18 | Kunal Girish Potdar   | Mechanical Engg. | 20/06/2016 | 04/07/2016 |
| 19 | Dugad Darshan Hiralal | Mechanical Engg. | 20/06/2016 | 04/07/2016 |
| 20 | Thakur Shubham        | Instrumentation  | 20/06/2016 | 04/07/2016 |
| 21 | Rutuja Kshatriya      | Instrumentation  | 20/06/2016 | 04/07/2016 |
| 22 | Rishikesh Ukande      | MBA              | 20/06/2016 | 04/07/2016 |
| 23 | Mechkul sonal         | MBA              | 20/06/2016 | 04/07/2016 |
| 24 | Shraddha Virghat      | MCA              | 20/06/2016 | 04/07/2016 |
| 25 | Kartika Pillai        | MCA              | 20/06/2016 | 04/07/2016 |
| 26 | Shubhada Ranalkar     | MCA              | 20/06/2016 | 04/07/2016 |

1.2.6 Does the University provide for the flexibility of combining the conventional face-to-face and Distance Mode of Education for students to choose the courses/combination of their choice" If 'yes', how does the institution take advantage of such provision for the benefit of students?

• Not Applicable.

#### 1.3 Curriculum Enrichment

## 1.3.1 Describe the efforts made by the institution to supplement the University's Curriculum to ensure that the academic programmes and Institution's goals and objectives are integrated?

#### Integration of Institute goals and objectives with University curriculum

- Institute focuses on improving student's academic results.
- In Institute each department conducts remedial classes for weak students to improve their performance.
- Faculty members also deliver contents beyond syllabus in theory as well as practical sessions.
- Tutorials and assignments are made mandatory parts of the regular academic process in order to enhance their learning skills.
- Mini projects and soft skill programme are also included in the curriculum to enrich the application of knowledge and develop team building skills.
- Institute arranged workshops, seminars and training programmes to understand contents beyond syllabus.
- Value added Programmes are conducted to make students employable.
- Training in soft skills is conducted for students by the eminent personalities.
- Students are encouraged to work in industries as interns during vacation and also take up industry sponsored projects.
- Institute and departments take special efforts to strengthen industry institute interaction.
- In Institute all departments conduct technical event like KSHITIJ, MECHANZA, ELICIT, INSTRUBOTICS, STHAPATYA.
- Institute offeres skill development programmes like SAP, DIC.

• Institute organizes social programmes under NSS activity like Blood donation camp, Tree plantation, Traffic Rally, Godavari Cleaning, Road safety, No vehicle day, MVP marathon, Sawchhhata abhiyan etc.

#### **Example:**

#### **Outcome Base Education (OBE) Framework:**

One such example of Program Educational Objectives and Outcomes of Mechanical Engineering are stated below.

#### **Vision of Mechanical Engineering**

To be the Center for excellence and Center of learning for innovation, incubation and research in the domain of product design, thermal engineering and manufacturing technology thereby path finder for professionalism, entrepreneurship and new knowledge contributing to the common masses.

#### **Mission of Mechanical Engineering**

To educate and train undergraduate and post graduate students in Mechanical Engineering by inculcating the values for discipline, quality and transparency and profession development in the job and self-employment emphasis industry based practices.

#### **Program Education Objectives (PEO's)**

- PEO1: To prepare technocrats that can satisfy the need of mechanical and allied industries.
- PEO2: To develop critical thinking, problem solving skills, research aptitude and carrier and professionalism among the students.
- PEO3: To improve and expand technical and professional skills of students through effective teaching, learning and industry interaction.

Table 1.3.1(A) Mapping of Program Outcome with Course outcome (Mechanical Engineering)

| Course | Course title                           | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 | PO11 | PO12 |
|--------|--|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|
| code   |  |     | 102 | 100 | 10. | 100 | 100 | 107 | 100 | 10) | 1010 | 1011 | 1012 |
| 102013 | Basic Mechanical Engineering           | 2   | 1   | -   | -   | -   | 1   | 1   | -   | -   | -    | -    | -    |
| 102014 | Engineering Graphics II                | -   | _   | 1   | -   | 2   | -   | -   | -   | -   | -    | -    | -    |
| 107008 | Engineering Mathematics III            | 3   | 2   | -   | -   | 1   | -   | -   | -   | -   | -    | -    | 2    |
| 202041 | Manufacturing Process-I                | 2   | _   | 1   | -   | -   | 2   | 1   | -   | -   | -    | -    | -    |
| 202042 | Computer Aided Machine Drawing         | -   | _   | 1   | -   | 3   | -   | ı   | -   | -   | 1    | -    | -    |
| 202043 | Thermodynamics                         | 2   | 3   | 1   | 2   | 1   | 1   | 1   | -   | -   | 1    | -    | -    |
| 202044 | Material Science                       | 1   | _   | 1   | -   | 1   | 1   | 2   | -   | -   | -    | -    | _    |
| 202051 | Strength of Materials                  | 3   | 1   | 1   | 3   | -   | 1   | ı   | -   | -   | 1    | -    | -    |
| 202045 | Fluid Mechanics                        | 2   | 2   | 1   | 2   | 1   | -   | -   | -   | -   | 1    | -    | -    |
| 202047 | Soft Skills                            | -   | _   | -   | -   | -   | -   | -   | 3   | 3   | 2    | -    | 2    |
| 202048 | Theory of Machines–I                   | 3   | 2   | 1   | -   | -   | 1   | ı   | -   | -   | 1    | -    | -    |
| 202049 | Engineering Metallurgy                 | -   | _   | 1   | -   | 1   | 1   | 2   | -   | -   | 1    | -    | -    |
| 202050 | Applied Thermodynamics                 | 2   | 1   | 2   | 1   | -   | 1   | 2   | -   | -   | 1    | -    | 1    |
| 203152 | Electrical and Electronics Engineering | 2   | 1   | -   | -   | -   | -   | -   | -   | 2   | -    | -    | -    |
| 202053 | Machine Shop – I                       | -   | _   | 1   | -   | -   | 1   | 1   | -   | -   | -    | -    | -    |
| 302041 | Design of Machine Elements – I         | 3   | 1   | 3   | 1   | 1   | 1   | 2   | -   | 2   | 1    | 1    | 1    |
| 302042 | Heat Transfer                          | 3   | 2   | 2   | -   | 1   | -   | 1   | -   | -   | 1    | -    | 1    |
| 302043 | Theory of Machines-II                  | 2   | 1   | 1   | -   | -   | 1   | -   | -   | -   | -    | -    | -    |
| 302044 | Metrology and Quality Control          | 1   | 1   | 1   | -   | 1   | 1   | 1   | -   | -   | 1    | -    | -    |
| 302045 | Hydraulics and Pneumatics              | 1   | 1   | 1   | -   | 1   | 1   | -   | -   | -   | -    | -    | _    |
| 302046 | Skill Development                      | -   | _   | -   | -   | -   | -   | -   | 2   | -   | 2    | -    | -    |
| 302047 | Numerical Methods and Optimization     | 3   | 2   | -   | 1   | 2   | -   | -   | -   | -   | -    | -    | 1    |
| 302048 | Design of Machine Elements -II         | 2   | 2   | 3   | 1   | 1   | 1   | 2   | -   | 1   | 1    | 1    | 1    |
| 302049 | Turbo Machines                         | 2   | 2   | 1   | 1   | _   | -   | 2   | -   | -   | -    | -    | _    |
| 302050 | Mechatronics                           | _   | 1   | 1   | 1   | 1   | 1   | -   | -   | 2   | -    | -    | _    |
| 302051 | Manufacturing Process-II               | -   | -   | 1   | -   | 1   | 1   | 1   | -   | -   | -    | -    | -    |

| Course code | Course title                                   |   | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 | PO11 | PO12 |
|-------------|--|---|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|
| 302052      | Machine Shop -II                               | - | -   | -   | -   | 1   | 1   | 1   | -   | -   | -    | -    | -    |
| 302053      | Seminar  | - | 2   | -   | -   | -   | -   | -   | 3   | 2   | 3    | -    | 2    |
| 402041      | Refrigeration and Air Conditioning             | 2 | 1   | 2   | -   | 1   | 1   | 2   | -   | -   | 1    | 1    | 1    |
| 402042      | CAD/ CAM Automation                            | 2 | 2   | 2   | 2   | 2   | 1   | -   | -   | -   | -    | -    | -    |
| 402043      | Dynamics of Machinery                          |   | 2   | 2   | 1   | 1   | 1   | 1   | -   | -   | 1    | -    | 1    |
| 402044      | Tribology (Elective-I)                         |   | 2   | 2   | 1   | -   | -   | 2   | -   | -   | -    | -    | 1    |
| 402045      | Advanced Manufacturing Processes (Elective-II) |   | -   | 1   | -   | 1   | 2   | 1   | -   | -   | -    | -    | 1    |
| 402046      | Project –I                                     |   | 2   | -   | -   | -   | -   | -   | 2   | 3   | 3    | 3    | 2    |
| 402047      | Power Plant Engineering                        |   | 1   | 1   | -   | -   | -   | 2   | 1   | -   | 1    | -    | 1    |
| 402048      | Mechanical System Design                       |   | 1   | 3   | 1   | 1   | 1   | 2   | -   | 2   | 1    | -    | 2    |
| 402049      | Industrial Engineering (Elective-III)          |   | _   | -   | -   | -   | 1   | -   | _   | _   | -    | 1    | 1    |
| 402050      | Finite Element Analysis ( Elective-IV )        |   | 3   | 2   | 3   | 2   | 1   | -   | _   | _   | -    | -    | -    |
| 402051      | Project – II                                   | 2 | 2   | -   | -   | -   | -   | -   | -   | 3   | 3    | 3    | 3    |

Institute has done the mapping of each course outcome with the Program Outcomes to evaluate & achieve the teaching learning outcome.

Mapping of Course Design of Machine Element-II (TE Mechanical Engineering) with the Program Outcomes.

#### Example 2:

- Course: Design of Machine Element-II (TE Mechanical Engineering)
- Course Outcomes:
  - 1. Ability to design and analyze Mechanical transmission systems
  - 2. Ability to design and select different types of bearings from manufacturer's catalogue.
  - 3. Enhancement in proficiency of CAD software for design and analysis so that students are capable to generate production drawing

Table 1.3.1(B) Mapping of Course Outcome with Program Outcome

| Rating | (2- Hi | gh Rating, | 1- Low | rating. | 0- No | rating) |
|--------|--------|------------|--------|---------|-------|---------|
|        |        |            |        |         |       |         |

| Соция             |    |    |    |    | Pr | ogran | n Out | come |    |    |    |    |
|-------------------|----|----|----|----|----|-------|-------|------|----|----|----|----|
| Course<br>Outcome | PO | PO | PO | PO | PO | PO    | PO    | PO   | PO | PO | PO | PO |
| Outcome           | 1  | 2  | 3  | 4  | 5  | 6     | 7     | 8    | 9  | 10 | 11 | 12 |
| 1                 | 1  | 1  | 2  | 0  | 0  | 1     | 0     | 0    | 2  | 2  | 0  | 1  |
| 2                 | 1  | 1  | 2  | 0  | 0  | 1     | 0     | 0    | 2  | 2  | 0  | 1  |
| 3                 | 0  | 0  | 0  | 0  | 2  | 0     | 0     | 0    | 2  | 1  | 0  | 1  |

## 1.3.2 What are the efforts made by the institution to enrich and organize the curriculum to enhance the experiences of the students so as to cope with the needs of the dynamic employment market?

- Institute has established Industry Institute Interaction (III) cell to bridge up gap between Industry and Institute.
- Industry Institute Interaction (III) cell interacts with various companies and collects information about the current needs of dynamic employment market. These requirements are communicated to all the departments.
- Institute has started one innovative programme named as SAP which focuses on improving employability skills among the students.
- Institute has started MVP SAP center under this various courses are started viz. Procurement, Sales and Distribution, Financial Accounting, ABAP and HRM.
- Every department has professional student association to supplement the university curriculum by implanting leadership and managerial skill in the students.
- Institute motivates students to participate in events like Mechanza, Kshitij, Stapatya, Instrubotics, Elicit, poster competition etc. to enhance their collaborative skills.
- Guest lectures, seminars, workshops are arranged by all department of Institute.
- Soft skill classes are conducted by Institute.
- Institute provides additional skill oriented programmes, which are relavant to regional and global employment market. Refer table 1.2.5 (B)
- Soft skills and communication classes are conducted by expert visiting faculty

Table 1.3.2(A) Programmes conducted by Institute / Department

| Department | Year    | Programme<br>Title                | Need and<br>Assessment  | Design and<br>Planning    | Resources<br>Institute/Perso<br>n (Location)   |
|------------|---------|-----------------------------------|---|---------------------------|--|
|            | 2013-14 | BSNL<br>Training<br>Programme     | To develop & learn the ability to select essential elements & practices needed using telecom sector | 40 hrs                    | BSNL Training<br>Center, MIDC,<br>Satpur, Nashik,<br>Sponsored by<br>AICTE, New<br>Delhi |
| E & TC     | 2014-15 | BSNL<br>Training<br>Programme     | To develop & learn the ability to select essential elements & practices needed using telecom sector | 40 hrs                    | BSNL Training<br>Center, MIDC,<br>Satpur, Nashik,<br>Sponsored by<br>AICTE, New<br>Delhi |
|            | 2015-16 | PLC &<br>SCADA                    | To develop & learn to implement the engineering Automation using PLC approach.                      | 40 hrs                    | Prolific<br>Automation<br>Training<br>Center, Pune                                       |
| E & TC     | 2016-17 | PLC &<br>SCADA                    | To develop & learn to implement the engineering Automation using PLC approach.                      | 40 hrs                    | Prolific Automation Training Center, Pune  |
|            | 2016-17 | C programming with Data Structure | To develop & learn fundamentals & practical approach to Data Structure.                             | Six days                  | SEED Info<br>Tech, Nashik<br>Division  |
| Mechanical | 2014-15 | GATE<br>Training-<br>GATE 2015    | For higher education and opportunities in Government jobs in favor of the students                  | Every week end in a year. | GATE Forum,<br>Nashik.<br>Mr. Vishal Patil<br>& Mr. Amit<br>Mane                         |
| MCA        | 2013-   | Mozilla Inc. Workshop             | To spread open web ideologies   | One day                   | Mr. Yoman Patil, Mozilla Inc.  |
| MCA        | 2014    | Google Apps<br>Workshop           | To get familiar with Google apps To know .NET   | 3-hrs 2-hrs               | Mr.Shashank Todwal, UMS Tech Labs. Mr. Sudhir  |

|    | 2015           | Sessions               | framework                          |                       | Gorade Sumago                 |
|----|----------------|------------------------|------------------------------------|-----------------------|-------------------------------|
|    | _              |                        |                                    |                       | Infotech                      |
|    |                | Basics of              | To Know the                        | 2-hrs                 | Miss Yogita                   |
|    |                | Web Development        | basics of web development          |                       | Shewale,                      |
|    |                | IOT                    | to know IOT                        | 2-hrs                 | Mr. Prakash                   |
|    |                | Interactive            | concepts &                         |                       | Ekhande,                      |
|    |                | Sessions               | Implementations                    |                       | Emerging Technologies         |
|    |                | Virtual                | to know VR                         | 3-hrs                 | Mr. Manas                     |
|    | 2015-          | Reality                | concepts &                         |                       | Gajre ,Zabuza                 |
|    | 2016           | Sessions<br>Web        | Implementations To get             | 2-hrs                 | Labs<br>Mr. Rakesh            |
|    |                | Development            | acquainted with                    | 2-1118                | Pawar,                        |
|    |                | in PHP                 | Web                                |                       | Shankuntal                    |
|    |                | Sessions               | development<br>skill               |                       | Infotech                      |
|    |                | UI Designing           | Enhance Front-                     | One day               | Mr.Chaitnya                   |
|    | 2016-          | Sessions               | end designing<br>skill             |                       | Dhomase,Fervo<br>ur Brother's |
|    | 2017           |                        |                                    |                       | Academy,                      |
|    |                | g c                    | <b>T</b>                           | 2.1                   | Nashik                        |
|    | 2016-          | Software testing       | To Assess<br>Software              | 2-hrs                 | Mr.Rajiv<br>Shirsalkar,       |
|    | 2010-          | Sessions               | Quality                            |                       | Lo-Tech Pro,                  |
|    | · .            |                        | •                                  |                       | Nashik                        |
|    |                | Hibernate &            | To aware about                     | One day               | Mr.Swapnil                    |
|    | 2016-          | Spring MVC<br>Workshop | the Java<br>Development            |                       | Kulkarni,Kanak a Softwares,   |
|    | 2017           | cinonop                | Frameworks in                      |                       | Pune Pune                     |
|    |                | D' D : î               | IT Firms                           | T 1                   | M. D. i i                     |
|    |                | Big Data &<br>Hadoop   | Students will understand the       | Two days<br>work shop | Mr. Pankaj<br>Singh , Altron  |
|    |                | Писоор                 | concepts of the                    | work shop             | Solution Solution             |
|    | 2016 -         |                        | Hadoop                             |                       |                               |
|    | 2017           |                        | framework and                      |                       |                               |
|    |                |                        | its deployment in a cluster        |                       |                               |
|    |                |                        | environment.                       |                       |                               |
|    |                | Android                | To learn and                       | Two days              | NDMVPS's                      |
|    |                | App. Development       | develop applications in            | workshop              | KBT                           |
| IT |                | Development            | the latest                         |                       | COE,Nashik                    |
|    |                |                        | operating                          |                       |                               |
|    | 204 -          |                        | system with                        |                       |                               |
|    | 2016 -<br>2017 |                        | practical implementation           |                       |                               |
|    | 201/           |                        | and begin                          |                       |                               |
|    |                |                        | managing your                      |                       |                               |
|    |                |                        | own cool                           |                       |                               |
|    |                |                        | applications like                  |                       |                               |
|    |                |                        | a professional at<br>this workshop |                       |                               |
|    |                |                        | •                                  |                       |                               |

|      |          | .NET and            | To understand          | One Day     | Winjit                                  |
|------|----------|---------------------|------------------------|-------------|---|
|      | 2013-14  | Cloud               | concept of .NET        | One Day     | technology,                             |
|      | 2013-14  | Cloud               | and Cloud              |             | Nashik.                                 |
|      |          | C-1                 |                        | On a Dana   | +                                       |
|      |          | Cyber               | To understand          | One Day     | Cybertech                               |
|      | 2013-14  | Security and        | concept of             |             | Global learning                         |
|      |          | Penetration         | Cyber Security         |             | Solution New                            |
|      |          | Testing             | G. 1 . '11             | 0 0         | Delhi                                   |
|      |          | Hadoop-Big          | Students will          | One Day     | Pragma                                  |
|      | 2014-15  | data                | understand the         |             | Educorp                                 |
|      | 2014-13  |                     | concepts of the        |             |   |
|      |          |                     | Hadoop and Big<br>Data |             |   |
|      |          | Workshop on         | To understand          | One Dev     | Mr. Ganesh                              |
|      | 2015-16  | Workshop on Python  |                        | One Day     | Gudekar                                 |
| COMP | 2013-10  | Fyulon              | concept of Python      |             | Gudekai                                 |
| COMP |          | Dia Data and        | Students will          | Three Days  | Mr. Pankaj                              |
|      |          | Big Data and Hadoop | understand the         | Tillee Days | Singh , Altron                          |
|      | 2016-17  | Пацоор              | concepts of the        |             | Solution                                |
|      | 2010-17  |                     | Big Data and           |             | Solution                                |
|      |          |                     | Hadoop                 |             |   |
|      |          | Android app         | To understand          | Two Days    | Vijayeta Bhat                           |
|      |          | Development         | concept of             | 1 WO Days   | WINJIT                                  |
|      | 2016-17  | Workshop            | Android app            |             | *************************************** |
|      |          | Workshop            | Development            |             |   |
|      |          | Applied CS          | To Learn and           | Three Days  | Shubham                                 |
|      |          | with Android        | understand             |             | Totala                                  |
|      | 2016-17  | workshop            | concept of             |             | Google(Under                            |
|      |          |                     | Applied CS with        |             | CS Education                            |
|      |          |                     | Android                |             | Programme)                              |
|      |          | Inbound             | Personality            | One day     | One day                                 |
|      |          | Training            | Development by         | training    | Inbound                                 |
|      |          | Programme           | Arya Hycinth -         | programme   | training is                             |
|      |          |                     | Pune                   |             | organized to                            |
|      |          |                     |                        |             | improve                                 |
|      | 2015-16  |                     |                        |             | Leadership                              |
|      |          |                     |                        |             | qualities, group                        |
|      |          |                     |                        |             | dynamics and                            |
|      |          |                     |                        |             | teamwork                                |
|      |          |                     |                        |             | among the                               |
|      |          |                     |                        |             | students.                               |
| MBA  |          | Workshop            | Soft Skill             | One day     | To improve                              |
|      |          | •                   | Development by         | Workshop    | Soft Skill and                          |
|      |          |                     | Gordon Sir             | Î           | Business                                |
|      |          |                     |                        |             | Communication                           |
|      | 2015-16  |                     |                        |             | Programme to                            |
|      |          |                     |                        |             | improve                                 |
|      |          |                     |                        |             | communication                           |
|      |          |                     |                        |             | and stage                               |
|      |          |                     |                        |             | daring.                                 |
|      |          | Inbound             | Personality            | One day     | To improve                              |
|      |          | Training            | Development by         | training    | Leadership                              |
|      | 2014-15  | Programme           | Arya Hycinth -         | programme   | qualities, group                        |
|      |          |                     | Pune                   |             | dynamics and                            |
|      | <u> </u> |                     |                        |             | -                                       |

|                                    |         |                                   |   |                                     | teamwork<br>among the<br>students.  |
|------------------------------------|---------|-----------------------------------|---|-------------------------------------|---|
|                                    | 2014-15 | Outbound<br>Training<br>Programme | Personality<br>Development by<br>Arya Hycinth -<br>Pune | Three days<br>training<br>programme | To improve<br>Leadership<br>qualities, group<br>dynamics and<br>teamwork<br>among the<br>students.    |
| MBA                                | 2014-15 | Workshop                          | Soft Skill<br>Development by<br>Gordon Sir              | One day<br>Workshop                 | To improve Soft Skill and business communication programme to improve communication and stage daring. |
| Instrumentat<br>ion and<br>Control | 2016-17 | Training<br>Program               | Training Program on DCS and PLC                         | Two days<br>training                | To Improve the skills practical hands on different kits.  |

## 1.3.3 Enumerate the efforts made by the institution to integrate the cross cutting issues such as Gender, Climate Change, Environmental Education, Human Rights, ICT etc., into the curriculum?

Efforts made by the institution to integrate the cross cutting issues such as Gender, Climate Change, Environmental Education, Human Rights, ICT etc.,

Table 1.3.3(A) Efforts made by the institution

| Cross cutting issues                            | Activities/efforts made   |
|---|---|
| Gender  | Women empowerment Cell, Women grievances Redressal cell   |
| Climate change                                  | Climate change, Tree Plantation   |
|   | Social work environment awareness and climate control   |
| Environmental<br>Education                      | Tree plantation, rain water harvesting, Environmental related<br>subjects in curriculum, Swachhata Mohim, Gram Swachhata<br>Abhiyan, Plastic Nirmulan, Road Safety Awareness, Apatti<br>Management, Godavari Cleaning Abhiyan |
| Human rights                                    | Anti ragging, Women grievances Redressal cell, Road Safety<br>Abhiyan, Matdar Nondani Abhiyan, Ahinsa Din   |
| Information<br>communication<br>Technology(ICT) | E-learning resources, Use of modern teaching aids like NPTEL Videos, ppts, etc  |

Table 1.3.3(B) Programmes Conducted under NSS Activity

| Academic | Activities             | Participant | Venue                  |
|----------|------------------------|-------------|------------------------|
| Year     |                        |             |                        |
| 2013-14  | Blood Donation Camp    | 121         | NDMVPS's KBT COE       |
|          | Tree Plantation        | 20          | NDMVPS's KBT COE       |
|          | Ahinsa Din             | 60          | NDMVPS's KBT COE       |
| 2014-15  | Blood Donation Camp    | 103         | NDMVPS's KBT COE       |
|          | Tree Plantation        | 20          | NDMVPS's KBT COE       |
|          | Health Checkup         | 120         | NDMVPS's KBT COE       |
| 2015-16  | Health Checkup         | 681         | KTHM Campus            |
|          | Blood Donation Camp    | 85          | NDMVPS's KBT COE       |
|          | Road Safety Abhiyan    | 45          | NDMVPS's KBT COE       |
| 2016-17  | Road Safety Abhiyan    | 45          | Children Traffic Park, |
|          | Health Checkup         | 580         | KTHM Campus            |
|          | Blood Donation         | 102         | NDMVPS's KBT COE       |
|          | Swachhata Mohim        | 75          | NDMVPS's KBT COE       |
|          | Matdar Nondani Abhiyan | 250         | NDMVPS's KBT COE       |

Table 1.3.3(C) NSS Camp Details

| Year     | Name of | Detail of work under taken | Place of Camp   | Duration   |  |
|----------|---------|----------------------------|-----------------|------------|--|
|          | Camp    | camp                       |                 |            |  |
| 2013-14  | Winter  | Environment Awareness      | Village Matori, | 23/12/2013 |  |
|          | camp    | GramSwachhata Abhiyan      | Nashik.         | to         |  |
|          |         | Tree Plantation            |                 | 30/12/2013 |  |
|          |         | Woman Empowerment          |                 |            |  |
| 2014-15  | Winter  | Gram Swachhta abhiyan      | Trimmbakeshwar  | 15/12/2014 |  |
|          | camp    | Plastic Nirmulan           |                 | to         |  |
|          |         | Road safety Awarness       |                 | 21/12/2014 |  |
| 2015- 16 | Winter  | Gram Swachhta abhiyan      | Village         | 21/12/2015 |  |
|          | camp    | Woman Empowerment          | Govardhan,      | to         |  |
|          |         | Personality development    | Nashik.         | 27/12/2015 |  |
|          |         | Environment awerness       |                 |            |  |
|          |         | Appati Managment           |                 |            |  |
| 2016-17  | Winter  | Avayav dan Abhiyan         | Village         | 19/12/2016 |  |
|          | camp    | Woman Empowerment          | Tiradshet,      |            |  |
|          |         | Personality development    | Nashik.         |            |  |
|          |         | Environment awerness       |                 |            |  |
|          |         | Appati Managment           |                 |            |  |

### **Activities Conducted Under NSS**





Visit to Traffic Education park



Road Safety Awareness



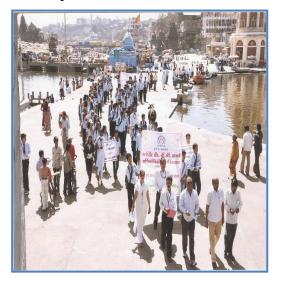
Tree plantation and swachhata Abhiyan





**Blood Donation Camp** 





Godavari cleaning & Godavari Padyatra at Ramkund





Tree plantation

### 1.3.4 What are the various value-added courses/enrichment programmes offered to ensure holistic development of students?

Moral and ethical values Employable and life skills Better career options Community orientation

#### Moral and ethical values

- Guest lectures on moral ethical values.
- Yoga Club.
- National Anthem, National Song.





Fig 1.3.3.2 Yoga Activity conducted on yoga day.

### **Employable & life skills**

- To increase employable skills in students, Institute has developed T & P and EDP cell. This cell conducts different activities like, GATE coaching classes, soft skill classes, expert talk etc.
- To increase life skills in students, Art of Living YES+' like course are conducted for them.

### **Better career option**

- Recent specializations offered by MVP SAP.
- For the better career of students and to increase employability, scheme like "Pradhan Mantri Kaushal Vikas Yojana, Govt.of India" is launched by institute to enable a large number of students to take up industry-relevant skill training that will help them in securing a better livelihood.

### **Community orientation**

- Institute conducted NSS activities viz. Blood donation camp, Tree plantation, Health Checkup, Cleanliness, Road safety awareness, environmental awareness, Plastic Nirmulan, MVP Marethon, Matdar nondani Abhiyan etc.
- Special winter camp is arranged by NSS unit at rural places where, students are interested in identifying their problems and find technology enabled solutions on it.

• Under NSS unit different Activities are conducted like Gram Swachhata Abhiyan, Women Empowerment, Avayav dan Abhiyan, Personality development camp etc.

### 1.3.5 Citing a few examples enumerate on the extent of use of the feedback from stakeholders in enriching the curriculum?

- Institute takes feedback from all stakeholders like students, teacher, alumni, parents, and consider their valuable suggestions in enriching the curriculum.
- After collecting feedback from all stakeholders, the data is processed and analysis report is submitted to the Principal. Then Principal takes necessary action on it.
- Parent's meets are conducted and suggestions of parents are considered for corrective measures.
- The best example is stated below.

Table 1.3.5(A) Example of Parents Feedback

| Activities                                 | Particulars  |   |  |  |  |  |
|--|--|---|--|--|--|--|
| Parent Meeting                             | Held on 05/11/2016   |   |  |  |  |  |
| Discussion in parent<br>Meet               | About Introduction of courses, Curriculum, Teaching Learning process, Placements and different Queries asked by the parents etc. |   |  |  |  |  |
| Feedback taken                             | Positive   | Negative  |  |  |  |  |
|  | Excellent, Institute dedications are good Satisfied in Parents teachers meet, Hospitality was Excellent.                         | In academic give more time for difficult subject. |  |  |  |  |
| Forwarded suggestion for corrective action | Yes  |   |  |  |  |  |
| Decision making and implementation         | If any Corrective measures are needed then decisions are taken by higher authority.  |   |  |  |  |  |
| Outcome analysis                           | Student progress and attendan  | ce report send to the parents.                    |  |  |  |  |

|   | NASHIK DISTRICT MARATHA VIDYA PRASARAK SAMAJ'S  KARMAVEER ADV. BABURAO GANPATRAO THAKA  COLLEGE OF ENGINEERING  NASHIK - 13  Udoji Maratha Boarding Campus, Pumping Station, Gangapur Roi Nashik - 422013, Maharashtra, India  Visit us at : www.kbrcov.org |
|---|---|
|   | FIRST YEAR ENGINEERING  |
|   | FEEDBACK FROM PARENT  |
|   | E. (All Branches)  Date: 05/  lame of the Ward: Krushita Sampatt Roll No.:  Branch: E9  |
| 1 | a Compati   |
| 1 | Mobile No: E-Mail ID:   |
|   | Are you satisfied by 'Parent -Teacher' meet?  |
|   | ( If No, reason)  |
| 2 | ) Would you like to have Parent-Teacher meet twice in semester?    NO   |
| 3 | ) Hospitality: ☐ Excellent ☐ Good ☐ Fair ☐ Poor   |
| 4 | ) Record Keeping: □ Excellent □ Good □ Fair □ Poor  |
| 5 | •   |
|   | ) Is your ward attendance below 75%?   YES   YES   YO   |
|   | If Yes , Reason)  |
|   | 5) Are you satisfied by the information given by the class coordinator?   |
|   | ff No, reason)  |
| 7 | ) Does your ward participate in the sports activity?  |
| 8 | Does your ward participate in extracurricular activities?   YES   NO  |
| 9 | ) Does your ward find any subject difficult?  |
|   | f Yes) - Name of the subject: ) Exectical Any suggestion:   |
|   | 2) FP L  1) Does your ward feel insecure in the college ?   YES NO  |
| а | f Ves Reason)   |
| 1 | 1) Any Other Suggestions, Kindly inform about child's result  |
|   |   |

Fig 1.3.5 Parents feedback form.

## 1.3.6 How does the institution monitor and evaluate the quality of its enrichment programmes?

- Academic Monitoring Committee (AMC) is chaired by Principal of the Institute. All Dean and HOD of all departments is member of this committee.
- AMC used to monitor all the Academics, student Feedback and overall teaching learning process to achieve maximum academic performance of the students.
- Guidance of experts/ guests in term of teaching to improve student performance.

- The analysis and suggestions by AMC will benefit the institutional progress in quality education and research.
- It will also make sure about keeping the transparency in faculty, staff and management with respect to objectives towards attainment of mission and vision of the Institute.
- AMC create a mechanism to integrate various academic activities, enrichment programmes to enhance supportive administrative tasks and to communicate and achieve quick actions and get impact on quality objectives of the Institute.

### **Example:**

Following is Activity report for Big data & Hadoop programme conducted by Computer department:

|                                 | ACTIVITY REPORT  |  |  |  |  |  |
|---------------------------------|--|--|--|--|--|--|
| Title of Activity:              | Big data & Hadoop Workshop   |  |  |  |  |  |
| Date & venue::                  | Date: 01 <sup>st</sup> Sept.2016- 03 <sup>rd</sup> Sept 2016   |  |  |  |  |  |
|                                 | Venue: NDMVPS's KBT COE, Department of Computer Engineering.   |  |  |  |  |  |
| Outcome of                      | Students are able to configure machine using Hadoop.   |  |  |  |  |  |
| activity:                       | Students are able to process on big data.  |  |  |  |  |  |
|                                 | Students are able to learn how to use Hadoop to process on live<br>Big Data like twitter or social media data  |  |  |  |  |  |
| Description of activity:        | Big data & Hadoop: 03 days workshop is conducted for students in order to learn Hadoop architecture, Big Data concept and processing on current Big data like Facebook, twitter etc                |  |  |  |  |  |
| Activity Experience:            | Big data & Hadoop workshop is successfully conducted.  |  |  |  |  |  |
| Assessment of activity outcomes | Big data & Hadoop: 03 day workshop is conducted to the students in order to learn Hadoop architecture, Big Data concept and processing. This workshop included both theory and practical sessions. |  |  |  |  |  |
| Feedback                        | Feedback is collected from participants for suggestion and improvement in future.  |  |  |  |  |  |

### 1.4 Feedback System

## 1.4.1 What are the contributions of the institution in the design and development of the curriculum prepared by the University?

- Institute Head of department attend meeting with the vice chancellor or BOS affiliated to SPPU Pune.
- Institute senior faculty members contribute their efforts in designing and developing curriculum at University level.
- Meetings of faculty members with subject Chairman.
- Contribution of faculty in designing and implementing open elective curriculum.

- Faculty is involved in the process of University syllabus revision, paper setting, and paper assessment etc.
- Suggestions are taken from expert faculty of course and forwarded it to subject chairman or BOS.
- As per the need of industry elective subjects are decided to meet the requirement of industry. In Computer engineering subject like Business Intelligence included in syllabus to get benefit to students.
- University gives flexibility to final year students to decide elective subject.
- In institute students are motivated for selecting elective subject and choices are given to students to select subject.
- Senior faculty member's work as paper setter inUniversity.s
- The question banks for university in-semester, end-semester as well as online examination are designed by senior faculty members.
- Whenever the university organizes workshop, seminar and conferences for knowledge enhancement of the faculty, institute deputes the faculty to attend the same.
- Faculty members take the active participation and involvement in FDP, STTP, Workshops, and Seminars.

# 1.4.2 Is there a formal mechanism to obtain feedback from students and stakeholders on Curriculum? If 'yes', how is it communicated to the University and made use internally for curriculum enrichment and introducing changes/new programmes?

- Yes, Institute provides facility to obtain feedback from stakeholders.
- Institute conduct Parent meet, Alumni meet programmes and feedback are taken from parents, Alumni.
- In academic curriculum for each course feedback is taken from student and corrective action is taken by higher authority if it is needed.
- Alumni are invited for Guest lectures, expert lecture. They also invited in annual gathering.
- Valuable suggestions and feedbacks of stakeholders are considered in future for the effective implementation of the curriculum.

### **Example:**

One such example of Student feedback is shown in fig 1.4.2(A)

| 1300 | Berry States                                      | Teacher's                               | Feedback Form  |                           |
|------|---|---|--|---------------------------|
|      |   | (Do not disc                            | close your identity)   |                           |
| Depa | artment:Comp                                      | e laboratory during a                   | Subject : O  | 5D                        |
|      | J   |   | name Class: TE   |                           |
|      | Typiv today n                                     | i carra Toinebula em                    | Date:  |                           |
| 1.   | How does the teacher                              | evolain the subject?                    | Date .   | 5代.                       |
|      | Exceedingly well                                  | Adequately                              | Inadequate   | Totally inadequate        |
| 2.   | Books referred / used b                           | by the teacher for teach                | hing in classroom.   | + parties on              |
|      | Standard Publication                              |   | Local Publications   | Self prepared Notes       |
| 3.   | Whether the teacher wa                            | as well prepared for the                | subject?   |                           |
|      | Always  | Often                                   | Sometimes  | Never                     |
| 4.   | How is the clarity of con                         | mmunication and spee                    | od of delivery?  |                           |
|      | Excellent   | Good                                    | Satisfactory   | Poor                      |
| 5.   |   |   | om students and provides satis                                     | _                         |
|      | Excellent   | Often                                   | Sometimes  | Never                     |
| 6.   |   |   | ity question paper in classroon                                    |                           |
|      | Always  | Often                                   | Sometimes  | Never                     |
| 7.   | How much of the class<br>irrelevant or general ma |   | uses for teaching the subject (                                    | as against deviating towa |
|      | Above 90%   | 80 - 90%                                | 60 - 80%   | Below 60%                 |
| В.   | Whether the teacher co                            | nducts the lectures reg                 | gularly?   |                           |
|      | Always  | Often                                   | Sometimes  | Never                     |
| Э.   | Neatness and clarity of                           | writing on blackboard                   | ?  | _                         |
|      | Excellent   | Good                                    | Satisfactory   | Poor                      |
| 10.  | What is the attitude of t                         |   |  |                           |
|      | Usually Sympathet                                 |   | sometimes sympath Appears to be indiffe                            |                           |
|      | Avoids personal co                                |   | Appears to be indim  | erent to students         |
| 11.  | Classroom control and                             | discipline<br>cipline by his of her pre | esence   |                           |
|      | Class is in disorder                              |   | Class is noisy and i   | n chase                   |
| 12.  | Overall impact of teach                           | er                                      |  |                           |
|      | Excellent   | Good                                    | Satisfactory   | Poor                      |
| 12.  | Excellent   | Good                                    |  | Least tolet HO states     |
| 3.   | No  |   | this subject? If yes, which & wh<br>gain in further semester? Why? |                           |
|      | Yes, she  | teaches very                            | well.  |                           |
| 15.  | Whether the staff mer difficulties?               |   | in the laboratory during prac                                      | tical slots to solve your |
| 16.  |   |   | to some students ? If yes, in wi                                   | hat way?                  |
|      | No  | Mark Control                            | Completed and Statement Com-                                       |                           |
| 17.  | Your suggestions and a                            |   | any.   |                           |

Fig 1.4.2.1(A) Feedback form filled by student

- 1.4.3 How many new programmes/courses were introduced by the institution during the last four years? What was the rationale for introducing new courses/programmes?) Any other relevant information regarding curricular aspects which the college would like to include Rationale behind introducing these courses:
  - Institute is at centralized place of city so as per increasing demand from students and industries new programmes or courses were introduced by the institution to fulfill their requirement.

Table 1.4.3(A) Introduction of new courses in the institute

| Academic<br>Year | Name of Course            | Name of Programme                           | Sanctioned<br>Intake |
|------------------|---------------------------|---|----------------------|
| 2012-13          | Civil Engineering         | PG (ME) Construction and<br>Management      | 24                   |
| 2012-13          | Mechanical<br>Engineering | PG (ME) Design Engineering                  | 24                   |
| 2016-17          | Mechanical<br>Engineering | PG Diploma Computer Aided<br>Product Design | 20                   |

#### CRITERION II: TEACHING - LEARNING AND EVALUATION

### 2.1 Student Enrollment and Profile

### 2.1.1 How does the college ensure publicity and transparency in the admission process?

- Under graduate & Post graduate admission process, as well as rules and regulations to be followed in the given Academic Year (A.Y.) are published in the brochure of Directorate of Technical Education (DTE) Government of Maharashtra.
- The Institute participates in Centralized Admission Process (CAP) conducted by DTE.
- All admissions are done centrally by the competent authority.
- A short description of the admission process like college fees, hostel fees and documents to be submitted during the admission process are displayed on the college website.
- Actual admissions take place on the basis of allotment letter of DTE offered to the student.
- The students submit the required documents which are scrutinized in their presence. The basic information of the student is entered by him/her in the college ERP system. Subsequently the admission is registered on the DTE website. The fees prescribed by Shikshan Shulk Samiti to the Institute are collected from the student. College I-card is handed over to the student at the end of admission process.
- The Admission Process carried out by DTE is highly transparent and all the necessary information is made available during the admission process on the DTE website <a href="https://www.dte.org">www.dte.org</a>.

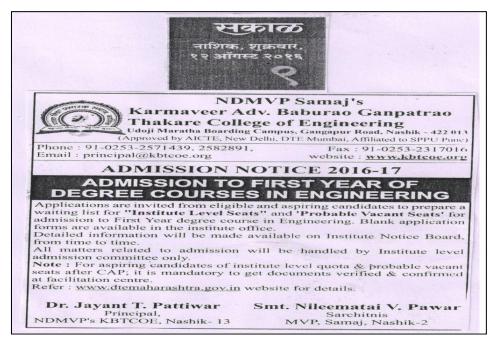


Figure 2.1.1 Newspaper advertisement for Admission to First Year of Degree Courses in Engineering (2016-17) given by the Institute

The college ensures publicity in the admission process by the following means:

- Every year college publishes a Leaflet.
- Institute website www.kbtcoe.org.
- Advertisement given in newspapers.
- The Institute is an authorized Application Receipt Center (ARC) for the centralized admission process.
- Institute has published an advertisement in News paper about Admission process is shown in fig 2.1.1

# 2.1.2 Explain in detail the Criterion adopted and process of admission (Ex. (i) merit (ii) common admission test conducted by state agencies and national agencies (iii) combination of merit and entrance test or merit, entrance test and interview (iv) any other) to various programmes of the Institution.

- The Institute follows admission rules and regulations, guidelines given by DTE. The Institute participates in centralized admission process (CAP) conducted by DTE. Based on the applications received, the DTE prepares merit list.
- The allotment of the seats is carried out on the basis of the order of preference given by the applicants and their position in the merit list, considering the reservation policy. The method adopted by DTE for generating admission merit list, changes every year.
- In the admission process from 2011 to 2014, merit list was prepared by DTE based on the score obtained in CET and subject to other rules of eligibility as specified by DTE. From Academic year 2015-16, students were allotted colleges based on their composite scores obtained by the candidate. This composite score is generated by combination of marks in the qualifying exam and JEE-Mains or CET conducted by DTE.
- As per the government rules, 20% seats are reserved under the management quota.

Table 2.1.2 Schedule of Activities for Admission to First Year of Under Graduate Technical Courses in Engineering and Technology for the Academic Year 2016-17

| Sr. No. | Activity   | Sch        | nedule                     |  |
|---------|--|------------|----------------------------|--|
|         |  | First Date | Last Date                  |  |
| 1.      | Online registration of application for admission through computer connected to Internet on the website for Maharashtra State/All India/J & K Migrant candidates. | 02/06/2016 | 16/06/2016                 |  |
| 2.      | Documents verification, updating and confirmation of Application Form for Admission in person at Facilitation Center (FC).                                       | 02/06/2016 | 17/06/2016<br>Up to 5.00PM |  |
| 3.      | Display of the provisional merit lists on website.   | 19/0       | 06/2016                    |  |
| 4.      | Submission of grievance, if any, at FC   | 19/06/2016 | 21/06/2016<br>Up to 5.00PM |  |
| 5.      | Display of the final merit lists for all types of candidates on website.   | 22/06/2016 |                            |  |
| 6.      | Display of Category wise Seat Distribution   | 21/06/2016 | 22/06/2016                 |  |

| (Seat Matrix) for CAP Round I  7. Online Submission & Confirmation of Option Form for CAP Round I, II, III through candidates Login by himself/herself through the website.  8. Display of Provisional Allotment of CAP Round I  9. Reporting to the Admission Reporting Center (ARC) for CAP Round I.  10. Display of Provisional Allotment of CAP Round II  11. Display of Provisional Allotment of CAP Round II  12. O7/07/2016 07/07/2016 Up to 5.00 | 016<br>0PM<br>016<br>0PM |
|---|--------------------------|
| Form for CAP Round I, II, III through candidates Login by himself/herself through the website.  8. Display of Provisional Allotment of CAP Round I  9. Reporting to the Admission Reporting Center (ARC) for CAP Round I.  10. Display of Provisional Allotment of CAP O7/07/2016  26/06/20 Up to 5.00  27/06/2016  27/06/2016  28/06/2016  28/06/2016  07/07/2016  07/07/2016  | 016<br>0PM<br>016<br>0PM |
| candidates Login by himself/herself through the website.  8. Display of Provisional Allotment of CAP Round I  9. Reporting to the Admission Reporting Center (ARC) for CAP Round I.  10. Display of Provisional Allotment of CAP O7/07/2016  22/06/2016  27/06/2016  27/06/2016  28/06/2016  05/07/2016  07/07/2016   | 016<br>0PM<br>016<br>0PM |
| the website.  8. Display of Provisional Allotment of CAP Round I  9. Reporting to the Admission Reporting Center (ARC) for CAP Round I.  10. Display of Provisional Allotment of CAP (07/07/2016)  11. Display of Provisional Allotment of CAP (07/07/2016)  12. Display of Provisional Allotment of CAP (07/07/2016)   | 016<br>0PM<br>016<br>0PM |
| 8. Display of Provisional Allotment of CAP Round I  9. Reporting to the Admission Reporting Center (ARC) for CAP Round I.  10. Display of Provisional Allotment of CAP 07/07/2016 07/07/20  | )PM<br>)16<br>)PM        |
| Round I  9. Reporting to the Admission Reporting Center (ARC) for CAP Round I.  10. Display of Provisional Allotment of CAP (07/07/2016) Up to 5.00 (07/07/2016) 07/07/2016   | )PM<br>)16<br>)PM        |
| 9. Reporting to the Admission Reporting Center (ARC) for CAP Round I. 28/06/2016 Up to 5.00  10. Display of Provisional Allotment of CAP 07/07/2016 07/07/20  | )16<br>)PM               |
| (ARC) for CAP Round I. Up to 5.00  10. Display of Provisional Allotment of CAP 07/07/2016 07/07/20  | )PM                      |
| 10. Display of Provisional Allotment of CAP 07/07/2016 07/07/20   |                          |
| 1   | )16                      |
| Round II   Up to 5.0  | )D) (                    |
| - r   |                          |
| 11. Reporting to the Admission Reporting Center 08/07/2016 12/07/20   |                          |
| (ARC) for CAP Round II Up to 5.00   |                          |
| 12. Display of Provisional Allotment of CAP 14/07/2016 14/07/20   | _                        |
| Round III Up to 5.0   |                          |
| 13. Reporting to the Admission Reporting Center 15/07/2016 18/07/20   |                          |
| (ARC) for CAP Round III. Up to 5.0  |                          |
| 14. Display of Vacant Seats for CAP Round IV 25/07/2016 25/07/20  |                          |
| Up to 5.0   | )PM                      |
| 15. Online Submission & Confirmation of fresh   |                          |
| Option Form for CAP Round IV through 26/07/2016 28/07/20  |                          |
| candidates Login by himself/herself through Up to 5.00  | )PM                      |
| the website.  |                          |
| 16. Display of Provisional Allotment of CAP 30/07/2016 At 11an  | า                        |
| Round IV  |                          |
| 17. Reporting to the ARC as per Allotment of $30/07/2016$ $03/08/20$  |                          |
| CAP Round IV Up to 5.0  | )PM                      |
| 18. For all candidates: Reporting to the Allotted   |                          |
| Institute and Confirmation of Admission by 30/07/2016 06/08/20  | 116                      |
| submitting required documents and paying  | ,10                      |
| remaining fees, as per the Allotment.   |                          |
| 19. Commencement of academic activities for All 01/08/2016  |                          |
| institutes 01/08/2016   |                          |

# 2.1.3 Give the minimum and maximum percentage of marks for admission at entry level for each of the programmes offered by the college and provide a comparison with other colleges of the affiliating university within the city/district.

Minimum and maximum marks for admission to first year of all undergraduate and postgraduate programmes offered by the college from AY 2013-14 to 2016-17 is detailed in the table no-2.1.3(A) given below.

Table 2.1.3(A) Minimum and maximum marks for admission to first year all undergraduate and postgraduate programmes

|        | NDMVP's KBT College of Engineering, Nashik |               |     |                 |     |         |     |         |    |
|--------|--|---------------|-----|-----------------|-----|---------|-----|---------|----|
| Course | <b>Admission Class</b>                     | Academic Year |     |                 |     |         |     |         |    |
| Name   |  | 2016-17       |     | 2016-17 2015-16 |     | 2014-15 |     | 2013-14 |    |
| (UG)   |  | Min           | Max | Min             | Max | Min     | Max | Min     | Ma |
|        |  |               |     |                 |     |         |     |         | X  |

| MECH       | First Year            | 31       | 105  | 21.6      | 92.6      | 24.8      | 91.5      | 41       | 122      |
|------------|-----------------------|----------|------|-----------|-----------|-----------|-----------|----------|----------|
|            | Direct Second<br>Year | 62.      | 86.6 | 60        | 85.5      | 57.5      | 86.2      | 58       | 86.<br>3 |
| CIVIL      | First Year            | 32       | 99   | 21.6      | 82.3      | 16        | 82.7      | 35.<br>5 | 122      |
|            | Direct Second<br>Year | 68.<br>5 | 87.4 | 66.4      | 84.2      | 68.6      | 85.3      | 72       | 83.<br>9 |
| COMP       | First Year            | 47       | 106  | 23.4      | 82.7      | 10.4      | 90.1      | 39       | 114      |
|            | Direct Second<br>Year | 71       | 85.3 | 63.6      | 86        | 85        | 57.7      | 70       | 84.<br>8 |
| IT         | First Year            | 43       | 97   | 18.9<br>7 | 73.7<br>6 | 24.6<br>5 | 64.0<br>4 | 33       | 85       |
|            | Direct Second<br>Year | 60.<br>6 | 84.6 | 56.9      | 83.5      | 63.5      | 84.5      | 60.<br>5 | 90.<br>3 |
| E&TC       | First Year            | 30       | 94   | 17.4      | 79        | 25.2      | 77.7      | 38.<br>5 | 114      |
|            | Direct Second<br>Year | 88       | 69.6 | 86.9      | 70.6      | 88.4      | 67.7      | 87       | 63.<br>6 |
| INSTR<br>U | First Year            | 45       | 82   | 45.7      | 76        | 44.7      | 70        | 40       | 64.<br>3 |
|            | Direct Second<br>Year | 57       | 82.7 | 53.2      | 75.5      | 57.1      | 77.9      | 59.<br>3 | 84.<br>6 |
| (PG)       |                       |          |      |           |           |           |           |          |          |
| MECH       | First Year            | 0.7<br>6 | 32.8 | 2.51      | 31        | 2.37      | 25.5      | 0        | 66.<br>2 |
| CIVIL      | First Year            | 1.6      | 17.8 | 3.73      | 21.2      | 3.04      | 21.8      | 27       | 62.<br>2 |
| MBA        | First Year            | 3.6      | 92   | 0.82      | 76        | 0.30      | 81.6      | 22       | 178      |
| MCA        | First Year            |          |      | 15        | 82        |           |           | 6        | 79       |
|            | Direct Second<br>Year |          |      |           |           | 4         | 97.3      |          |          |

Table 2.3.1(B) Minimum and maximum marks for admission to first year all undergraduate and postgraduate programmes

| R. H. S | R. H. SAPAT College of Engineering, Management Studies & Research, Nashik |               |      |         |      |                         |      |      |      |
|---------|---|---------------|------|---------|------|-------------------------|------|------|------|
| Course  | Admission Class   | Academic Year |      |         |      |                         |      |      |      |
| Name    |   | 2016-17       |      | 2016-17 |      | 2016-17 2015-16 2014-15 |      | 201  | 3-14 |
| (UG)    |   | Min           | Max  | Min     | Max  | Min                     | Max  | Min  | Max  |
| MECH    | First Year  | 34            | 97   | 24      | 82.3 | 30.3                    | 91.6 | 50   | 117  |
|         | Direct Second Year  | 60            | 85   | 61      | 85.9 | 66                      | 86   | 63.2 | 84.2 |
| CIVIL   | First Year  | 44            | 87   | 29.3    | 76.5 | 31.4                    | 66.2 | 42   | 96   |
|         | Direct Second Year  | 61.9          | 83.3 | 61.9    | 83.3 | 67.8                    | 82.5 | 64.8 | 81.0 |
| COMP    | First Year  | 39            | 103  | 9.74    | 74.7 | 21.7                    | 77.8 | 31   | 93   |

|      | Direct Second Year | 65.3 | 85   | 53.5 | 82.7 | 64.5 | 86.2  | 64.1 | 83.8 |
|------|--------------------|------|------|------|------|------|-------|------|------|
| E&TC | First Year         | 37   | 77   | 11   | 33.7 | 22.3 | 85.2  | 39   | 93   |
|      | Direct Second Year | 61   | 83   | 57   | 85.4 | 54.9 | 87.09 | 68.7 | 83.9 |
| (PG) |                    |      |      |      |      |      |       |      |      |
| MECH | First Year         | 4.5  | 24.1 | 61.2 | 42.2 | 5.93 | 40.1  | 22   | 38.7 |
| MCA  | First Year         | 22   | 136  | 30.4 | 71   | 25   | 76    | 45   | 87   |
|      | Direct Second Year | -    | -    | -    | -    | 44.7 | 78.80 | 48.4 | 59.1 |

Table 2.3.1(C) Minimum and maximum marks for admission to first year all undergraduate and postgraduate programmes

|            | K.K.W Institute of Engineering & Research Center, Nashik. |     |               |       |       |      |       |      |      |  |
|------------|---|-----|---------------|-------|-------|------|-------|------|------|--|
| Course     | Admission   |     | Academic Year |       |       |      |       |      |      |  |
| UG         |   | 201 | 6-17          | 201   | 5-16  | 201  | 4-15  | 201  | 3-14 |  |
| UG         | class   | Min | Max           | Min   | Max   | Min  | Max   | Min  | Max  |  |
| MECH       | First Year  | 17  | 155           | 38.2  | 94.2  | 35.1 | 95.5  | 58   | 151  |  |
| CIVIL      | First Year  | 47  | 130           | 21.8  | 91.2  | 35.6 | 88.2  | 57   | 151  |  |
| COMP       | First Year  | 52  | 146           | 17.4  | 97.7  | 30.7 | 94.4  | 39   | 132  |  |
| IT         | First Year  | 46  | 131           | 39.5  | 89.8  | 30.5 | 80.4  | 43.5 | 121  |  |
| E &<br>T.C | First Year  | 35  | 123           | 27.7  | 88.5  | 30.6 | 89.9  | 59   | 136  |  |
| PG         | PG  |     |               |       |       |      |       |      |      |  |
| MBA        | First Year  | 31  | 62            | 5.2   | 64.79 | 0.83 | 70.44 | 23   | 114  |  |
| MCA        | First Year  | 12  | 88            | 11.25 | 87.53 | 42   | 104   | 26   | 98   |  |

## 2.1.4 Is there a mechanism in the Institution to review the admission process and student profiles annually? If 'yes', what is the outcome of such an effort and how has it contributed to the improvement of the process?

Yes, Institute has mechanism to review the admission process. The details are as follows:

### Review of admission process & student profile.

- As the engineering admission process is conducted & governed by DTE, Institute follows rules and regulations, guidelines set up by the Government.
- For the 20% management quota, Institute level merit list is prepared for the admissions.
- Institute however has formed the Admission committee & T & P cell to review the admission process & student profile.

### The institution analyzes the student profiles to gain insight into:

- Opening and closing cutoff marks community wise.
- Geographical distribution of candidates.
- Gender classification.
- District wise data analysis.
- School of study, Board and Medium of study.
- Strength, weakness, opportunity & challenges of students.

#### Role of Admission Committee & T& P cell

- Review of student profile on the basis of their MH-CET, AIEEE, JEE and PCM scores.
- Based on the analysis, students with poor scores and possible academically weaker students are identified.
- For such weaker students, make up classes, career guidance programs are conducted to impart basic skills.
- As a result of such efforts, the ability of students to understand the engineering concepts enhances which has reflected in better results.

### The outcome of the analysis is helpful for the following:

- To take the decision about publicity of admissions in future.
- To identify the students coming from the different medium & region.
- To work on weaknesses of students.
- To improve their knowledge in some special subjects like Mathematics, Physics, and Chemistry etc.

# 2.1.5 Reflecting on the strategies adopted to increase/improve access for following categories of students, enumerate on how the admission policy of the Institution and its student profiles demonstrate/reflect the National commitment to diversity and inclusion

- SC/ST
- OBC
- Women
- Differently abled
- Economically weaker sections
- Minority community
- Any other
- The Institute stands by the National commitment to diversity and inclusion of students from all strata of society. The Institute strives to create inclusive culture in which difference is recognized and valued.
- The Institute follows the reservation policy for admissions of various categories of students prescribed by the Government of Maharashtra. This policy is implemented in the central admission process (CAP) of the Directorate of Technical Education (DTE) Government of Maharashtra which is followed by the Institute.
- This is reflected in the student profile presented as follows:

Table 2.1.5 Category-wise students admitted during last four years.

| ACADEMIC |    | NO. OF STUDENTS ADMITTED |    |     |     |       |      |       |  |  |
|----------|----|--------------------------|----|-----|-----|-------|------|-------|--|--|
| YEAR     | SC | ST                       | NT | OBC | SBC | VJ/DT | Open | Total |  |  |
| 2016-17  | 54 | 22                       | 53 | 298 | 4   | 11    | 172  | 614   |  |  |
| 2015-16  | 56 | 24                       | 51 | 319 | 6   | 11    | 214  | 681   |  |  |
| 2014-15  | 59 | 28                       | 57 | 291 | 13  | 14    | 248  | 710   |  |  |
| 2013-14  | 57 | 27                       | 46 | 273 | 7   | 10    | 263  | 683   |  |  |

- The Institute admits students under TFWS (Tuition Fee Waiver Scheme) of DTE. During the last four years total 73 students has taken the benefit of this scheme.
- Reservations under J&K quota is also provided as per the DTE and state government policy. Under these quota total 06 students has taken the admission during the last four years.

## 2.1.6 Provide the following details for various programmes offered by the Institution during the last four years and comment on the trends. i.e. reasons for increase / decrease and actions initiated for improvement.

Table 2.1.6 Various programmes offered by the Institution during the last four years are as follows:

| Sr. No | Course Name<br>(UG)        | Year    | No. of<br>Students<br>Admitted (X) | Sanctioned<br>Intake (Y) | Demand<br>Ratio<br>(X/Y) |
|--------|----------------------------|---------|------------------------------------|--------------------------|--------------------------|
|        |                            |         | 116                                | 120                      | 0.96                     |
| 1      | Mechanical                 | 2015-16 | 126                                | 120                      | 1.05                     |
| 1      | Engineering                | 2014-15 | 127                                | 120                      | 1.058                    |
|        |                            | 2013-14 | 125                                | 120                      | 1.041                    |
|        |                            | 2016-17 | 60                                 | 60                       | 1.00                     |
| 2      | Civil Engineening          | 2015-16 | 63                                 | 60                       | 1.05                     |
| 2      | Civil Engineering          | 2014-15 | 62                                 | 60                       | 1.03                     |
|        |                            | 2013-14 | 62                                 | 60                       | 1.03                     |
|        |                            | 2016-17 | 63                                 | 60                       | 1.05                     |
| 3      | Computer                   | 2015-16 | 63                                 | 60                       | 1.05                     |
| 3      | Engineering                | 2014-15 | 61                                 | 60                       | 1.01                     |
|        |                            | 2013-14 | 60                                 | 60                       | 1.00                     |
|        |                            | 2016-17 | 53                                 | 60                       | 0.88                     |
| 4      | IT Engineering             | 2015-16 | 63                                 | 60                       | 1.05                     |
| 4      |                            | 2014-15 | 53                                 | 60                       | 0.88                     |
|        |                            | 2013-14 | 58                                 | 60                       | 0.96                     |
|        |                            | 2016-17 | 42                                 | 60                       | 0.7                      |
| 5      | E & TC                     | 2015-16 | 58                                 | 60                       | 0.96                     |
| 3      | Engineering                | 2014-15 | 63                                 | 60                       | 1.05                     |
|        |                            | 2013-14 | 60                                 | 60                       | 1.00                     |
|        | T                          | 2016-17 | 12                                 | 40                       | 0.3                      |
|        | Instrumentation            | 2015-16 | 27                                 | 40                       | 0.675                    |
| 6      | and Control<br>Engineering | 2014-15 | 31                                 | 40                       | 0.775                    |
|        | Eligilieerilig             | 2013-14 | 22                                 | 40                       | 0.55                     |
| Sr. No | Course Name<br>(PG)        | Year    | No. of<br>Students<br>Admitted (X) | Sanctioned<br>Intake (Y) | Demand<br>Ratio<br>(X/Y) |
|        |                            | 2016-17 | 17                                 | 24                       | 0.70                     |
| 1      | Mechanical                 | 2015-16 | 24                                 | 24                       | 1.00                     |
| 1      | Engineering                | 2014-15 | 24                                 | 24                       | 1.00                     |
|        |                            | 2013-14 | 24                                 | 24                       | 1.00                     |
|        |                            | 2016-17 | 24                                 | 24                       | 1.00                     |
| 2      | Civil Engineering          | 2015-16 | 24                                 | 24                       | 1.00                     |
|        | _                          | 2014-15 | 24                                 | 24                       | 1.00                     |

|   |      | 2013-14 | 24 | 24 | 1.00 |
|---|------|---------|----|----|------|
|   |      | 2016-17 | 60 | 60 | 1.00 |
| 3 | MBA  | 2015-16 | 60 | 60 | 1.00 |
| 3 | MIDA | 2014-15 | 54 | 60 | 0.9  |
|   |      | 2013-14 | 60 | 60 | 1.00 |
|   | MCA  | 2016-17 | 0  | 60 | 0.00 |
| 4 |      | 2015-16 | 17 | 60 | 0.28 |
| 4 |      | 2014-15 | 00 | 60 | 0.00 |
|   |      | 2013-14 | 15 | 60 | 0.25 |

#### **Reasons for increase / decrease in admissions:**

• All the undergraduate seats were filled against the sanctioned intake capacity with an exception of Instrumentation & Control Engineering and Electronics & Telecommunication engineering whose few seats were vacant. Demand for particular engineering disciplines has been changing year on year. Because Parents/Students has perception that there is less opportunity towards industrial placement for these courses due to which trend for taking admission to E&TC and Instrumentation & Control Engineering stream is less. Also the overall economic and employment scenario affects the number of applications for engineering courses. Most of the graduates prefer 2 years post-graduation courses rather than 3 years. Due to which trend to take admission for MCA Engineering is less in last 3 years

### **Actions initiated for improvement:**

- The Institute has started giving more publicity for its credentials, ranking and facilities
- The Institute attracts meritorious students by providing value added courses like-
  - **SAP** Various modules are run under SAP like Material management, Sales & Distribution, Human Resource, ABAP etc.
  - **Design Innovation Center** various courses are conducted under Design Innovation center like Design and development of signal conditioning & Sensor technologies, advanced techniques for Environment Watershed Management, Post graduate Diploma in Computer-aided Product Designs.
- Continuous improvements in the infrastructural facilities.
- Continuous improvements in the Student Placements.
- Focusing on Student centric value added activities.

### 2.2 Catering to Student Diversity

## 2.2.1 How does the Institution cater to the needs of differently- abled students and ensure adherence to government policies in this regard?

The Institute follows government policies to cater to the needs of differently-abled students by means of-

- Institute provides facilities of Ramp and lift for differently-abled students.
- Institute has Provision of Wheel chair for Handicaped Students.
- Institute provides extra time in the examination hall as per the rules & guidelines of SPPU.
- Institute provides Writer for the differently-abled student as per the rules & guidelines of SPPU.

• Seats are reserved for physically handicapped students as per the rules & regulation specified by SPPU.



Figure 2.2.1 Physically disabled student's facilities.

2.2.2 Does the Institution assess the students' needs in terms of knowledge and skills before the commencement of the programme? If 'yes', give details on the process.

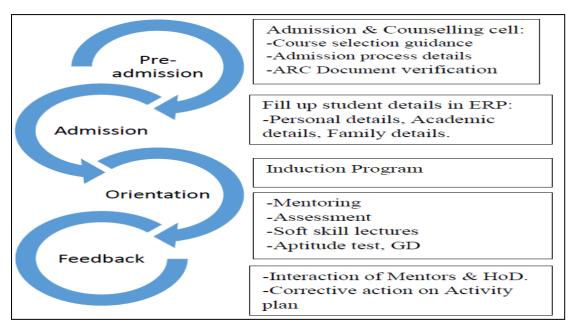


Fig.2.2.2 Student's Pre-assessment process

- Yes, Institute assesses the students' needs in terms of knowledge and skills before the commencement of the program.
- Assessment is also carried out based on students qualifying marks and their ranking in the merit list.

- At the beginning of the semester concerned faculty members conduct orientation classes to ascertain knowledge based needs and skills of the students.
- Institute conduct soft skill classes, organize GD, debates, and quiz competition, aptitude tests and value added courses for students to enhance their skills & knowledge.
- Based on the inputs from students and as per their need, guidance for competitive exams like GATE, Civil services is provided

## 2.2.3 What are the strategies adopted by the Institution to bridge the knowledge gap of the enrolled students (Bridge/Remedial/ Add-on/Enrichment Courses, etc.) to enable them to cope with the programme of their choice?

Following programs are adopted by Institute to bridge the knowledge gap.

- Institute conducts Expert Lectures on contents beyond syllabus to the students to make them aware about the recent trends in their disciplines.
- Institute arranges technical events, industrial visits, paper and poster presentations and seminars to bridge the knowledge gap to enable them to cope with advances in their respective fields of studies.
- The Institute offers remedial classes and extra classes as per the student needs and to fulfill the curriculum/syllabus prescribed by the University.
- The Faculty covers the University curriculum with special topics for each subject to bridge the gap.
- Institute conducts various add-ons, enrichment courses for students.
- Following table includes the various Add-on/Enrichment programs conducted by the Institute for Students-

Table 2.2.3 Add-on/Enrichment programs conducted by the Institute for Students

| Department | Title of Programme                       | Date                   | No. of participant |
|------------|--|------------------------|--------------------|
|            | Higher Education in foreign universities | 24/01/2014             | 60                 |
| Mechanical | Higher Education in foreign universities | 16/01/2015             | 60                 |
|            | Higher Education in Germany              | 31/07/2015             | 100                |
|            | Higher Education in Germany              | 01/08/2014             | 114                |
|            | Workshop on Advance java                 | 8/10/2016              | 17                 |
| 3.50       | UI Designing Sessions                    | 13/08/2016             | 17                 |
| MCA        | Software testing Sessions                | 09-2016                | 17                 |
|            | Virtual Reality Sessions                 | 29/07/2015             | 50                 |
|            | IOT Interactive Sessions                 | 11/2015                | 51                 |
|            | Web Development in PHP Sessions          | 2015                   | 50                 |
| MCA        | .NET Sessions                            | 28/02/2015             | 40                 |
|            | Basics of Web Development                | 2015                   | 17                 |
|            | Google Apps Workshop                     | 21/10/2013             | 55                 |
|            | Android App Development                  | 17/09/2016             | 137                |
| - T-       |  | 01/10/2016             | 137                |
| IT         | Big data & Hadoop                        | 30/8/2016<br>02/9/2016 | 75                 |

|               | Soft Skill session                 | Aug 2016       | 56  |  |
|---------------|------------------------------------|----------------|-----|--|
|               | Applied CS with Android workshop   | 24/10/2016     | 20  |  |
|               |                                    | 26/10/2010     | 30  |  |
|               | Android App development            | 17/09/2016     |     |  |
|               | Workshop                           | 19/09/2016     |     |  |
| Computer      | DST workshop on Entrepreneurship   | 14/07/2016     | 1.5 |  |
|               | Development                        | 16/07/2016     | 15  |  |
|               | One day workshop on Python         | 08/02/2016     | 120 |  |
|               | Hadoop-Big data workshop           | 14/02/2015     | 71  |  |
|               | Entrepreneurship Development       | 16/09/2016     | 200 |  |
|               | View towards the life              | 12/01/2016     | 200 |  |
|               | MSP Software Training              | 2015           | 24  |  |
|               | ERP Software Training              | 2015           | 50  |  |
| Civil         | Auto-CAD Software Training         | 2015           | 100 |  |
|               | Water Audit Course                 | December       | 00  |  |
|               |                                    | 2015           | 80  |  |
|               | ERP Software Training              | 2013           | 80  |  |
| -             | 5 Days training on Automation      | 2/9/16 to      | 20  |  |
| Instrumention | Using PLC,SCADA                    | 6/9/16         | 28  |  |
| &             | Six Days STTP on "C"               | 29/9/16 to     | 1.1 |  |
| Control       | Programming                        | 8/10/16        | 11  |  |
|               | Workshop on "Automation            | 21 /0 /201 c T |     |  |
|               | Technology Covers PLC &            | 21/9/2016 To   | 46  |  |
|               | SCADA"                             | 24/09/2016     |     |  |
|               | Traffic Awareness Training         |                |     |  |
|               | Program at Children Traffic        | 17/09/2016     | 78  |  |
|               | Education Park,                    |                |     |  |
| E& TC         | Workshop on "Electronics           | 08/09/2016     | 151 |  |
|               | Products"                          | 08/09/2010     | 131 |  |
|               | Workshop on "C Programming"        | 28 /6/2016     | 37  |  |
|               |                                    | 30/6/2016      | 31  |  |
|               | Visit at Dharampur Science Center, | 29/07/2016     | 70  |  |
|               | Gujrat.                            | 29/07/2010     | 70  |  |
|               | Workshop on Embedded System        | 21/07/2016     | 81  |  |
|               | VLSI workshop                      | 15/07/2016     | 56  |  |
|               |                                    | 16/07/2016     | 30  |  |
|               | Workshop on "Personality           | 16/02/2015     | 59  |  |
|               | Development"                       |                |     |  |
|               | Workshop on "Ardino Procesor       | 13/02/2015     | 62  |  |
|               | ,Latex ,PCB Design"                | 14/02/2015     |     |  |
|               | Workshop on "Personality           | 05/09/2014     | 10  |  |
| E& TC         | Development"                       |                | 10  |  |
|               | AICTE –BSNL Employability          | 11/08/2014     | 30  |  |
|               | Enhancement Program                |                |     |  |
|               | Automation System                  | 07/03/2014     | 47  |  |
|               | Workshop on "Personal Power        | 22/02/2014     | 74  |  |
|               | Power of MBA                       | 13/02/2014     | 127 |  |
|               | Emotional Freedom Technique EFT    | 31/01/2014     | 118 |  |
|               | Campus to Corporate                | 14/09/2013     | 129 |  |

|           | Etiquette & Manners   | 5/9/2013                    | 130 |
|-----------|---|-----------------------------|-----|
|           | Workshop on "Practical Oriented<br>Electronics Workshop on Industrial             | 30/08/2013<br>31/08/2013    | 68  |
|           | Approach For Electronics  |                             |     |
|           | How to Crack GATE   | 27/07/2013                  | 66  |
|           | How to Crack GATE & CAT   | 25/7/2013                   | 67  |
|           | Practical Orientation on Industrial Approach For Electronics                      | 10/7/2013                   | 148 |
|           | Personality Development   | 6/7/2013                    | 80  |
|           | Soft Skill Development By Nandita<br>Ray  | 10/09/2013                  | 60  |
|           | Soft Skill Development By Neeta<br>Nigam  | 01/09/2014                  | 60  |
|           | Inbound Training Program by AryaHycinth   | 10/09/2014                  | 60  |
|           | 03-Days Outbound Training<br>Program by Arya Hycinth                              | 25/02/2015<br>to 27/02/2015 | 20  |
|           | Soft Skill Development By Gordon<br>Sir   | 05/03/2015                  | 60  |
| MBA       | One Day-Outbound Training<br>Programme by Shubhangi<br>Kundalkar & Gordon Noronha | 04/10/2015                  | 60  |
|           | Inbound Training Program by Arya<br>Hycinth                                       | 08/10/2015                  | 60  |
|           | One Day-Outbound Training Programme by Gordon Noronha                             | 02/02/2016                  | 60  |
|           | Inbound Training Program by Arya<br>Hycinth                                       | 27/09/2016                  | 60  |
|           | Soft Skill Development By Gordon<br>Noronha                                       | 22/08/2016                  | 60  |
|           | Zensar Training   | 2015-2016                   | 48  |
|           | Entrepreneurship Awareness Camp   | 2014                        | 10  |
|           | Entrepreneurship Awareness Camp   | 2016                        | 10  |
|           | Zensar Training   | 2014-2015                   | 45  |
| Institute | Entrepreneurship Awareness Camp   | 14/07/2016 to<br>16/07/2016 | 15  |
|           | Entrepreneurship Training   | 09/02/2015                  |     |
|           | Programme   | 11/02/2015                  |     |
|           | Big data and Hadoop   | 01/09/2016 to 03/09/2016    | 77  |

## 2.2.4 How does the college sensitize its staff and students on issues such as gender, inclusion, environment etc.?

Institute takes all the efforts to educate its staff and students on the issue of gender, inclusion, environment in following ways:

### **Gender:**

- Institute provides equal opportunity to ladies and gents faculty with respect to appointments, administration, deputation to courses, higher studies.
- Institute provides equal opportunity to girls and boys students with respect to participation in extracurricular activities, sports and placements.
- Women Grievance committee is in place to redress the issues of female staff and students.
- Women's day is celebrated in the institute.
- Following tables shows Male Female Ratio of the Staff & Students-Table 2.2.4 (A) Staff Male Female Ratio

| No. of Te | No. of Teaching staff |      | echnical staff | No. of Non-teaching staff |        |  |
|-----------|-----------------------|------|----------------|---------------------------|--------|--|
| Male      | Female                | Male | Female         | Male                      | Female |  |
| 85        | 40                    | 46   | 16             | 60                        | 12     |  |

Table 2.2.4 (B) Students Male Female Ratio

| Academic Year | Number | Number of Student |     |  |
|---------------|--------|-------------------|-----|--|
| Academic Tear | Boys   | Girls             |     |  |
| 2016-17       | 268    | 179               | 447 |  |
| 2015-16       | 303    | 217               | 520 |  |
| 2014-15       | 287    | 203               | 490 |  |
| 2013-14       | 299    | 211               | 510 |  |

### **Inclusion:**

- The Institute stands by the National commitment to diversity and inclusion of students from all strata of society.
- The Institute strives to create inclusive culture in which difference is recognized and valued.
- The Institute follows the reservation policy for admissions of various categories of students is prescribed by the Government of Maharashtra.
- The Institute follows all the policy & guidelines regarding scholarship & free ship for various categories of students prescribed by the Government of Maharashtra.

Table 2.2.4 (C) No. of Students Admitted under following Quota in last 4 years.

| Academic year | No. of students admitted under following quota in last 4 years |     |    |  |  |
|---------------|--|-----|----|--|--|
|               | TFWS   | J&K | PH |  |  |
| 2016-17       | 19   | 0   | 1  |  |  |
| 2015-16       | 19   | 0   | 1  |  |  |
| 2014-15       | 16   | 1   | 2  |  |  |
| 2013-14       | 19   | 5   | 2  |  |  |
| Total         | 73   | 06  | 06 |  |  |



Figure 2.2.4.Environmental & Social activities conducted by the Institute

### **Environment:**

- The Institute promotes environmental and social awareness amongst the faculty and student community by celebrating Yoga day and Environment day.
- The NSS volunteers undertake various social activities and environment protection drives in the nearby villages as a part of their annual NSS camps.
- The Institute has participated and committed in future for the clean and green city campaign by active participation in mission 'Swach Godavari Abhiyan'.
- Institute organizes Special winter camp in different villages under the NSS program.
- Various activities like Tree plantation, Gram-swachhata Abhiyan, Road safety awareness, Apatti management are conducted by the Institute under the NSS.

## 2.2.5 How does the Institution identify and respond to special educational/learning needs of advanced learners?

Institute identifies advanced learners in the following ways:

- From the performance in qualifying examinations (JEE, MH-CET etc.) for admissions to the program
- From the enthusiasm shown in their participation in co-curricular events.
- From the sincerity in attending and consistency in performing practical & theory sessions which is evaluated on a continuous basis through daily monitoring report of ERP.
- From the performance in internal and University exams conducted periodically.

### Following are the institutional efforts to respond to special educational/learning needs of advanced learners:

- The Institute encourages advanced learners for undergoing internships in industries.
- Institute provides guidance for GATE, Civil Services Exams etc.
- The students are exposed to various intercollegiate technical competitions like Mechanza, Instrubotics, Elicit, Kshitij, Sthapatya etc. to sharpen their skills and knowledge.
- Advanced learners are given opportunity to prepare for global certifications and value added training programs.
- Institute has initiated SAP and various programs under Design Innovation center like Design of signal conditioning & Sensor technology etc.
- Institute organizes various technical buildathon competitions like Robo war, Bridge making, Circuit mania, Cube blasting, AutoCAD, placement bonanza, Poster making, which helps advanced learners to develop analytical thinking along with experimental skills. This eco-system builds up confidence in the students, inspires and motivates them to take on more challenging assignments in future.
- Advanced learners are encouraged to visit industries, discuss an industrial problem and work on its solution. Such industry sponsored projects make them professionally competent.
- Library has Special repository of research and e-learning material for such students to get higher level knowledge of their topic of interest.
- These students are also motivated to pursue higher studies and research.
- Following Table includes details of Industrial Visits organized by the Institute for students in Last 3 years –

Table 2.2.5 Industrial Visits organized by the Institute in last 3 years.

| Sr.<br>No. | Name of Depart | Academi<br>c Year | Date       | Details such as topic, speaker, location     |
|------------|----------------|-------------------|------------|--|
|            | ment           |                   |            |  |
| 1          |                |                   | 18/07/2013 | Central Railway Workshop, Manmad             |
| 2          |                |                   | 28/08/2013 | Sewage Treatment Plant, Nashik               |
| 3          |                |                   | 30/08/2013 | Manjarpada tunnel, Nashik                    |
| 4          |                |                   | 13/09/2013 | Peninsula Project, Nashik                    |
| 5          |                |                   | 17/09/2013 | MHADA Project Site,Pathardi                  |
| 6          |                |                   | 1/10/2013  | Shapoorji and Pallonji, Construction         |
|            | CIVIL          |                   |            | Site, Nashik                                 |
| 7          | CIVIL          | 2013-14           | 3/10/2013  | Hydro Power Plant, Vaitarna Dam              |
| 8          |                |                   | 09/10/2013 | MHADA Project Site,Pathardi                  |
| 9          |                |                   | 09/01/2014 | Metrological Station KTHM College,<br>Nashik |
| 10         |                |                   | 15/01/2014 | Water Treatment Plant, Nashik                |
| 11         |                |                   | 27/01/2014 | Ozar Airport, Nashik                         |
| 12         |                |                   | 06/02/2016 | Ashok residency, Satpur                      |
| 13         |                |                   | 04/03/2014 | Jain Irrigation System Ltd. Jalgoan          |

| 14 |         |                                     | 09/09/2014 | Hydro-Electric Power Plant, Vaitarna<br>Dam                                     |  |
|----|---------|-------------------------------------|------------|---|--|
| 15 |         | 2011.15                             | 12/02/2015 | Water Treatment Plant, Nashik   |  |
| 16 |         | 2014-15                             | 18/03/2015 | Remote Sensing and GIS Division, Meri,<br>Nashik                                |  |
| 17 |         |                                     | 23/03/2015 | Sun Infrastructure Pvt. Ltd. Nashik   |  |
| 18 |         |                                     | 03/07/2015 | Metrological Station, NDMVP's College of Agriculture, Nashik                    |  |
| 19 |         |                                     | 03/07/2015 | Water Resource Engineering Division,<br>MERI, Nashik                            |  |
| 20 |         |                                     | 10/07/2015 | Central Railway Workshop Manmad   |  |
| 21 |         |                                     | 31/07/2015 | Sewage Treatment Plant, Nashik  |  |
| 22 |         |                                     | 20/08/2015 | Pune –Nashik Highway Project  |  |
| 23 |         |                                     | 29/09/2015 | Sun Infrastructure Pvt. Ltd. Nashik   |  |
| 24 |         | 2015-16                             | 26/10/2015 | Amit Enterprises Housing Ltd. Pathardi<br>Phata, Nashik                         |  |
| 25 |         |                                     | 27/10/2015 | Ultra-Tech RMC Plant, Satpur, Nashik  |  |
| 26 |         |                                     | 11/01/2016 | GhatGar Dam, A. Nagar   |  |
| 27 |         |                                     | 16/01/2016 | Sardar Sarovar Dam, Gujrat  |  |
| 28 |         |                                     | 10/02/2016 | Bhandardara Dam   |  |
| 29 |         |                                     | 17/02/2016 | Sun Infrastructure Ltd., Nashik   |  |
| 30 |         |                                     | 11/03/2016 | Water Treatment Plant, Nashik   |  |
| 31 |         |                                     | 31/08/2016 | Sewage Treatment Plant, Nashik  |  |
| 32 |         |                                     | 21/09/2016 | Nashik- Pune Highway  |  |
| 33 |         |                                     | 10/07/2016 | Central Railway Workshop Manmad   |  |
| 34 |         |                                     | 27/09/2016 | Gangapur Dam, Nashik  |  |
| 35 |         | 2016-17                             | 06/10/2016 | Sun Infrastructure Pvt. Ltd   |  |
| 36 |         |                                     | 12/10/2016 | Bagad Properties, Nashik  |  |
| 37 |         |                                     | 22/11/2016 | Ultra-Tech RMC Plant, Satpur, Nashik  |  |
| 38 |         |                                     | 28/07/2016 | Deolali Railway Station, Nashik   |  |
| 1  |         |                                     | 17/01/2014 | Industrial Visit to GMRT Narayangaon, pune                                      |  |
| 2  |         | 2013-14<br>& T C 2014-15<br>2016-17 | 11/09/2013 | Monk Automation Pvt. Ltd. MIDC<br>Ambad, Nashik                                 |  |
| 3  |         |                                     | 16/01/2015 | Industrial Visit to GMRT Narayangaon,<br>Pune                                   |  |
| 4  | E&TC    |                                     | 23/01/2015 | Industrial Visit to GMRT Narayangaon ,Pune                                      |  |
| 5  |         |                                     | 04/02/2015 | Reliance Power Plant Dhanu  |  |
| 6  |         |                                     | 17/09/2016 | Traffic Awareness Training Programme at Children Traffic Education Park, Nashik |  |
| 7  | 1       |                                     | 29/07/2016 | Dharampur Science Center, Gujarat   |  |
| 1  | Diametr | 2013-14                             | 02/09/2013 | Watson Pharma Pvt. Ltd; Ambarnath.  |  |
| 2  | INSTRU  | 2014-15                             | 18/09/2014 | National Horticultural Research and   |  |

|   |         |         |             | Development Foundation, Chitegaon Phata.               |  |
|---|---------|---------|-------------|--|--|
| 3 |         | 2015-16 | 11/01/16    | Hindustan Coca Cola Beverages Pvt. Ltd. Nashik         |  |
| 4 |         | 2016-17 | 01/09/2016  | Reliance Electronics, Nashik                           |  |
| 5 |         | 2016-17 | 07/09/2016  | KRIBHCO Ltd, Surat                                     |  |
| 1 |         | 2013-14 | 16/09/2013  | Visvesvaraya Industrial and                            |  |
|   |         |         |             | Technological Museum, Banglore                         |  |
| 2 | IT      |         | 19/01/2013  | Persistent Systems ,Pune                               |  |
| 3 | 11      | 2014-15 | 28/02/2015  | Persistent Systems ,Pune                               |  |
| 4 |         | 2015-16 | 6 /03/ 2015 | Altruist Technologies, Chandigarh                      |  |
| 5 |         | 2016-17 | 26/09/2016  | C –DAC Kharghar, Mumbai                                |  |
| 1 | СОМР    | 2015-16 | 09/09/2015  | SE Computer 34 Student Visit to C-DAC, Mumbai          |  |
| 2 |         | 2016-17 | 28/09/2016  | TE Computer 49 Student Visit to Seed info-tech, Mumbai |  |
| 3 |         |         | 28/09/2016  | BE Computer 42 Student Visit to Seed info-tech, Mumbai |  |
| 4 |         |         | 26/09/2016  |  |  |
|   |         |         |             | DAC, Mumbai  |  |
| 1 |         | 2014-15 | 09/03/2015  | Ispat industries ltd at Mumbai                         |  |
|   |         |         | 10/03/2015  |  |  |
| 2 |         |         | 23/03/2015  | Baif Kaju Processing Unit at Dapoli,                   |  |
|   |         |         | 24/03/2015  | Ratnagiri  |  |
| 3 |         |         | 27/08/2014  | Sarda Farms at Nashik                                  |  |
| 4 | MBA     |         | 03/02/2015  | Glenn mark Pharmaceuticals Ltd                         |  |
| 5 | MDA     |         | 12/08/2015  | Sarda Farm, Sahyadri Agro,Mohadi<br>Nashik             |  |
| 6 |         |         | 10/03/2016  | Jahagirdar Bekers , Nashik                             |  |
| 7 |         |         | 13/10/2015  | KVIC Nashik  |  |
| 8 |         |         | 23/08/2016  | Sahyadri Agro, Mohadi ,Nashik                          |  |
| 9 |         |         | 31/08/2016  | Biaf – Jawahar.  |  |
| 1 | MCA     | 2013-14 | 13/3/2014   | ESDS Software Solution, Nashik                         |  |
| 2 |         | 2015-16 | 6/10/2015   | UMS Tech Labs. Nashik.                                 |  |
| 1 |         | 2016-17 | 25/07/2016  | Seva Automotive PVT LTD Nashik                         |  |
| 2 | Mechani | 2016-17 | 30/08/2016  | Narang Cold Storage, Nashik.                           |  |
| 3 | cal     | 2016-17 | 08/09/2016  | Nashik Engineering Cluster, Nashik.                    |  |
| 4 |         | 2016-17 | 04/10/2016  | Reliance Thermal Power Station Dahanu                  |  |



Fig. 2.5.5 Industrial visits organized by Institute.

2.2.6 How does the Institute collect, analyze and use the data and information on the academic performance (through the programme duration) of the students at risk of drop out (students from the disadvantaged sections of society, physically challenged, slow learners, economically weaker sections etc. who may discontinue their studies if some sort of support is not provided)?

Institute obtains and analyzes information about students at the risk of dropout or having consistent poor academic performance in the following manner.

- Institute identifies low performer students in the qualifying examination.
- Institute list out defaulter students having less attendance in theory and practical.
- Institute list out pass-class students obtained from analysis of results of internal and University exams
- Through continuous evaluation and interactions of course faculty with the students during class, laboratory or tutorial sessions.
- Through interactions of class teacher/Mentor during periodic meetings with students.

Information about students at risk of drop-out and having consistent poor performance is used for giving additional support in following ways:

 Institute conducts additional lectures for difficult courses like Engineering Mathematics, Engineering Graphics, Engineering Physics, Electrical & Electronics engineering, Fundamentals of programming language for

- academically weak students to bring them at par with the others in semester I & II of first year.
- Difficult Subjects are identified and Institute provides Personal attention and counseling.
- **For example:** Subjects like Robotics & Automation; student's gets difficulty to understand it logically so Institute provides personal attention & counseling.
- Course faculty mentor students individually and suggest remedial measures
- Taking corrective actions which are discussed in regular departmental meeting of faculty.
- Institute Makes students aware of scholarships, free-ships procedures for obtaining financial support for their education.
- Provision of installments in fess is allowed for economically weak students.
- Institute has started Earn and Learn scheme for economically weaker students as per the guidelines of SPPU, Pune.
- Institute has good infrastructure and facilities for easy movement and accessibility to differently-challenged students.
- Providing extra time while writing exam papers and /or providing a writer to students with physical disabilities as per the guidelines of SPPU, Pune.
- Institute Communicate the academic performance of students to their parents in parents-meet and seeking their support in resolving the difficulties of the students

### 2.3 Teaching-Learning Process

## 2.3.1 How does the college plan and organize the teaching, learning and evaluation schedules? (Academic calendar, teaching plan, evaluation blueprint, etc.)

The Institute has the following process to plan and organize the teaching and learning as well as evaluation schedules:

### **Teaching and learning process:**

- SPPU provides an academic calendar before the commencement of semester wherein the number of days for teaching and evaluation are available which gives a guideline to frame an Institute level academic calendar.
- Institute level academic calendar is prepared and provided to all departments before the commencement of semester.
- Principal conducts meeting with all HoD's and gives necessary guidelines on the basis of previous feedback.
- Choice based preferences are asked for next semester before the staff members proceed for vacation and load distributions is done by considering these choices.
- HoD's also assigns the responsibilities to the faculties for the activities to be conducted throughout the semester.
- The teaching plan is prepared by every subject teacher prior to the starting of the semester which includes lecture number, topics planned, date, topics covered, etc. This is monitored periodically by the HoDs.
- The subject teachers are ask to prepare/update course file which contains academic calendar, syllabus, teaching plan, subject notes, question bank on each unit, university question papers with model solution etc.

• Monthly meeting of faculties is conducted by HoD to discuss the problems if any and to take updates of the conduction of academics.

### **Evaluation:**

The formative evaluation of students is done by following ways.

- Institute has developed internal evaluation process.
- All the information related to Exams is scheduled in advanced and displayed through academic calendar.
- Institute conducts Mock tests, internal tests for the students.
- Institute Evaluate the students based on Students attendance, assignments, performance in internal/Online test, students overall performance which supports the choice based credit system.
- Institute monitors the academics through Daily monitoring Reports of ERP.
- The academic progress of the Students is monitored by the Mentors and respective subject teacher.

The Summative evaluation of students is done by following ways.

- Theory In semester, End Semester examinations
- Online examinations.
- Oral /Practical examinations.
- The details of these examinations are announced well in advance by the SPPU.

### Savitribai Phule Pune University

(Formerly University of Pune)



### ACAEMIC CALENDER FOR VARIOUS ACTIVITES FOR ENGINEERING COURSES FOR THE YEAR 2015-2016

### FIRST TERM

| Sr.<br>No. | Details of Activities  | Year   | Date  |
|------------|--|--|---|
| 1          | Commencement of Teaching   | S.E/T.E/B.E. &MCA - II & III Year                                      | 15/06/2015  |
| 2          | Conclusion of Teaching   | S.E/T.E/B.E. &MCA - II & III Year                                      | 06/10/2015  |
| 3          | Commencement of Teaching   | M.E. II Year   | 20/07/2015  |
| 4          | Conclusion of Teaching   | M.E. II Year   | 07/11/2015  |
| 5          | Practical/Oral/ Project Examination  | S.E/T.E/B.E.   | 12/10/2015 to 27/10/201   |
| 6          | Theory Examination   | S.E/T.E/B.E. &MCA - II & III Year                                      | 02/11/2015 to 27/11/201   |
| 7          | Vacation for Faculty   |  | 08/10/2015 to 07/11/201   |
| 8          | Relieve the Faculty for CAP  |  | 09/11/2015 Onwards  |
|            |  | SECOND TERM  |   |
| Sr.<br>No. | Details of Activities  | Year   | Date  |
| 1          | Commencement of Teaching   | F.E/S.E/T.E/B.E. & MCA -I, II & III<br>Year                            | 14/12/2015  |
| 2          | Conclusion of Teaching   | F.E/S.E/T.E/B.E. & MCA -I, II & III<br>Year                            | 02/04/2016  |
| 3          | Commencement of Teaching   | M.E .I & II Year   | 11/01/2016  |
| 4          | Conclusion of Teaching   | M.E .I & II Year   | 18/01/2016  |
|            | The state of the s |  |   |
| 5          | Practical/Oral/ Project Examination  | S.E/T.E/B.E. &MCA - II & III Year                                      | 06/04/2016 to 23/04/016   |
| 5<br>6°    | Practical/Oral/ Project Examination Theory Examination   | S.E/T.E/B.E. &MCA - II & III Year<br>S.E/T.E/B.E. &MCA - II & III Year |   |
|            |  |  | 02/05/2016 to 28/05/201   |
| 6          | Theory Examination   | S.E/T.E/B.E. &MCA - II & III Year                                      | 02/05/2016 to 28/05/201<br>25/04/2016 to 30/04/201  |
| 6°         | Theory Examination Practical Examination   | S.E/T.E/B.E. &MCA - II & III Year<br>M.E .I & II Year                  | 06/04/2016 to 23/04/010<br>02/05/2016 to 28/05/201<br>25/04/2016 to 30/04/201<br>16/05/2016 to 28/05/201<br>13/04/2016 to 23/05/201 |

Ganeshkhind, Pune- 07 Ref. No. PGS/ 1702 Date: - 22/05/2015 Asstt. Registrar (P.G. Admission)

Fig.2.3.1 (A) University Academic Calendar

NASHIK DISTRICT MARATHA VIDYA PRASARAK SAMAJ's

## KARMAVEER ADV. BABURAO GANPATRAO THAKARE COLLEGE OF ENGINEERING

NASHIK - 13

Udoji Maratha Boarding Campus, Pumping Station, Gangapur Road, Nashik-422013, Maharashtra, India

Visit us at: www.kbtcoe.org

Ref. No. NDMVPSKBTCOE/Acad/01 /2015-16

Date: 12/12/2015

### Academic Calendar (S.E., T.E., B.E. all branches) for year 2015-16 (Semester-II)

| Sr.<br>No. | Details of Activity   | Day       | Date                     |  |
|------------|---|-----------|--------------------------|--|
| 1          | Commencement of Teaching  | Monday    | 14/12/2015               |  |
|            | NSS Special Winter Camp   |           | 21/12/2015 to 27/12/2015 |  |
| 2          | Id- E-Milad (Holiday)   | Thursday  | 24/12/2015               |  |
| 3          | Christmas (Holiday)   | Friday    | 25/12/2015               |  |
| 4          | Display of Attendance   | Thursday  | 31/12/2015               |  |
| 5          | M.V.P. Marathon -2016   | Sunday    | 03/01/2016               |  |
| 6          |   | Friday    | 15/01/2016               |  |
| 7          | Display of Attendance   |           | 22/01/2016 to 24/01/2016 |  |
| 8          | Fusion-2016 (Tentative)   | Tuesday   | 26/01/2016               |  |
| 9          | Republic Day  | Saturday  | 30/01/2016               |  |
| 10         | Display of Attendance and letters to parents                                      | Monday    | 15/02/2016               |  |
| 11         | Display of Attendance & Department wise class coordinator meeting with HOD        | Friday    | 19/02/2016               |  |
| 12         | Chatrapati Shivaji Maharaj Jayanti (Holiday)                                      | -         | 22/02/2016 to 23/02/2016 |  |
| 13         | Technical Events ( All departments) (Tentative)                                   | Tuesday   | 23/02/2016               |  |
| 14         | Karmaveer Adv. Baburao Thakare Punyatithi   | Tuesday   | 01/03/2016               |  |
| 15         | Display of Attendance   | Saturday  | 12/03/2016               |  |
| 16         | Karmaveer Adv. Baburao Thakare Jayanti  | Tuesday   | 15/03/2016               |  |
| 17         | Display of Attendance and letters to parents                                      | Wednesday | 23/03/2016               |  |
| 18         | Holi (Holiday)  |           | 31/03/2016               |  |
| 19         | Display of Attendance & Department wise class coordinator meeting with HOD        | Thursday  | 02/04/2016               |  |
| 20         | Display of final detention list and letters to parents in case detained students. | Saturday  | 02/04/2016               |  |
| 21         | Conclusion of Teaching  | Saturday  | 04/04/2016               |  |
| 22         | Karmaveer Dr. Vasantrao N Pawar Jayanti   | Monday    | 05/04/2016               |  |
| 23         | Last date for term work submission  | Tuesday   |                          |  |
| 24         | Practical / Oral / Project Examination  |           | 06/04/2016 to 23/04/2016 |  |
| 25         | Gudhi Padawa (Holiday)  | Friday    | 08/04/2016               |  |
| 26         | Mahavir Jayanti (Holiday)   | Tuesday   | 19/04/2016               |  |
| 27         | Theory Examination  |           | 02/05/2016 to 28/05/201  |  |
| 28         |   |           | 13/04/2016 to 23/05/201  |  |
| 29         |   |           | 25/05/2016 onwards       |  |

Note: S.E online and T.E and B.E offline examination will be as per university schedule.

Prof. Vinod C Shewale Coordinator (Academics) Dr. Jayant T Pattiwar Principal

Fig.2.3.1 (B) Institute Academic Calendar

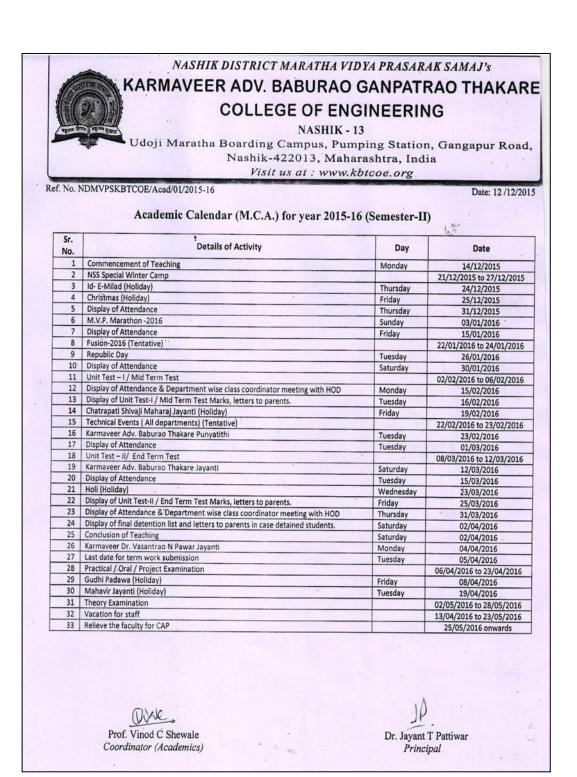


Fig.2.3.1 (C) Department Academic Calendar





## Karmaveer Adv. Baburao Ganpatrao Thakare COLLEGE OF ENGINEERING

Udoji Maratha Boarding Campus, Near Pumping Station Road, Gangapur Road,
Nashik-422013, Maharashtra - India
Phone: +91 253-2571439, 2314319, Fax: 0253-2317016
email: principal@kbtcoe.org website: www.kbtcoe.org

### **Academic Monitoring Cell**

### Staff Teaching Plan

Date: 23/12/2016

Academic Year: 2016-2017

Course: UG Branch: ELECTRONICS AND TELE

Year: BE Semester: 7 TH SEM Section: A

Sub Code: MWE Subject Type: THEORY

Subject: MICROWAVE ENGINEERING

Emp ID: ETC007 Emp Name: CHAUDHARI ATUL RUPCHAND

| Sr.No. | Unit | Topic Code | Expected Date | Topic Description   |
|--------|------|------------|---------------|---|
| 1      | 1    | 1.1        | 15/06/2016    | MICROWAVE HISTORY & BAND  |
| 2      | 1    | 1.2        | 16/06/2016    | TRANSMISSION LINES AND WAVEGUIDES INTRODUCTION TO MICROWAVES ENGINEERING: HISTORY OF MICROWAVES |
| 3      | 1    | 1.3        | 20/06/2016    | MICROWAVE FREQUENCY BANDS. APPLICATIONS OF MICROWAVE.   |
| 4      | 1    | 1.4        | 21/06/2016    | GENERAL SOLUTION FOR TEM, TE AND TM WAVES   |
| 5      | 1    | 1.5        | 22/06/2016    | PARALLEL PLATE WAVEGUIDE  |
| 6      | 1    | 1.6        | 23/06/2016    | RECTANGULAR WAVEGUIDE   |
| 7      | 1    | 1.7        | 27/06/2016    | WAVE GUIDE PARAMETERS. INTRODUCTION TO COAXIAL LINE   |
| 8      | 1    | 1.8        | 28/06/2016    | RECTANGULAR WAVEGUIDE CAVITY RESONATORS   |
| 9      | 1    | 1.9        | 29/06/2016    | CIRCULAR WAVEGUIDE CAVITY RESONATORS  |
| 10     | 2    | 2.1        | 30/06/2016    | MICROWAVE COMPONENTS MULTI PORT JUNCTIONS   |
| 11     | 2    | 2.2        | 04/07/2016    | CONSTRUCTION AND OPERATION OF E-PLANE   |
|        |      |            |               |   |

Institute ID :KBTCOE

Designed by SyNchRoniK Inc.

gned by SyNchRoniK Inc.

Report for Academic Monitoring Cells (Staff Teaching Plan)

Fig.2.3.1 (D) Subject Teaching Plan

Page 1 of 3

### 2.3.2 How does IQAC contribute to improve the teaching –learning process?

Presently the Teaching-learning process is monitored and governed by the Academic Monitoring Committee (AMC). Academic Monitoring Committee (AMC) acts as Internal Quality Assurance Cell (IQAC). As we are in the first cycle of Accreditation. For the Post Accreditation quality sustenance measure, the Internal Quality Assurance Cell (IQAC) as per NAAC guidelines is under process of development. The primary aim of the proposed IQAC is to develop a system for conscious, consistent and catalytic action to improve the academic and administrative performance of the institution.

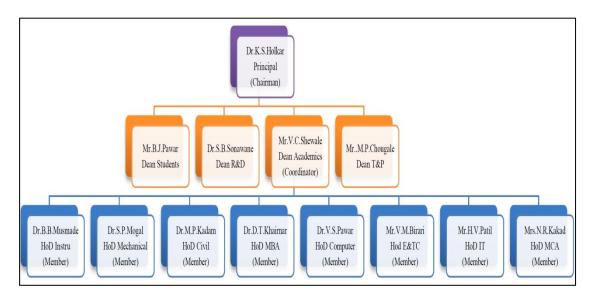


Fig. 2.3.2. Academic Monitoring Committee (AMC)

### **Academic Monitoring Committee (AMC):**

- This committee is chaired by Principal of the Institute. All Dean of Institute and HOD's of all departments are member of this committee. AMC used to monitor all the Academics, Student Feedback and overall teaching learning process to achieve maximum academic performance of the students. Faculty & staff appraisal are also looked after by AMC where it not only monitors the performance of individual faculty but also guide them to achieve their own objectives.
- AMC checks course files, theory and practical attendance sheets, Lab manuals, staff feedback etc. in every semester.
- AMC monitors the classes and interact with students and faculty regularly and on need basis suggests remedial measures and motivates teachers to use latest technological aids.
- Monthly tutor meeting are conducted to counsel the students and to discuss issues related to academics, hostel, mess and overall facilities. AMC inform all the issues raised by mentors & coordinators to principal. Based on the issues raised by AMC, the Principal takes corrective measures to improve teaching learning process.

#### **Benefits:**

• The analysis and suggestions by AMC benefit the institutional progress in quality education and research. It also makes sure about keeping the

- transparency in faculty, staff and management with respect to objectives towards attainment of mission and vision of the Institute.
- AMC create a mechanism to integrate various academic activities, enhance supportive administrative tasks and effectively communicate to achieve quick actions and get impact on quality objectives of the Institute.

# 2.3.3 How is learning made more student-centric? Give details on the support structures and systems available for teachers to develop skills like interactive learning, collaborative learning and independent learning among the students?

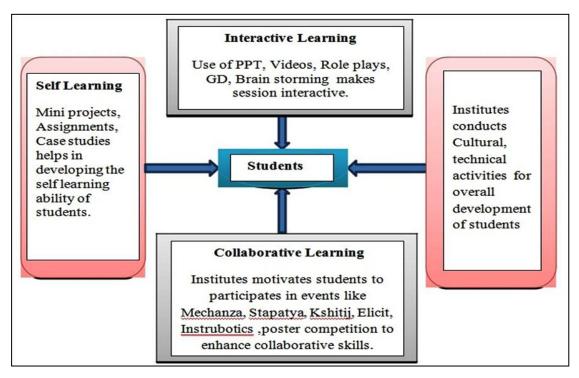


Fig. 2.3.3(A) Students Centric Teaching Learning Methodologies

### Efforts made by the Institute for Student centric learning

- Institute motivates Students for participative learning.
- Institute has improved the Teaching learning process by adopting approaches like case study, Self-learning assignments, Mini projects for the students.
- Institute conducts Expert lectures, seminars, workshops, paper presentation and industrial visits for students in every semester.
- Training and placement cell of the Institute & respective departments organizes activities like personality development guidance, aptitude test, quiz, group discussion and debate competition.
- Institute provides guidance for GATE, Civil Services Exams etc.

### Support structures and systems available

- Well-equipped laboratories with flexible access
- Library facility with access to e-learning resources, e-journals, magazines, subscriptions to journals and transactions like ASCE, ASME, IEEE, J-gate, Springer etc.
- ICT enabled classrooms with LAN, Internet and LCD Projector.

- Akash R&D center of IIT-Mumbai.
- NPTEL videos.

Various students' centric teaching learning methodologies adopted in all the departments:

- Videos and animations for different technical concepts are made available to make more interactive lectures.
- By conducting tutorials, the students will have better understanding of the course.
- Assignments, Case studies, mini projects on advanced topics in every course are given which make the students to acquire the self-learning capabilities.
- Occasionally online quiz, group discussions and seminars are conducted for advanced topics in various courses.
- Easy access is made available for students to some of key books providing them in departmental library.
- Institute motivates students to participate in events like Mechanza, Kshitij, Stapatya, Instrubotics, Elicit, poster competition etc. to enhance their collaborative skills.
- In addition for overall development of students, Institute also conducts cultural and technical activities.

## 2.3.4 How does the Institution nurture critical thinking, creativity and scientific temper among the students to transform them into life-long learners and innovators?

### Institute Nurture Critical Thinking and Creativity among students by following ways-

- Institute organizes various technical events such as Mechanza, Elicit, Instrubotics, Kshitij, Stapatya, Idea Spark, Poster competition etc.to develop creativity and critical thinking among the students.
- Institute motivates students to participate in national level project competitions organized by other Institutes and universities such as Avishkar, Aakaar, Techfest, Axis 14 etc.
- Students are encouraged by the Institute to select industry sponsored projects. The Institute provides value added courses like-:

#### SAP

- Following modules are run under SAP.
- Material management.
- ABAP.
- Sales & Distribution.
- Human Resource

### Design Innovation center

Following courses are conducted under Design Innovation center.

- Design and development of signal conditioning & Sensor technologies.
- Advance techniques for Environment Watershed Management.
- Post graduate Diploma in Computer-aided Product Designs.

#### Institute Nurture Scientific temper among students by following ways.

- Institute invites experts from academia as well as from industry to deliver lectures on modern and emerging areas which helps students to develop their innovative & scientific temper.
- Faculty members encourage the students to participate in state /national /international conference, competitions like AVISHKAR (SPPU-Pune sponsored zonal and state level project competitions to develop scientific & innovative temper among students.
- Institute has NMEICT Remote Center (IIT Mumbai) [National Mission on Education through ICT (MHRD, Govt. of India). Participants can interact with the eminence faculty of IIT delivering a lecture from IIT and live lectures are transmitted at Remote Centers using A-VIEW software.
- All the department of the institute has established student academic associations: MESA,PAES, ICONS, ITSA, and ACES, which conducts the various activity viz. seminars, project competition in order to develop the scientific culture and up gradation of knowledge among the students.
- Students are encouraged to present and publish research papers in conferences and journals.

Following table shows the various events organize by the Institute and different competitions held under these events:

Table 2.3.4 Various events organize by the Institute under different competitions

| Name of Technical Events | Types of Competition                             |
|--------------------------|--|
| Mechanza                 | Lathe War, Logic Cube                            |
|                          | Paperranza, Cannon ball                          |
| Instrubotics             | Robo Race, Robo Soccer                           |
|                          | Project competition                              |
|                          | Contraption, Gaming                              |
| Elicit                   | Circuit mania, Quiz                              |
|                          | Placement Bonanza Competition                    |
|                          | Box cricket, Box cricket                         |
|                          | Language Coding                                  |
| Stapatya                 | Bridge Making Competition                        |
|                          | AutoCAD Drafting Competition                     |
|                          | Cube Blasting                                    |
|                          | Floating Structure                               |
| Kshitij                  | C War, Paper Azzi, Pro-manifasto                 |
| Other                    | Idea Spark, Young Turks, Poster competition etc. |



Figure 2.3.4 (A) MECHNZA



Figure 2.3.4 (B) INSTRUBOTICS



Figure 2.3.4 (C) ELICIT



Figure 2.3.4 (D) Activities conducted by MBA Department

2.3.5 What are the technologies and facilities available and used by the faculty for effective teaching? Eg: Virtual laboratories, e-learning - resources from National Programme on Technology Enhanced Learning (NPTEL) and National Mission on Education through Information and Communication Technology (NME-ICT), open educational resources, mobile education, etc.

Institute provides following Technologies and facilities to the faculty for effective teaching-

- E-learning resources from National Programme on Technology Enhanced Learning (NPTEL videos).
- NMEICT [National Mission on Education through ICT] Remote Center (IIT Mumbai).
- Internet facility (155 MBPS leased line).
- Wi-Fi campus.
- ICT enabled classrooms with LAN, Internet & LCD Projector.
- Library with OPAC Search Facility.
- Dedicated reference Section with reading room in Library.
- Institute has Remote Center and Aakash R & D center affiliated to IIT Mumbai.
- Institute provides AAKASH Tablets to students and faculties under the research promotion scheme in association with IIT Mumbai.
- Apart from computer systems, sophisticated instruments, modeling tools, data
  processing software and modern equipment's are provided to create
  infrastructural facilities to meet the needs of new and emerging areas of
  research.
- Library facility with access to e-learning resources, e-journals, magazines, subscriptions & transactions like ASCE, ASME, IEEE, J-gate, Springer etc.

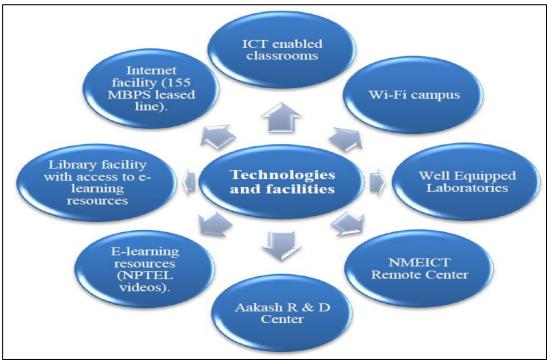


Fig 2.3.5 Technologies and facilities provided by the Institute

### 2.3.6 How are the students and faculty exposed to advanced level of knowledge and skills (blended learning, expert lectures, seminars, workshops etc.)?

#### Students-

- Institute organizes and motivates students to participate in workshops, conferences, project competitions and poster presentation organized by other professional Institutes like IIT Bombay.
- The Institute provides various value added courses like-
  - SAP- Various modules are run under SAP like Material management, ABAP, Human Resource etc.
  - **Design Innovation center** various courses are conducted under Design Innovation center like Design and development of signal conditioning & Sensor technology, advanced techniques for Environment Watershed Management, Post graduate Diploma in Computer-aided Product Designs.
- Institute organize various workshops like Android App development, Big Data & Hadoop, Industrial Automation, Ardino Processor, Latex, Advanced Cmos layer designing etc. to escalate students advance level of knowledge & skills. Institute has NMEICT Remote Center (IIT Mumbai) [National Mission on Education through ICT (MHRD, Govt. of India). Students can interact with the eminence faculty of IIT delivering a lecture from IIT and live lectures are transmitted at Remote Centers using A-VIEW software.
- A faculty member encourages the students to participate in state/national/international conference, competitions like AVISHKAR (SPPU-Pune sponsored zonal and state level project competitions to develop scientific & innovative temper among students.
- Institute has the student's chapters of professional bodies like ISOI, SAE, CSI and IEI which organizes events to expose the students for advanced level of technology.
- Institute has signed Memorandum of Understanding (MOUs) with many leading industries as well as research institutes which help students to get industry knowledge, training, project work etc.
- Industry visits are arranged every year to sensitize students and faculty to the practical challenges faced in industry and to advance technologies. It also increases awareness of the expectations of industry and helps them prepare for employability.

### Faculty-

- Institute provides advanced level of knowledge to the faculty by conducting various workshops, seminars, conferences, faculty development program, and short term training programs.
- Institute provides support to the staff for participating in various workshop, seminar, conferences, STTP's, and guest lecturers organized by other Institutes.
- Faculty is motivated to take up higher education & research at premier Institutes.
- Institute has also working towards technology integration in teaching & learning. With this aim to make faculty competent, FDP on Use of ICT in Education for online &blended learning has organized with association of IIT Bombay.

• Institute has NMEICT Remote Center (IIT Mumbai) [National Mission on Education through ICT (MHRD, Govt. of India). Participants can interact with the eminent faculty of IIT delivering a lecture from IIT and live lectures are transmitted at Remote Centers using A-VIEW software.

Table 2.3.6 Workshop/Seminar organized by the Institute for Staff & Students.

| Workshop  | From       | То         |
|---|------------|------------|
| Advanced Topics in Control Systems  | 27/1/2016  | 28/1/2016  |
| State level workshop on emerging trend in Heat Transfer Engineering   | 04/02/2016 | 05/02/2016 |
| Workshop on "Electronics Products" Conducted By Rishabh Instrument, Nashik.   | 08/09/2016 | 08/09/2016 |
| Workshop on Hibernate & Spring MVC (A_JAVA)   | 08/10/2016 | 08/10/2016 |
| Workshop on Android App Development   | 17/09/2016 | 10/10/2016 |
| Workshop on Big Data & Hadoop   | 01/09/2016 | 03/09/2016 |
| Workshop on Applied CS with Android workshop  | 24/10/2016 | 26/10/2016 |
| Workshop on Industrial Automation using PLC & SCADA   | 2/9/2015   | 5/9/2015   |
| Workshop on Emerging Trends in Heat Transfer<br>Engineering   | 19/12/2015 | 20/12/2015 |
| Workshop on Big Data & Hadoop   | 14/02/2015 | 14/02/2015 |
| Workshop on "Entrepreneurship Development"  | 15/9/2014  | 26/9/2014  |
| ISTE workshop on Fluid Mechanics organized by IIT Kharagpur   | 10/06/2014 | 20/06/2014 |
| Workshop on Control Systems   | 2/12/2014  | 12/12/2014 |
| Workshop on DCS & PLC overview  | 21/7/2014  | 25/7/2014  |
| Workshop on "Research Methodology"  | 14/02/2014 | 15/02/2014 |
| ISTE Workshop on Structural Analysis  | 04/01/2016 | 09/01/2016 |
| ISTE workshop on Engineering Mechanics organized by IIT Mumbai  | 26/11/2013 | 06/12/2013 |
| Workshop on Tribological Aspects in Design  | 03/10/2013 | 04/10/2013 |
| Workshop on "Practical Oriented Electronics Workshop on<br>Industrial Approach For Electronics "Conducted By<br>Electronics Study Center, Jalgaon | 30/08/2013 | 31/08/2013 |
| Workshop on 2 &3 wheeler technologies in association with Automotive club, IIT Delhi  | 20/9/2013  | 21/9/2013  |
| Workshop on Cyber Security & Penetration Testing  | 11/07/2013 | 12/07/2013 |
| Seminars  | From       | To         |

| Embedded Systems & Applications  | 17/9/2016  | 17/9/2016  |
|--|------------|------------|
| Comparisons of Power Plants  | 2/3/2016   | 2/3/2016   |
| Instrumentation in Thermal Power Plants                                | 11/2/2016  | 11/2/2016  |
| HPC Research & Career  | 5/2/2016   | 5/2/2016   |
| Technical seminar & Practical session on use of CATIA & ANSYS software | 05/02/2014 | 12/02/2014 |
| Instrumentation in Thermal Power Plants                                | 21/1/2015  | 21/1/2015  |
| Automation A Booming Field   | 7/3/2014   | 7/3/2014   |
| Scope of Engineer in Astronomy   | 31/12/2013 | 31/12/2013 |
| Scope of Delta in Industrial Automation                                | 17/7/2013  | 17/7/2013  |
| Two days state level seminar on "Tribological aspects in Design"       | 3/10/2013  | 4/10/2013  |



Figure 2.3.6.FDP & Workshop organized by the Institute.

2.3.7 Detail (process and the number of students \ benefitted) on the academic, personal and psycho-social support and guidance services (professional counseling/mentoring/academic advise) provided to students?

### **Academic Support**

- Institute provides Book Bank Facility to Students.
- Institute provides Printed Laboratory Manual to Students.
- Institute conducts Remedial and extra classes as per the need.
- Institute has T & P cell to provide career related guidance & support to the students.
- Institute conduct individual level counseling through tutor/mentor scheme.
- Institutes provide financial assistance to the research work of students.

### Personal and psycho-social support-

- Individual level counseling through tutor/mentor scheme.
- In addition to above, students approach individual faculty member's /HOD/ Principal for career guidance and counseling.

- Suggestion box is maintained in each department where students, faculty members can give their suggestions.
- NSS activity gives social awareness amongst students. It also gives training for psychosocial support.

#### **Guidance Services-**

- The training & placement cell provides professional counseling to the students.
- The personality development sessions, entrepreneurship development programs are organized for students.
- Institute provides guidance for GATE, Civil Services Exams etc.

# 2.3.8 Provide details of innovative teaching approaches/methods adopted by the faculty during the last four years? What are the efforts made by the Institution to encourage the faculty to adopt new and innovative approaches and the impact of such innovative? Practices on student learning?

#### Innovative teaching approaches adopted by the faculty-

- Interactive teaching learning approaches like brain storming, group discussions, Role plays.
- Use of flash animations, Puzzle solving.
- Case studies, Assignments.
- Use of E-learning resources such as NPTEL Videos.

### Efforts made by the Institution to encourage the faculty:

- Faculty members are deputed for participating in the FDP, Work-shops and Industrial trainings to update their skills on recent technologies.
- Institute organizes Faculty development programs, expert lecture to encourage the faculty to adopt new and innovative teaching approaches.
- For example: AICTE approved FDP by IIT Bombay on "Use of ICT in education for Online and Blended Learning" Under the national Mission on Education through ICT(MHRD, Govt. of India) has been conducted at our institute to encourage the faculty to adopt new and innovative teaching approaches.
- Institute provides subscriptions for various National and International Journals.
- Institute has class room with LCD, Wi-Fi and LAN connection.
- Internet facility (155 MBPS leased line).
- Deputes staff for attending innovative teaching learning programs like Mission 10X.

#### 2.3.9 How are library resources used to augment the teaching-learning process?

The library resources are used to augment teaching-learning process in the following manner

- Library procures learning resources as per the syllabus prescribed by the University. Resources are processed and organized by a standard established process.
- Information about all these learning resources is accessible throughout the campus via Online Public Access Catalog (OPAC). Index for all reading material is available through OPAC. Also Title wise, Author wise search option helps to access reading material easily.

- Subscribed e-resources are accessible through IP based and users can access full text of required material from their department and classroom. This facility helps in planning lecture and preparing lecture notes/ presentations.
- Students are made to refer text books, reference books prescribed in curriculum.
- Dedicated reference section with reading room in Library.
- Book bank facility.
- Use of e-learning resources.
- Use of e-journals and subscribed contents from ASCE, ASME, IEEE-ASPP, J-gate, Springer, Elsevier etc.

Table 2.3.9 Library Resource

| Library Holding     | Year 2013-14 |         | Year 2014- |         | Year 2015-        |         | Year 2016-17   |            |
|---------------------|--------------|---------|------------|---------|-------------------|---------|----------------|------------|
|                     |              |         |            | 15      |                   | 16      |                |            |
|                     | No           | Total   | No         | Total   | No                | Total   | No             | Total      |
|                     |              | cost    |            | cost    |                   | cost    |                | cost       |
| Text book           | 2589         | 59749   | 629        | 6.58    | 949               | 6.48    | 462            | 3.08 lakh  |
|                     | 2309         | 33143   | 029        | lakh    | ) <del>11</del> 7 | lakh    | 402            |            |
| Reference Book      | 364          | 2.22    | 571        | 1.56    | 557               | 8.62    | 30             | 1.05 lakh  |
|                     | 304          | lakh    | 3/1        | lakh    | 337               | lakh    | 30             |            |
| Jouranal/Periodical | 25           | 34445   | 61         | 1.35    | 73                | 1.52    | Rene           | wal order  |
|                     | 23           |         | 01         | lakh    | 13                | lakh    | has been place |            |
| e- resource         | 7            | 15.00   | 5          | 13.58   |                   | -       | Rene           | wal order  |
|                     | /            | lakh    | )          | lakh    | _                 |         | has be         | een placed |
| Any other specify   | New          | s Paper | New        | s Paper | New               | s Paper | News Paper     |            |
| (News paper Genral  | 13           |         | 14         |         | 16                |         | 16             |            |
| books)              |              |         |            |         |                   |         |                |            |



Fig 2.3.9 Facilities provided by the library

2.3.10 Does the Institution face any challenges in completing the curriculum within the Planned time frame and calendar? If 'yes', elaborate on the challenges encountered and the institutional approaches to overcome these.

Institute takes following efforts for completing the curriculum within the planned time frame and calendar:

- For some subjects additional teaching hours are provided to cover prerequisites.
- In university curriculum of newly introduced in-semester theory and online university exams, the academic calendar is prepared with optimal utilization of available weeks for teaching learning activities.
- Extra lectures are arranged to cover the syllabus.
- Academic Monitoring committee continuously monitors the academic performance & teaching learning process in order to complete the curriculum within the planned time frame.

### 2.3.11 How does the Institute monitor and evaluate the quality of teaching learning?

Institute monitor and evaluate the quality of teaching learning through:

- Institute has Academic Monitoring Committee which monitors all the academics, Student Feedback and overall teaching learning process to achieve maximum academic performance of the students.
- AMC checks course files, theory and practical attendance sheets, Lab manuals, staff feedback etc. in every semester. Also this committee monitors the classes and interacts with students and faculty regularly and on need basis suggests remedial measures and Motivates teachers to use latest technological aids.
- AMC inform all the issues raised by mentors & coordinators to principal. Based on the issues raised by the above mentioned committees, the Principal takes corrective measures to improve teaching learning process.
- Regular follow up is taken through the weekly meeting of the HOD by the Principal and staff meeting by HOD.
- Student attendance monitoring and reporting of the same to the parents by SMS/Letters.
- Continuous Monitoring through ERP system which generates various reports such as Daily monitoring, student attendance, teaching plan etc.
- Feedback about faculty is taken from the students. In this feedback, questions
  related to teaching competencies and attitude of the concerned faculty are
  asked. Based on the feedback, HOD gives necessary directions for
  improvement in the teaching methods. Principal also monitors the feedback
  system and counsels the faculty with low feedback. Dean academics is
  assigned to low performing faculty and their performance is reviewed
  regularly.
- Result analysis of internal examinations and university examination has monitored by all department head for corrective remedial measures.
- Supervision of lecture and practical sessions by HOD. Counseling is done to staff members for improvement.

#### 2.4 Teacher Quality

2.4.1 Provide the following details and elaborate on the strategies adopted by the college in planning and management (recruitment and retention) of its human resource (qualified and competent teachers) to meet the changing requirements of the curriculum.

- Human resources required for teaching are planned as per the academic requirements from time to time. The requirements of teaching staff are consolidated by establishment section before start of new academic year.
- The staff is recruited as per guidelines of AICTE, New Delhi and SPPU. An overall student teacher ratio is maintained at 15:1 as per AICTE norms.
- Faculty is exposed to various technical and motivational training programs to upgrade their skills and keep themselves updated about the changing technological needs.
- The Institute involves stakeholders in formulating vision, mission and goals of the Institute which helps in improving their sense of belonging and in aligning all activities towards realizing them.

Table 2.4.1 (A) Staff Information

| Highest<br>Qualification | Pro  | fessor    | Associate<br>Professor |             |      |        | Total |
|--------------------------|------|-----------|------------------------|-------------|------|--------|-------|
|                          | Male | Female    | Male                   | Female      | Male | Female |       |
|                          |      | Perm      | anent Te               | achers      |      |        |       |
| D.Sc./D.Litt.            | -    | -         | -                      | -           | -    | -      | -     |
| Ph.D.                    | 5    | -         | 4                      | 1           | 3    | -      | 13    |
| M.Phil.                  | -    | -         | -                      | -           | -    | -      | -     |
| PG                       | -    | -         | 11                     | 2           | 58   | 38     | 109   |
|                          | Tei  | mporary T | eachers                | (Ad-hoc bas | sis) |        |       |
| Ph.D.                    | -    | -         | -                      | -           | -    | -      | -     |
| M.Phil.                  | -    | -         | -                      | -           | -    | -      | -     |
| PG                       | -    | -         | -                      | -           | -    | -      | _     |
| BE                       | -    | -         | -                      | -           | 4    | 1      | 5     |
| Part-time Teachers       |      |           |                        |             |      |        |       |
| Ph.D.                    | -    | -         | -                      | -           | -    | -      | -     |
| PG                       | -    | -         | - 1                    | -           | -    | _      | _     |

### Strategies adopted by the Institute for retention of faculty members are as follows:

- Provide academic autonomy for adopting various strategies of teaching appropriate for attaining desired learning outcome.
- Provide yearly increments & promotions based on Experience & Qualification.
- Implementing various welfare schemes for faculty like group gratuity, mediclaim policy, credit cooperative society, sevak welfare fund etc.
- Creating an atmosphere conducive for their professional growth.
- Assigning roles and responsibilities challenging their capabilities and making them strive further.
- Providing necessary infrastructure and facilities for promoting the culture of research.
- Deputing faculty for higher studies & research.
- Establishing research promotional policies for attending conferences and publishing research papers in India and abroad.

• Institute provides maternity leaves for ladies staff.

The details of faculty pursuing higher studies & the existing faculty who are encouraged for higher studies are given below.

Table 2.4.1 (B) Details of faculty pursuing and completed higher studies

| Qualification | No. of staff |
|---------------|--------------|
| Ph.D          | 13           |
| PhD Pursuing  | 35           |
| PG            | 74           |

2.4.2 How does the Institution cope with the growing demand/ scarcity of qualified senior faculty to teach new programmes/ modern areas (emerging areas) of study being introduced (Biotechnology, IT, Bioinformatics etc.)? Provide details on the efforts made by the Institution in this direction and the outcome during the last three years.

Steps taken by the Institute to cope with the growing demand/ scarcity of qualified senior faculty to teach new programmes/ modern areas of study

- Institute has working towards technology integration in teaching & learning. With this aim to make faculty competent, FDP on Use of ICT in Education for online &blended learning has organized with association of IIT Bombay.
- Institute has NMEICT Remote Center (IIT Mumbai) [National Mission on Education through ICT (MHRD, Govt. of India). Participants can interact with the eminent faculty of IIT delivering a lecture from IIT and live lectures are transmitted at Remote Centers using A-VIEW software.
- Institute invites experts from academia as well as from industry to deliver lectures on modern and emerging areas.
- The Institute motivates & support faculty members for pursuing Ph.D. & higher studies.
- Institute has Remote Center of IIT Bombay which gives opportunity to faculty to interact with researchers through video conferencing.

Few of the eminent persons have visited to the campus and interacted with faculties and students. The details are as follows.

Table 2.4.2 Eminent persons visited to the institute.

| Name of Department     | Year | Name of Visiting eminent scientists /<br>Industrial Person |
|------------------------|------|--|
|                        | 2013 | 1. Mr.N.L.Soni, Senior Scientist, BARC,                    |
|                        | 2013 | Mumbai   |
| Mechanical Engineering |      | 2. Dr.D.V.Bhat, Professor, SVNIT, Surat.                   |
|                        |      | 3.Dr.V.M.Phalle,Head VJTI,Mumbai                           |
|                        | 2016 | 1.Dr. K.N. Iyer (IIT Mumbai)                               |
|                        |      | 2.Dr. R.P. Vedula (IIT Mumbai)                             |
|                        |      | 3.Dr. Sridhara Sheshadri (IIT Mumbai)                      |
|                        |      | 4.Dr.R.S.Jha, Manager (Innovation), Thermax                |

|   | 1           |   |
|---|-------------|---|
|   |             | Ltd,Pune. 5.Dr.Avsar Lakdawala, Nirma University, Ahmedabad. 6.Dr.Parag Sonawane,Director (R &D), |
|   |             | AIMID Ltd, Shenzen, China 7. Shri. Rajendra Kumar Das, Vice President,                            |
|   |             | CEAT Ltd, Nashik.<br>8.Dr. Pankaj Jagad, Nirma University,  |
|   |             | Ahmedabad.  |
|   |             | 9.Dr.Atul Srivastava (IIT Mumbai)   |
| Civil Engineering                       | 2014-<br>15 | 1.Dr. Deepak Khare IIT Roorki,<br>2.Dr. H. S. Patil NIT Surat                                     |
|   | 2015-<br>16 | 1.Prof. V.L Manekar   |
| MBA                                     | 2014-       | 1.Dr. Omprakash Kulkarni  |
|   | 15          | 2.Arya Hycinth, Gordon Noronha  |
|   | 2013        | 1.Mr. Sunil Jadhav<br>(Project Manager, Emerson, UAE)<br>2.Mr. Ajinkya H Patil                    |
|   | 2014        | (Research Scholar, University Of Groningen, Netheland)  |
| Instrumentation and Control Engineering | 2014        | 1.Mr. Nitin Lokhande (Director, ETA, Pune) 2.Mr. Deepak Jain (SMEC Automation, Mumbai)            |
|   |             | 3.Mr. Vinay Raju (Yokogawa, Bangalore)<br>4.Mrs. Punam Borah (Yokogawa, Bangalore)                |
|   | 2015        | 1.Mr. A.K.Das (Director, Monorail Mumbai)   |
|   |             | 2.Mr. Rajesh Bhave (Emerson Process   |
|   |             | Management, Pune)   |
|   |             | 3.Mr. Henry Hans (Emerson Process Management, Pune)   |
|   |             | 4.Mr. Shirish Chaphekar   |
|   |             | (Emerson Process Management, Pune)  |
|   | 2016        | 5.Dr. Pankaj M Koinkar  |
|   |             | (Tokushima University, Japan)   |
|   |             | 6.Dr. M. D. Patil , (R.A.I.T., Mumbai)<br>7.Dr. Vishwesh Vyawhare, (R.A.I.T.,                     |
|   |             | Mumbai)   |
|   |             | 8.Mr. Umesh Gupta, (Research Scholar, IIT   |
|   |             | Pawai)  |
|   |             | 9.Mr. Samir Patil (Atlanta, USA)  |
|   |             | 10.Dr. O. G. Kulkarni, (Sharddha Inventions, Nashik)  |
|   |             | 11.Mr. Aniruddha Sanvastare   |
|   |             | (Shriharsh Electronics, Nashik)   |
|   |             | 12.Dr. Vikas Shinde   |
|   |             | (Manager R&D, Excel Industries Ltd, Mumbai)   |

# 2.4.3 Providing details on staff development programmes during the last four years elaborate on the strategies adopted by the Institution in enhancing the teacher quality.

The Institute encourages (deputes) faculty/staff to take part in development programs conducted at the Institute or in other Institutes/organizations.

Table 2.4.3(A) Nomination to staff development programmes

| Academic Staff Development                 | No. of staff Nominated |       |       |       |
|--|------------------------|-------|-------|-------|
| Programmes                                 | 2016-                  | 2015- | 2014- | 2013- |
|  | 17                     | 16    | 15    | 14    |
| Refresher courses                          | -                      | -     | -     | -     |
| HRD programmes                             | 5                      | 8     | 7     | 6     |
| Orientation programmes                     | 6                      | 9     | 12    | 10    |
| Staff Training Conducted by college        | 1                      | 16    | 11    | 13    |
| Staff training conducted by the university | 1                      | -     | -     | -     |
| Staff training conducted by other          | 8                      | 16    | 10    | 14    |
| institutions                               |                        |       |       |       |
| Summer/ winter schools, workshops          | 5                      | 32    | 23    | 49    |

b) Faculty Training programmes organized by the Institution to empower and enable the use of various tools and technology for improved teaching-learning.

Table 2.4.3(B) Faculty Training programmes

| Name of the Program   | From                   | То                     | Days |
|---|------------------------|------------------------|------|
| Training program on "Automation Technology Covers PLC & SCADA" Conducted By: Prolific System, Pune.   | 21/06/2016             | 24/06/2016             | 4    |
| AICTE approved FDP by IIT Bombay on "Use of ICT in education for Online and Blended Learning" Under the national Mission on Education through ICT(MHRD, Govt. of India) | 2/5/2016               | 10/07/2016             | 60   |
| Faculty Development program on Entrepreneurship Development Sponsored by DST.   | 11/03/2016             | 22/03/2016             | 12   |
| STTP on Introduction to Structural Engineering.   | 4/1/2016               | 9/1/ 2016              | 07   |
| PLC Training Program.   | 19-9-2016<br>20-9-2016 | 25-9-2016<br>26-9-2016 | 04   |
| Training program on "C Programming" Conducted By Seed Infotech Ltd., Nashik.  | 23/06/2016             | 28/06/2016             | 5    |
| Inbound Training Program on Personality Development By-Arya Hycinth -Pune   | 27/9/2016              | 27/9/2016              | 1    |
| Training program on VLSI.   | 15/07/2016             | 16/07/2016             | 2    |

| Training program on "PCB Design" Conducted By Arya Technology. ,Nashik.                | 05/02/2016 | 06/02/2016 | 2  |
|--|------------|------------|----|
| Training program on Advanced Cmos layer designing                                      | 15/07/2015 | 16/07/2015 | 2  |
| Training program on DeltaV DCS   | 15-6-2015  | 19-6-2015  | 05 |
| Outbound Training Programme on Personality   | 25/02/2015 | 27/02/2015 | 3  |
| Development By-Arya Hycinth -At Pachgani   |            |            |    |
| Training program on "Ardino Procesor ,Latex ,PCB Design" Conducted By MicroIndia, Pune | 12/02/2015 | 14/02/2015 | 3  |
| Training program on.NET and Azure.   | 17/1/2015  | 14/3/2015  | 4  |
| Faculty Development program on Entrepreneurship Development                            | 18/12/2014 | 30/12/2014 | 12 |

Table 2.4.3(C) No. of faculty participated in Workshops /Seminar / Conferences.

| Details of faculty participation in workshops / Seminars / Conferences  |             | No. of Faculty |             |             |  |  |
|---|-------------|----------------|-------------|-------------|--|--|
| Seminars / Conferences  | 2016-<br>15 | 2015-<br>14    | 2014-<br>15 | 2013-<br>14 |  |  |
| Invited as resource persons in workshops/Seminars/Conferences organized by external professional agencies.          | 3           | 4              | 3           | 7           |  |  |
| Participated in external Workshops / Seminars/Conferences recognized by national/ international professional Bodies | 18          | 50             | 45          | 64          |  |  |
| Presented papers in Workshops/<br>Seminars/Conferences conducted or recognized by<br>professional agencies          | 18          | 31             | 47          | 61          |  |  |

# 2.4.4 What policies/systems are in place to recharge teachers? (eg: providing research grants, study leave, support for research and academic publications teaching experience in other national institutions and specialized programmes industrial engagement etc.)

- Institute encouraged faculty to participate in training programmes /workshops/ seminars/conferences/FDPs to get advanced level of knowledge and professional skills.
- The Institute provides duty leave to faculty for attending seminars, conferences, STTP and FDP.
- The Institute reimburses the conference registration fees, publication fees paid by the faculty.

### **Research grants:**

• The Institute encourages the faculty to apply in order to get research grants from funding agencies like AICTE, BCUD and DST.

Table 2.4.4 (A) List of Faculty working on funded project

| Name of Faculty   | Role of Faculty           | Funding Agency            |
|-------------------|---------------------------|---------------------------|
| Dr. N. S. Patil   | Assistant Coordinator     | DIC, SPPU, Pune           |
| Dr. S.B. Sonawane | PI Major Research Project | SERB, DST, Govt. of India |
| Mr. V. C. Shewale | PI Minor Research Project | BCUD, SPPU, Pune          |
| Mrs. S.H.Jadhav   | PI Minor Research Project | BCUD, SPPU, Pune          |
| Mrs. R.N.Mahale   | PI Minor Research Project | BCUD, SPPU, Pune          |
| Dr.S.R.Pachorkar  | PI Minor Research Project | BCUD, SPPU, Pune          |
| Dr. S. J. Kokate  | PI Minor Research Project | BCUD, SPPU, Pune          |
| Mr. S. Y. Pawar   | PI Minor Research Project | BCUD, SPPU, Pune          |

### **Study Leave:**

• Institutes grant the Study Leave to the faculty for Research work and higher studies.

Table 2.4.4 (B) List of Faculty granted leave for research work

| Name of Department  | Year          | Name of Faculty          | Name of      |
|---------------------|---------------|--------------------------|--------------|
|                     |               | <b>Granted Leave for</b> | research     |
|                     |               | Ph.D.                    | institute    |
| Civil Engineering   | 2015-2016     | Mr. S. M. Waysal         | SVNIT, Surat |
|                     | 2016-2017     | Mr. R. V. Devalkar       | SVNIT, Surat |
|                     |               | Mrs. M. C. Aher          |              |
|                     |               |                          |              |
| Instrumentation &   | 2010 to 2015  | Mr. A. R. Kulkarni       | MNNIT,       |
| Control Engineering |               |                          | Allahabad    |
|                     | 27/01/2015 to | Mr.Y. P. Patil           | SVNIT, Surat |
|                     | 30/6/2015     |                          |              |
|                     |               |                          |              |
| Mechanical          | 2011-2012     | Mr. S.P. Mogal           | SVNIT Surat  |
| Engineering         | 2011-2012     | Mr. A.B. Kakade          | SVNIT Surat  |

2.4.5 Give the number of faculty who received awards / recognition at the state, national and international level for excellence in teaching during the last four years. Enunciate how the institutional culture and environment contributed to such performance/achievement of the faculty.

Table 2.4.5 Award Received by Faculty

| Sr.<br>No | Name of Faculty | Award /<br>Recognitions | Awarding<br>Organization | Year    |
|-----------|-----------------|-------------------------|--------------------------|---------|
| 01        | Dr.K.S.Holkar   | Best Teacher Award      | SPPU                     | 2015-16 |

| 02 | Dr. S. B.<br>Sonawane | IEI Young Engineer<br>Award | Institution of Engineers,<br>India         | 2015-16 |
|----|-----------------------|-----------------------------|--|---------|
| 03 | Dr. S. B.<br>Sonawane | Promising Engineer<br>Award | Institution of Engineers,<br>Nashik Center | 2014-15 |
| 04 | Dr.S.R.Pachorkar      | State level-<br>Avishkar-13 | Government of<br>Maharashtra               | 2013-14 |
| 05 | Mr.V.M.Birari         | Best Paper Award            | PCCOE,Pune                                 | 2015-16 |

# 2.4.6 Has the Institution introduced evaluation of teachers by the students and external Peers? If yes, how is the evaluation used for improving the quality of the teaching-learning process?

#### **Evaluation of Teachers by students**

- Every semester, Institute provides the Feedback form to students for evaluation of teachers.
- The students fill up the feedback form of each subject teacher made available by the Institute.
- All the respective departments of the Institute prepare reports based on student's feedback.
- Institute takes the necessary corrective actions based on the feedback report.
- The students can also provide suggestions through the suggestion box.

#### **Evaluation of Teachers by external peers**

- As there is no provision as such to evaluate teachers by external peers, the Institute has established Academic Monitoring committee (AMC) to evaluate the faculty performance.
- AMC monitor all the Academics, Student Feedback and overall teaching learning process.
- AMC checks course files, theory and practical attendance sheets, Lab manuals, staff feedback etc. in every semester.
- Based on the observations, the Academic Monitoring committee takes corrective actions to bring improvements in teaching-learning process.

### Corrective measures based on evaluation

- Institute communicates all the feedbacks and suggestions given by the Academic monitoring committee and students to the concerned faculty.
- The faculty is then instructed to bring necessary corrective changes in the teaching learning approach suggested by AMC & students.

#### 2.5 Evaluation Process and Reforms

### 2.5.1 How does the Institution ensure that the stakeholders of the Institution especially students and faculty are aware of the evaluation processes?

• Institute follows all the evaluation processes & procedures define by the SPPU.

- Institute displays all the circulars, notices issued by the SPPU on its website. www.kbtcoe.org.
- The administration and exam department of the Institute communicate the circulars and notices regarding evaluation to all respective departments.

#### **Information for students**

- Notices/circulars from SPPU regarding evaluation process are displayed on the notice boards and also conveyed to the students by the class teachers.
- Term work evaluation of students is based on continuous assessment. Students are made aware of this assessment scheme in the orientation program.
- Institute disseminates Outcome based evaluation methods to students and parents through Parents meet organized every semester.

#### **Information for Faculty**

- Institute displays Notices/circulars issued by SPPU on ERP Portal.
- Notices/circulars are circulated to faculty in department meetings.
- Continuous assessment evaluation scheme is discussed in departmental meetings.

### 2.5.2 What are the major evaluation reforms of the university that the Institution has adopted and what are the reforms initiated by the Institution on its own?

#### University Reforms adopted by the Institute

- Institute conducts online tests, In-semester exam, and University exam as per the scheduled given by the SPPU.
- Institute follows the choice based credit system for post graduate courses introduced by SPPU.
- Institute follows Exam rules & regulations specified by the SPPU.Students can apply for the Photocopy of answer sheets for evaluation in case he/she is not satisfied with the assessment.

### Reforms initiated by the Institute

- Institute has developed internal evaluation process.
- Institute conducts Mock test, internal test for the students.
- Institute Evaluate the students based on Students attendance, assignments, performance in internal/Online test, students overall performance which supports the choice based credit system.
- Institute monitors the academics through Daily monitoring Reports of ERP.
- The academic progress of the Students is monitored by the Mentors and respective subject teacher.
- The Institute appoints faculty as examiners for the internal exam, mock test.

### 2.5.3 How does the Institution ensure effective implementation of the evaluation reforms of the University and those initiated by the Institution on its own?

### Institute effectively implements the evaluation reforms recommended by the SPPU by following way:

- Institute follows all Exam rules & regulations specified by the SPPU.
- Institute conducts In-sem Exam, online exams, Oral, practicals, university exams effectively as per the guidelines given by the SPPU.

- Institute has good IT infrastructure & facilities to conduct the above Exams effectively.
- Institute has assigned Chief Exam Officer under the norms of examination department of SPPU.
- Institute displays details of all the evaluation reforms of the SPPU on institute website & notice boards, which helps students to get awareness of all reforms.

### Institute effectively implements the evaluation reforms initiated by the Institute by following way.

- Institutes conducts Mock test, internal test in every semester.
- Institute has Exam coordinator in each department for smooth conduction of online exam and internal tests.
- Institute conducts practice sessions for First year University online exam
- Institute gives assignments, mini projects, case studies to the students and based the on that, student performance is evaluated.

# 2.5.4 Provide details on the formative and summative assessment approaches adapted to measure student achievement. Cite a few examples which have positively impacted the System.

### Institue has adopted following Formative assessment approaches to monitor individual student learning.

- Institute provides self learning Assignments, Mini projects to the students.
- Institute conducts activities like Poster Presentations, Group Discussions, and technical quiz/debate to assess the intellectual & interactive skills of the students.
- Institute organizes Industrial Visits for students and asks them to prepare the report on it.
- Institute conducts internal test & mock test for the students.
- Student's participation in Workshops/Seminars/conferences.
- Student's participation in national/international/intercollege competition.
- Students Overall attendance and conduct throughout the semester.
- Student's participation in Social activities.

### University has following Summative assessment approaches to measure student achievement.

- University written exam at the end of semester.
- University Practical exam.
- Viva voce and seminar.
- Project exam.

Following is an example of outcome of formative assessment process which reflects positive impact on student's performance & placements.

As a result of good formative assessment, the number of students placed in last 3 years has increased

Table 2.5.4 Number. of students placed in last 3 years

| Academic year | Number of student placed |
|---------------|--------------------------|
| 2015-16       | 86                       |

| 2014-15 | 71 |
|---------|----|
| 2013-14 | 49 |

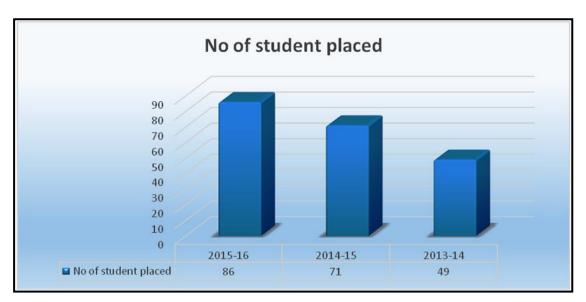


Fig. 2.5.4 No. of Students placed

2.5.5 Detail on the significant improvements made in ensuring rigor and transparency in the internal assessment during the last four years and weightages assigned for the overall development of students (weightage for behavioral aspects, independent learning, communication skills etc.)

Institute has taken following efforts to have transparency in the internal assessment.

- Institute has developed assessment sheet which considers students attendance, assignments, performance in internal/Online test, students overall performance.
- Institute prepares Department wise Academic Calendar & displayed it on notice board consisting details of test slot and Institute/department events, at the start of semester.
- All department maintains record for every student which contains details of student attendance, test marks, assignments etc.
- Institute monthly communicate the student attendance through SMS/letters.
- Every department displays the Students attendance, internal/mock test marks on the notice board.
- Institute gives assignments to students or conducts retest for failure in the internal test.
- Institute organizes Parent Meet through which progress of the students are communicated to the parents.
- Institute has appointed Mentors to assess & measure academic progress of the Students. Based on that individual level counseling of students is done by the respective mentors.
- Students can discuss issues regarding academic & test performance with the concerned teacher at the time of tutor/mentor meeting
- Following Fig 2.5.5 shows the Term Work Assessment Sheet.

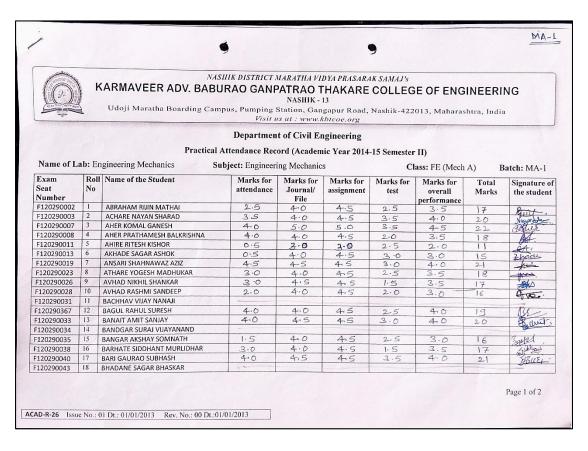


Fig 2.5.5 Assessment Sheet

### 2.5.6 What are the graduates attributes specified by the college/affiliating university? How does the college ensure the attainment of these by the students?

#### **Graduated attributes:**

- Engineering knowledge: Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization for the solution of complex engineering problems.
- Problem analysis: Identify, formulate, research literature, and analyses complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.
- Design/development of solutions: Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for public health and safety, and cultural, societal, and environmental considerations.
- Conduct investigations of complex problems: Use research-based knowledge
  and research methods including design of experiments, analysis and
  interpretation of data, and synthesis of the information to provide valid
  conclusions.
- Modern tool usage: Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools, including prediction and modeling to complex engineering activities, with an understanding of the limitations.
- The engineer and society: Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the

- consequent responsibilities relevant to the professional engineering practice.
- Environment and sustainability: Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.
- Ethics: Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.
- Individual and team work: Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.
- Communication: Communicate effectively on complex engineering activities with the engineering community and with the society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.
- Project management and finance: Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.
- Life-long learning: Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.

### Steps taken by the Institute to attainment of this Graduated attributes:

- Institute has developed Program Educational Outcomes, Program Outcomes, Course Objectives and Course Outcomes, which are in accordance with the University.
- Outcome base education (OBE) is implemented as per the requirement
- Mapping of courses with PO is carried out.
- Institute develops teaching learning process and infrastructure to meet the above requirement.
- Institute regularly monitors the attainment of the same. It may modify the academic process to meet the outcomes.
- The OBE document of the institute will be placed before the committee at the time of expert visit.

### 2.5.7 What are the mechanisms for redressal of grievances with reference to evaluation both at the college and University level?

- Redressal of grievances is permitted by University only for end semester examinations and not for online, term work/oral/practical, project, and seminar examination.
- The mechanisms for redressal of grievances with reference to evaluation are as follows:

### Institute level mechanisms for redressal of grievances with reference to evaluation:

- Students are made aware of the assessment methods at the beginning of the semester and whenever necessary.
- Institute has appointed Chief Exam Officer (CEO) to solve grievances of the students.
- Term End exam marks & Internal Test mark are displayed on notice board.
- Students having grievances with the internal evaluation process can directly discuss their doubts individually with respective faculty members.

- Students can approach the Head of the Department, in case of any grievances
- Institute provides support for solving student grievances related to Exam form filling, Results, Eligibility etc.

### University level mechanisms for redressal of grievances with reference to evaluation:

- Paper setting, conduction of examination, evaluation and declaration of results is done by SPPU.
- After the results are declared by the University, students can apply for photo copy of their answer sheets, which are provided by the University on payment of fees.
- Upon receipt of the application forms by the university from the college/institute, "cell providing Photo copy of Answer Book" shall scrutinize the answer-book and shall verify the following:
  - a) Whether the total marks in the given paper awarded to the examinee on the statement of marks matches with the awarded to the examinee on the cover page of the answer books?
  - b) Whether the question-wise marks awarded to all the questions inside the answer books are correctly carried over to the cover page?
  - c) Whether the total of the question-wise marks on the cover page is correct?
  - d) Whether all the answer or parts thereof in the answer books(s) have been assessed by the examiner?
  - e) Any other matter as may be prescribed by the board of examinations of the University.
- The photocopy of the Answer sheets shall be sent to the HOD/Principal of the college by the University.
- If the student has grievance after receiving photo copy of answer sheet, then he/she can apply for revaluation by paying revaluation fees.
- University authorities pass the Ordinance No. 1 to 10 relating to the conduct of examination. University has displayed detailed Ordinance information at examination portal of the website: www.unipune.ac.in.

### 2.6. Student performance and Learning Outcomes

### 2.6.1 Does the college have clearly stated learning outcomes? If 'yes' give details on how the students and staff are made aware of these?

- Yes, every department prepares its own Program Educational Objectives.
- For every course/subject separate course objective and outcomes are specified by SPPU, Pune.
- These are discussed with staff in departmental meetings. These are also reflected in course files.
- Program Educational Objectives and Outcomes are displayed on institute website.
- Program Educational Objectives and Outcomes are communicated to the students through notice boards.
- Program Educational Objectives and Outcomes of Mechanical Engineering are stated below.

### **Program Education Objectives (PEO's):**

- PEO1: To prepare technocrats that can satisfy the need of mechanical and allied industries.
- PEO2: To develop critical thinking, problem solving skills, research aptitude and carrier and professionalism among the students.
- PEO3: To improve and expand technical and professional skills of students through effective teaching-learning and industry interaction.

Institute has done the mapping of each course outcome with the Program Outcomes to evaluate & achieve the teaching learning outcome.

Mapping of Course DME\_II (TE Mech) with the Program Outcomes, Example is as follows-

- Subject-: Design of Machine Elements (TE Mech)
- Course Outcomes-
  - 1. Ability to design and analyze Mechanical transmission systems
  - 2. Ability to design and select different types of bearings from manufacturer's catalogue.
  - 3. Enhancement in proficiency of CAD software for design and analysis so that students are capable to generate production drawing.

Table 2.6.1 Mapping of Course Outcome with Program Outcome

| Course            |         | Program Outcome |         |         |         |         |      |         |         |          |          |          |
|-------------------|---------|-----------------|---------|---------|---------|---------|------|---------|---------|----------|----------|----------|
| Course<br>Outcome | PO<br>1 | PO<br>2         | PO<br>3 | PO<br>4 | PO<br>5 | PO<br>6 | PO 7 | PO<br>8 | PO<br>9 | PO<br>10 | PO<br>11 | PO<br>12 |
| 1                 | 1       | 1               | 2       | 0       | 0       | 1       | 0    | 0       | 2       | 2        | 0        | 1        |
| 2                 | 1       | 1               | 2       | 0       | 0       | 1       | 0    | 0       | 2       | 2        | 0        | 1        |
| 3                 | 0       | 0               | 0       | 0       | 2       | 0       | 0    | 0       | 2       | 1        | 0        | 1        |

Rating (2- High Rating, 1- Low rating, 0- No rating)

2.6.2 Enumerate on how the Institution monitors and communicates the progress and performance of students through the duration of the course/programme? Provide an analysis of students results/achievements (Programme/ course wise for last 4 years) and explain the differences if any and patterns of achievement across the programmes/ courses offered.

- Institution has established a well-defined process to monitor & asses the progress and performance of students.
- All departments follow this process and communicate this to their parents at regular intervals.

### Institute monitors the student academic performance by following way.

 Institute conducts students internal assessment based on Students attendance, assignments, performance in internal/Online test, students overall performance.

- Institute has implemented tutor/mentor scheme through which students overall academic progress is monitored.
- Institute monitors the student's attendance through ERP.
- Institute analyses the performance of students in internal assessment and based on that, preventive and corrective actions are taken on non-performing students.
- Institute also used formative and summative assessment approach to monitors & evaluate student academic performance.
- Formative assessment includes in semester exams, online exams and summative assessment includes end-semester exams for theory and practical/oral/term work.

### Institute communicate the student academic performance by following way.

- Institute regularly communicate the continuous assessment to the student in tutor/mentor meets for self-analysis and improvement.
- Institute displayed the results of online exams/internal exam on the notice board.
- Institute displayed the results of in-semester exams and end-semester exams on the institute website.
- Institute conducts Parent to communicate the overall progress of each student to their parent.
- At the end of every month, attendance report is displayed to the students and also conveyed to the parents.
- Institute prepares the detail result analysis report at the end of semester for analysis & evaluation of teaching learning process.
- The result analysis of all courses of last four years is shown below.

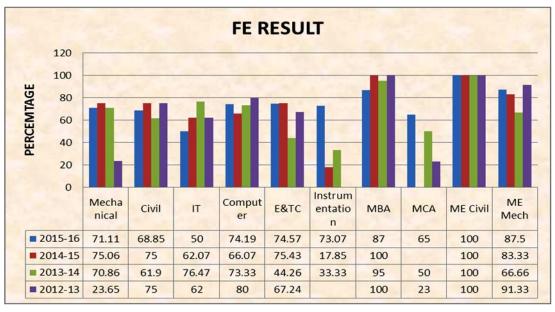


Fig 2.6.2 (A) F.E Result Analysis

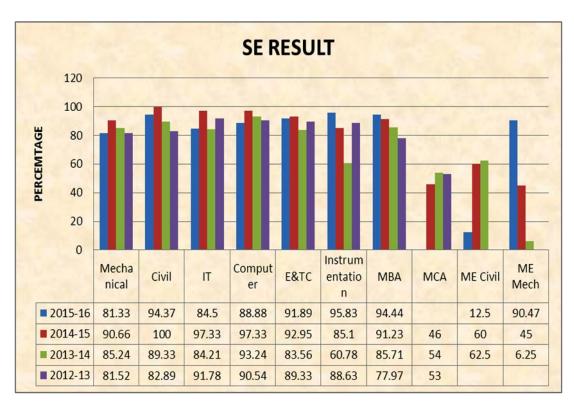


Fig 2.6.2 (B) S.E Result Analysis

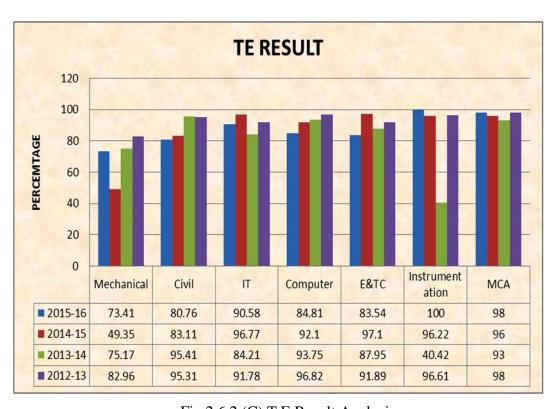


Fig 2.6.2 (C) T.E Result Analysis

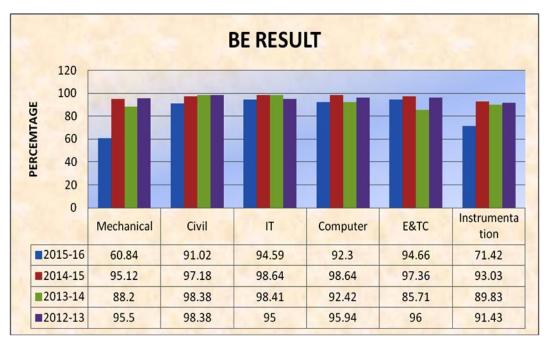


Fig 2.6.2 (D) B.E. Result Analysis

### 2.6.3 How are teaching, learning and assessment strategies of the Institution structured to facilitate the achievement of intended learning outcomes?

### **Teaching:**

- Institute has well defined teaching strategy. Before the commencement of each semester, Institute level academic calendar is prepared and circulated by Dean Academics. Department level academic calendar is also prepared by respective time table coordinator. By referring to the academic structure, Institute and department calendars, each course teacher prepares Lecture Planning through ERP and implementation status is filled in after every lecture.
- All teaching resources are procured well in advance before commencement of the curriculum. Faculty teaching new course is deputed for various training programs. Course coordinator identifies the need for content beyond syllabus and develops strategies for their implementation. Faculty teaching the course implements the same.
- A well-defined process of academic monitoring is implemented through ERP.
  This process is useful to effectively balance syllabus contents and lecture
  conduction. Gaps identified during academic monitoring are bridged by
  conducting make up lectures. Student feedback plays an important role for the
  assessment of teaching strategies.

### Learning:

- Every course teacher plans various modes of delivery such as chalk/talk, PPTs, case study, tutorials, quiz, projects, seminars, self-learning industry visits, internships etc. for achieving desired learning outcome.
- Faculty prepares the course files and other study materials, unit wise notes to support the learning outcomes.
- Students are encouraged for rural based and social need based projects under NSS activity.

- Institute motivates students to participate in national level project competitions organized by other Institutes and universities such as Avishkar, Axis-14, Aakaar etc.
- To meet the outcomes, guest or expert lectures are organized for critical subject and current trends in technology.

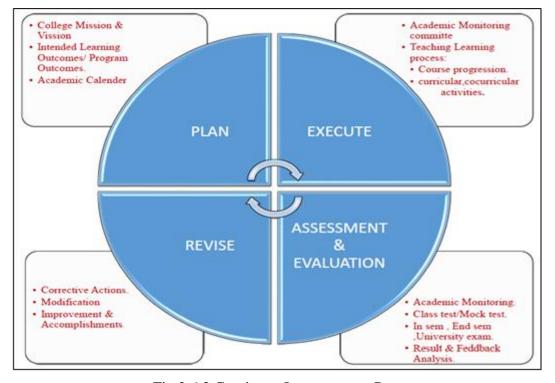


Fig 2.6.3 Continous Improvement Process

#### **Assessment Strategies:**

- The achievement of learning outcomes in terms of learning outcomes in terms of academic performance is carried out as per the norms laid down by SPPU. Various formative and summative assessment methods explained in 2.6.2 are used for this purpose.
- Institute has developed continuous Improvement process to facilitate the achievement of intended learning outcomes.

Institute has done the mapping of each course outcome with the Program Outcomes to evaluate & achieve the teaching learning outcome.

Mapping of Course DME\_II (TE Mech) with the Program Outcomes, Example is as follows-

- Subject-: Design of Machine Element II (TE Mech)
- Course Outcomes-
  - 1. Ability to design and analyze Mechanical transmission systems
  - 2. Ability to design and select different types of bearings from manufacturer's catalogue.
  - 3. Enhancement in proficiency of CAD software for design and analysis so that students are capable to generate production drawing

Table 2.6.3 Mapping of Course Outcome with Program Outcome

| Course            |         | Program Outcome |         |         |         |         |             |         |         |          |          |          |  |
|-------------------|---------|-----------------|---------|---------|---------|---------|-------------|---------|---------|----------|----------|----------|--|
| Course<br>Outcome | PO<br>1 | PO<br>2         | PO<br>3 | PO<br>4 | PO<br>5 | PO<br>6 | <b>PO</b> 7 | PO<br>8 | PO<br>9 | PO<br>10 | PO<br>11 | PO<br>12 |  |
| 1                 | 1       | 1               | 2       | 0       | 0       | 1       | 0           | 0       | 2       | 2        | 0        | 1        |  |
| 2                 | 1       | 1               | 2       | 0       | 0       | 1       | 0           | 0       | 2       | 2        | 0        | 1        |  |
| 3                 | 0       | 0               | 0       | 0       | 2       | 0       | 0           | 0       | 2       | 1        | 0        | 1        |  |

Rating (2- High Rating, 1- Low rating, 0- No rating)

## 2.6.4 What are measures/ initiative taken up by the Institution to enhance the social and economic relevance (student placements, entrepreneurship, innovation and research aptitude developed among students etc.) of the courses offered?

Following initiatives are taken by the Institute to enhance the social and economic relevance of the courses offered.

- Institute have Dedicated entrepreneurship development cell which conducts different activities to develop Entrepreneurship skills among the students.
- The Institute provides various value added courses like-
  - **SAP** Various modules are run under SAP like Material management, ABAP, Sales & Distribution etc.
  - **Design Innovation center** various courses are conducted under Design Innovation center like Design and development of signal conditioning & Sensor technology, advanced techniques for Environment Watershed Management, Post graduate Diploma in Computer-aided Product Designs.
- Institute has established First Automation center in collaboration with fox control, Nashik.
- Institute has signed Memorandum of Understanding (MOUs) with many leading industries as well as research institutes which help students to get industry knowledge, training, project work etc.
- The Department of Instrumentation & control has established Dr.Vasantrao Pawar Young Engineering lab at horizon academy, Nashik.
- Library provides various National/International journals, e-resources which helps students to their projects.
- Library has DELNET membership of Delhi, which helps students to access National/International journals.
- Faculty involves students in their funded research projects.
- Faculty members encourage the students to participate in state/national/international conference, competitions like AVISHKAR (SPPU-Pune sponsored zonal and state level project competitions to develop scientific & innovative temper among students.
- Institute organizes annual national level technical event for the students.
- The event include technical paper presentation, project exhibition, coding competition, quizzes, technical games, robotics competition, circuit building, Circuit Mania, Placement Bonanza Competition and Texas Instruments India Analog Maker Competition, lathe war, paperanzaa, cannon ball, logic cube etc. to develop scientific temper and research culture among student.

- The Institute is having Akash Remote Center of IIT-Mumbai. Under that 224 Akash Tablets were given to the students for their project work.
- NMEICT Remote Center (IIT Mumbai) [National Mission on Education through ICT (MHRD, Govt. of India). Students can interact with the eminence faculty of IIT delivering a lecture from IIT and live lectures are transmitted at Remote Centers using A-VIEW software.
  - Institute invites experts from academia as well as from industry to deliver lectures on modern and emerging areas which help students to develop their innovative & scientific temper.
- Institute organizes Conferences, research paper competition, seminars and workshops for students.
- Institute provides financial assistance to students for their innovative projects.
- Institute has adequate online and offline learning resources available in the library for teaching, learning as well as research.
- Institute deputes the students for internship programs to industries and Institutes of repute.
- Training & Placement cell of Institute trains the students for placement and helps them to develop an all-round personality by conducting a variety of sessions on aptitude training, soft skills etc.
- The Institute promotes environmental and social awareness amongst the faculty and student community by celebrating Yoga day and Environment day.
- The NSS volunteers undertake various social activities and environment protection drives in the nearby villages as a part of their annual NSS camps.

## 2.6.5 How does the Institution collect and analyze data on student performance and learning outcomes and use it for planning and overcoming barriers of learning?

### Institute collect data on Students performance & Learning outcomes by following way:

- The Academic Monitoring committee in the Institute continuously monitors the achievement of learning outcomes.
- Institute analyses the student attendance through daily monitoring report of FRP
- Institute conducts Tutor/ Mentor meet regularly with the students to analyses the student's progress and based on that corrective actions are taken.
- All faculty with their respective subjects submits students internal assessment report to Head of departments department compiles student's performance report.
- All Head of Departments conducts meeting with the faculty members to assess the teaching learning & evaluation process by considering students performance report.
- Institute has done the mapping of each course outcome with the Program Outcomes to evaluate & achieve the teaching learning outcome.
- Results of formative and summative assessment methods are the major indictors for evaluating student performance.
- Student Placement through in campus & off campus interviews and number of students pursing higher studies indicates the achievement of learning outcome.

### Steps taken by the Institute to overcome the barrier of learning:

- Results of formative & summative methods are used by the course teacher to improve the performance in the same course for the next batch of students.
- Non-performing Students are identified and proper corrective and preventive actions are planned, so that students can improve their performance in summative exams.
- Institute conducts soft skills classes, Remedial classes, and extra lectures for academically weak students.
- Institute has established Tutor/Mentor scheme which performs individual level counselling of students and solves students difficulties related to the academics.

### 2.6.6 How does the Institution monitor and ensure the achievement of learning outcomes?

- The Academic Monitoring committee in the Institute monitors the achievement of learning outcomes.
- The achievements of learning outcomes are ensured by Institute through the feedback from its stakeholders and the industry.
- Student Placement through in campus & off campus interviews and number of students pursing higher studies indicates the achievement of learning outcome.
- Teaching learning process is continuously monitored and immediate remedial measures are taken to overcome problems.

### Steps taken by the Institute to monitor and ensure the achievement of learning outcomes:

- Institute has developed Program Educational Outcomes, Program Outcomes, Course Objectives and Course Outcomes, which are in accordance with the University.
- Institute has implemented Outcome base education (OBE) as per the requirement.
- Institute has done the mapping of each course outcome with the Program Outcomes to evaluate & achieve the teaching learning outcome.
- Institute regularly monitors the attainment of the same.
- Institute develops teaching learning process and infrastructure to meet the above requirement.
- The OBE document of the institute will be placed before the committee at the time of expert visit.

Following is an example of Mapping of the courses (Mechanical department) with the PO.

Table 2.6.6 Mapping of the courses (Mechanical department) with the PO.

| Course code | Course title                           | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 | PO11 | PO12 |
|-------------|--|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|
| 102013      | Basic Mechanical Engineering           | 2   | 1   | -   | -   | -   | 1   | 1   | -   | -   | -    | -    | -    |
| 102014      | Engineering Graphics II                | -   | -   | 1   | -   | 2   | -   | -   | -   | -   | -    | -    | -    |
| 107008      | Engineering Mathematics III            | 3   | 2   | -   | -   | 1   | -   | -   | -   | -   | -    | -    | 2    |
| 202041      | Manufacturing Process-I                | 2   | -   | -   | -   | -   | 2   | 1   | -   | -   | -    | -    | -    |
| 202042      | Computer Aided Machine Drawing         | -   | -   | -   | -   | 3   | -   | -   | -   | -   | 1    | -    | -    |
| 202043      | Thermodynamics                         | 2   | 3   | 1   | 2   | 1   | 1   | -   | -   | -   | 1    | -    | -    |
| 202044      | Material Science                       | 1   | -   | 1   | -   | 1   | 1   | 2   | -   | -   | -    | -    | -    |
| 202051      | Strength of Materials                  | 3   | 1   | 1   | 3   | -   | 1   | -   | -   | -   | 1    | -    | -    |
| 202045      | Fluid Mechanics                        | 2   | 2   | 1   | 2   | 1   | -   | -   | -   | -   | 1    | -    | -    |
| 202047      | Soft Skills                            | -   | -   | -   | -   | -   | -   | -   | 3   | 3   | 2    | -    | 2    |
| 202048      | Theory of Machines–I                   | 3   | 2   | 1   | -   | -   | 1   | -   | -   | -   | 1    | -    | -    |
| 202049      | Engineering Metallurgy                 | -   | -   | 1   | -   | 1   | 1   | 2   | -   | -   | 1    | -    | -    |
| 202050      | Applied Thermodynamics                 | 2   | 1   | 2   | 1   | -   | 1   | 2   | -   | -   | 1    | -    | 1    |
| 203152      | Electrical and Electronics Engineering | 2   | 1   | -   | -   | -   | -   | -   | -   | 2   | -    | -    | -    |
| 202053      | Machine Shop – I                       | -   | -   | -   | -   | -   | 1   | 1   | -   | -   | -    | -    | -    |
| 302041      | Design of Machine Elements – I         | 3   | 1   | 3   | 1   | 1   | 1   | 2   | -   | 2   | 1    | 1    | 1    |
| 302042      | Heat Transfer                          | 3   | 2   | 2   | -   | 1   | -   | 1   | -   | -   | 1    | -    | 1    |
| 302043      | Theory of Machines-II                  | 2   | 1   | 1   | -   | -   | 1   | -   | -   | -   | -    | -    | -    |
| 302044      | Metrology and Quality Control          | 1   | 1   | 1   | -   | 1   | 1   | 1   | -   | -   | 1    | -    | -    |

| Course code | Course title                                   | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 | PO11 | PO12 |
|-------------|--|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|
| 302045      | Hydraulics and Pneumatics                      | 1   | 1   | 1   | -   | 1   | 1   | -   | -   | -   | -    | -    | -    |
| 302046      | Skill Development                              | -   | -   | -   | -   | -   | -   | -   | 2   | -   | 2    | -    | -    |
| 302047      | Numerical Methods and Optimization             | 3   | 2   | -   | 1   | 2   | -   | -   | -   | -   | -    | -    | 1    |
| 302048      | Design of Machine Elements -II                 | 2   | 2   | 3   | 1   | 1   | 1   | 2   | -   | 1   | 1    | 1    | 1    |
| 302049      | Turbo Machines                                 | 2   | 2   | 1   | 1   | -   | -   | 2   | -   | -   | -    | -    | -    |
| 302050      | Mechatronics                                   | -   | 1   | 1   | 1   | 1   | 1   | -   | -   | 2   | -    | -    | -    |
| 302051      | Manufacturing Process-II                       | -   | -   | 1   | -   | 1   | 1   | 1   | -   | -   | -    | -    | -    |
| 302052      | Machine Shop -II                               | -   | -   | -   | -   | 1   | 1   | 1   | -   | -   | -    | -    | -    |
| 302053      | Seminar  | -   | 2   | -   | -   | -   | -   | -   | 3   | 2   | 3    | -    | 2    |
| 402041      | Refrigeration and Air Conditioning             | 2   | 1   | 2   | -   | 1   | 1   | 2   | -   | -   | 1    | 1    | 1    |
| 402042      | CAD/ CAM Automation                            | 2   | 2   | 2   | 2   | 2   | 1   | -   | -   | -   | -    | -    | -    |
| 402043      | Dynamics of Machinery                          | 3   | 2   | 2   | 1   | 1   | 1   | 1   | -   | -   | 1    | -    | 1    |
| 402044      | Tribology (Elective-I)                         | 3   | 2   | 2   | 1   | -   | -   | 2   | -   | -   | -    | -    | 1    |
| 402045      | Advanced Manufacturing Processes (Elective-II) | -   | -   | 1   | -   | 1   | 2   | 1   | -   | -   | -    | -    | 1    |
| 402046      | Project –I                                     | -   | 2   | -   | -   | -   | -   | -   | 2   | 3   | 3    | 3    | 2    |
| 402047      | Power Plant Engineering                        | 2   | 1   | 1   | -   | -   | -   | 2   | 1   | -   | 1    | -    | 1    |
| 402048      | Mechanical System Design                       | 2   | 1   | 3   | 1   | 1   | 1   | 2   | -   | 2   | 1    | -    | 2    |
| 402049      | Industrial Engineering (ELE-III)               | -   | -   | -   | -   | -   | 1   | -   | -   | -   | -    | 1    | 1    |
| 402050      | Finite Element Analysis (ELE-IV)               | 3   | 3   | 2   | 3   | 2   | 1   | -   | -   | -   | -    | -    | -    |
| 402051      | Project – II                                   | 2   | 2   | -   | -   | -   | -   | -   | -   | 3   | 3    | 3    | 3    |

NDMVPS's K.B.T. College of Engineering Nashik, Maharashtra (2016-17)

# 2.6.7 Does the Institution and individual teachers use assessment/evaluation outcomes as an indicator for evaluating student performance, achievement of learning objectives and planning? If 'yes' provide details on the process and cite a few examples.

Yes, Institute use evaluation outcomes as an indicator for evaluating student performance.

Following are the Indicators used by the Institute for evaluating student performance & learning objectives

- Institute has clearly define Vision and Mission are highly correlated with the Programme Educational Objectives (PEOs) of each department, which in turn are mapped to Program outcomes.
- Therefore, PO and PEO attainment indicate the alignment of academic activities with the vision and mission of the Institute.

Following are the Indicators used by the department for evaluating student performance & learning objectives.

- POs are also aligned with the Graduate Attributes that a student is expected to develop on completion of the program.
- Their attainment or lack of it helps in aligning the activities of the department

Following are the Indicators used by the individual teacher for evaluating student performance & learning objectives.

- Institute has done the mapping of each course outcome with the Program Outcomes to evaluate & achieve the teaching learning outcome.
- Results of formative and summative assessment are the major indicators used by the respective course teachers for evaluating student performance.
- Non-performing Students are identified and proper corrective and preventive actions are planned, so that students can improve their performance in summative exams.
- Example: If a student scores less marks in in-Semester or On-line exam, course teacher prepares them for summative exams by putting extra efforts by means of corrective action (Extra sessions for theory/practical).
- Results of summative methods are used by the course teacher to improve the performance in the same course for the next batch of students.

#### CRITERION III: RESEARCH, CONSULTANCY AND EXTENSION

#### 3.1 Promotion of Research

### 3.1.1 Does the institution have recognized research center/s of the affiliating University or any other agency/organization?

- Yes, the institute has research centers of other agency the detail are as follows.
- Aakash R& D Center (IIT Mumbai).
- NMEICT Remote Center (IIT Mumbai).
- Design & Innovation Center-Spoke Center (DIC), First in Nashik District (in association with Savitribai Phule Pune University and MHRD New Delhi).



Fig. no 3.1.1 Inauguration function of Design & Innovation Center-Spoke Center by Hon. Vice Chanceller and Director SPPU, Pune and Sarchitnis NDMVP samaj.

# 3.1.2 Does the Institution have a research committee to monitor and address the issues of research? If so, what is its composition? Mention a few recommendations made by the committee for implementation and their impact.

• Yes, the institution has a research committee to monitor and address the issues of research. The composition of the committee is as follows

Table 3.1.2. Details of Research Committee

| Principal: Chairperson                   | Dr. K. S. Holkar                     |
|--|--------------------------------------|
| Dean Research and Development: Secretary | Dr. S.B. Sonawane                    |
| Heads of Concern Department: Member      | Dr. B. B. Musmade<br>Dr. S. P. Mogal |
|  | Dr. M. P. Kadam                      |
|  | Dr. V. S. Pawar                      |

|                                       | Dr. D. T. Khairnar<br>Mr. V. M. Birari<br>Mr. H. V. Patil<br>Mrs. N. R. Kakad |
|---------------------------------------|---|
| One UG Faculty: Member                | Mr. V. C. Shewale   |
| One PG Faculty: Member                | Mr. D.V. Kushare  |
| Industry Person and Scientist: Member | Dr. O. G. Kulkarni  |

#### **Objective of Research Committee:**

- To create a conducive environment for promotion of Research, Innovation and Consultancy activities in the institute.
- To ensure smooth functioning and effective Management of Research, Innovation and Consultancy activities at the institute.
- To facilitate the process of proposal submissions for availing the funding from different funding agencies.
- To promote research in various departments of the institute.
- To strengthen industry institute interaction by promoting consultancy, testing and need based research & innovation activities in the institute.

#### The Few recommendations of the Committee are as under:

- To encourage faculty members to apply for Major, Minor Research Projects, Incubation, Design and innovation Centres.
- To provide laboratories with equipments/instruments to carry out research.
- To get special assistance schemes for up-gradation of Research infrastructure.
- To motivate and facilitate teachers to attend subject based conferences/ seminars.
- Provision for recurring and contingency expenses.
- To conduct presentations on research proposal preparation, presentation, various schemes and collaborations.
- Encouragement & support for the establishment of collaborations & linkages with industries and research institutes.
- To publish institute research journal.

#### The major impacts of these measures are as under:

- Faculty Members of various departments have got research grant from BCUD, Pune, SERB-DST, Govt. of India.
- Institute has submitted two proposals to NITI Aayog, Govt. of India for getting Atal Incubation Center on "Nano materials" & "Sensor technology". Combined cost of these proposals is 19.74 Crores.
- Increased in number of research publications, participation in seminars and presentation of articles, membership of professional bodies, by the faculty members and students.
- Several faculty members have registered for Ph.D. programmes.
- Students have actively participated in various competitions like technical paper presentation, Avishkar project competition, Robowar, Lathwar, Supra-SAE (National level competition), etc.

• Many students have worked on application oriented projects sponsored by industries.

### 3.1.3 What are the measures taken by the institution to facilitate smooth progress and implementation of research schemes/ projects?

- Autonomy to the principal investigator
- Timely availability or release of resources
- Adequate infrastructure and human resources
- Time-off, reduced teaching load, special leave etc. to teachers
- Support in terms of technology and information needs
- Facilitate timely auditing and submission of utilization certificate to the funding authorities
- any other
- The principal investigator has complete autonomy to select the area, topic and research problem.
- Principal investigator decides specifications, vendors etc. for purchase of materials.
- Principal investigator decides collaborators, conferences, IPR filing and publications.
- Funds received for project and research work are made available to the principal investigator as per demand.
- Institute has well settled laboratories and facilities for carrying out research projects.
- Funds are made available to principal investigator under AICTE/SPPU-BCUD/ SERB-DST/Aakash Center/ Remote Center, Research grants.
- Institute considers the leave of employee for the research work and also adjusts their work load at department level.
- The institutional central library and laboratory are available for faculty and students for research work even after college working hours.
- Duty leave is sanctioned to teachers to undertake field work, presentation, attending national international seminars and conferences.
- Institute provides adequate internet facility, Wi-Fi facility and library resources such as e-journal, e-book, reference books etc.
- As per the requirement of principal investigator available infrastructure of the institute is provided.
- JRF/SRF fellow is appointed as per the norms in consultation with principal investigator and head of the institute.
- Institutes accounts section extends all cooperation to principal investigator for timely auditing of research projects and submission of utilization certificate to funding authority.

### 3.1.4 What are the efforts made by the institution in developing scientific temper and research culture and aptitude among students?

- Institutes arrange guest lectures, seminars and industrial visits by inviting eminent scientist and industry persons.
- Faculty members encourage the students to participate in state/ National/

- International conference, competitions like AVISHKAR (SPPU-Pune sponsored zonal and state level project competition) to develop scientific temper among students.
- Intercollegiate, Institute level technical event, motivate them to present their work/idea/novelty.
- Principal investigator of funded major, minor projects involves UG and PG students in their research projects.
- All the department of the institute has established student academic associations which conduct the various activity viz. seminars, project competition in order to develop the scientific culture and up gradation of knowledge among the students.
- Institute organizes annual National level technical event for the students which
  includes technical paper presentation, project exhibition, coding competition,
  quizzes, technical games, robotics competition, circuit building, circuit mania,
  lathewar, paperanzaa, cannon ball, logic cube etc. to develop scientific temper
  and research culture among students.
- Details of technical events organized by institute are as follows.

Table 3.1.4. Detail of Annual Technical Events Organized by Institute

| Name of department                      | Name of Technical events | Year    | No.<br>Participants |
|---|--------------------------|---------|---------------------|
|   | Instrubotics             | 2015-16 | 64                  |
| Instrumentation and Control Engineering |                          | 2014-15 | 73                  |
| 8 4 8                                   |                          | 2013-14 | 600                 |
|   | Sthapatya-2k16           | 2016-17 | 99                  |
| Civil Engineering                       | Nirman-2k15              | 2015-16 | 190                 |
| Civii Eligiliceting                     | Techunique-2014          | 2014-15 | 195                 |
|   | Techunique-2013          | 2013-14 | 183                 |
| Computer Engineering and                |                          | 2015-16 | 193                 |
| Information Technology                  | C-war and kshitij        | 2014-15 | 64                  |
| Engineering                             |                          | 2013-14 | 16                  |
| Electronics and                         | Elicit-16                | 2015-16 | 380                 |
| Telecommunication Engineering           | Elicit-15                | 2014-15 | 396                 |
| Zingimeering                            | Elicit-14                | 2013-14 | 330                 |
|   |                          | 2016-17 | 25                  |
|   | SAE                      | 2015-16 | 23                  |
| Mechanical Engineering                  |                          | 2014-15 | 25                  |
|   | Mechanzaa                | 2015-16 | 322                 |
|   |                          | 2014-15 | 359                 |

|                                   |                                    | 2013-14 | 239 |
|-----------------------------------|------------------------------------|---------|-----|
| Master of Business Administration | Arth - sangram: the war of numbers | 2016-17 | 13  |
|                                   | Idea spark - 2016                  | 2014-15 | 23  |



Inauguration of ELICIT- 14 by the hands of Hon. SarchitnisNilimataiPawar, Education officer Prof. Chaudhari R.M., Principal Dr. JayantPattiwar, Mr. Ravi Bhati



ELICIT-14: Demonstration of Project by participant in Project Competition



Elicit-15: Participants



Elicit-15: Welcome Speech by Prof. V.M.Birari, HOD E&TC



Elicit-15: ROBO-Race Competition

Figure 3.1.4. (A) Event Photographs





Figure 3.1.4. (B) Event Photographs



Figure 3.1.4. (C) Event Photographs



Figure 3.1.4. (D)Event Photographs

- 3.1.5 Give details of the faculty involvement in active research, guiding student research, leading Research Projects, engaged in individual/collaborative research activity, etc. Faculty guides the UG and PG students for the project work.
  - Faculty gets the research project funding from SPPU, DST and AICTE. Student actively works on these projects in order to bridge gap between theory and practical.
  - Faculty and student are associated with industry sponsored project.
  - Faculties are guiding PG projects.

Table 3.1.5. (A). List of Faculty working on funded research project

| Name of Faculty   | Role of Faculty           | Funding Agency            |
|-------------------|---------------------------|---------------------------|
| Dr. N. S. Patil   | Assistant Coordinator     | DIC, SPPU, Pune           |
| Dr. S.B. Sonawane | PI Major Research Project | SERB, DST, Govt. of India |
| Mr. V. C. Shewale | PI Minor Research Project | BCUD, SPPU, Pune          |
| Mrs. S.H.Jadhav   | PI Minor Research Project | BCUD, SPPU, Pune          |
| Mr. R.N.Mahale    | PI Minor Research Project | BCUD, SPPU, Pune          |
| Dr. S.R.Pachorkar | PI Minor Research Project | BCUD, SPPU, Pune          |
| Dr. S. J. Kokate  | PI Minor Research Project | BCUD, SPPU, Pune          |
| Mr. S. Y. Pawar   | PI Minor Research Project | BCUD, SPPU, Pune          |

Table 3.1.5.(B). Detail of Faculty Guiding the PG Projects

| Name of Department     | Name of the Faculty | nme of the Faculty No of PG. |         |
|------------------------|---------------------|------------------------------|---------|
|                        |                     | Completed                    | Ongoing |
|                        | Dr.S.P.Mogal        | 5                            | 5       |
|                        | Mr.A.B.Kakade       | 7                            | 7       |
|                        | Mr.Y.B.Choudhary    | 5                            | 5       |
|                        | Mr.N.K.Kharate      | 8                            | 5       |
| Mechanical Engineering | Mr.S.Y.Pawar        | -                            | 4       |
|                        | Mr.M.S.Patil        | -                            | 2       |
|                        | Mr.D.V.Kushare      | 3                            | 7       |
|                        | Mr.S.N.Palhe        | -                            | 1       |
|                        | Dr.J.T.Pattiwar     | 2                            | -       |
|                        | Dr. P. G. Gaikwad   | 10                           | 03      |
|                        | Dr. A. B. Saner     | 06                           | 06      |
| Civil Engineering      | Mr. R. V. Devalkar  | 15                           | 19      |
| Civil Engineering      | Mrs. M. C. Aher     | 02                           | 16      |
|                        | Mr. A. S. Patil     | -                            | 02      |
|                        | Mr. P. D. Aher      | -                            | 02      |

Table 3.1.5.(C) Detail of Faculty Guiding the Ph.D scholars.

| Name of the Department    | Name of the Guide         | No. of Ph.D Scholars |         |
|---------------------------|---------------------------|----------------------|---------|
|                           |                           | Completed            | Ongoing |
| Master in Business        | Dr.D.T.Khairnar (Guide at | 01                   | -       |
| Administration            | JJTU University)          |                      |         |
| Instrumentation & Control | Dr. B.B. Musmade (Co-     | -                    | 01      |
| Engineering               | Guide at COEP)            |                      |         |

# 3.1.6 Give details of workshops/ training programmes/ sensitization programmes conducted/organized by the institution with focus on capacity building in terms of research and imbibing research culture among the staff and students.

Table 3.1.6.(A). List of workshop/Seminars/Training program conducted/organized by the institution is given below.

| De        | List of Workshop/Seminars/ FDPs/ Training programs Organized by Departments (Academic Year 2013-2014,2014-2015,2015-2016 and 2016-2017) |   |            |            |       |
|-----------|---|---|------------|------------|-------|
| Sr.<br>No | Name of   | Type of Program   | Da         | ate        | Total |
| NO        | Department  | organized   | From       | То         | Days  |
| I         |   | Workshop  |            |            |       |
| 1         |   | Tribological Aspects in Design  | 03/10/2013 | 04/10/2013 | 02    |
| 2         | Mechanical<br>Engineering   | Two week ISTE workshop on Engineering Mechanics organized by IIT Mumbai                         | 26/11/2013 | 06/12/2013 | 12    |
| 3         |   | Two week ISTE workshop on Fluid Mechanics organized by IIT Kharagpur                            | 10/06/2014 | 20/06/2014 | 10    |
| 4         |   | State level workshop on<br>emerging trend in Heat<br>Transfer Engineering                       | 04/02/2016 | 05/02/2016 | 02    |
| 5         | Civil Engineering   | Engg – Mechanics, ISTE  | 26/11/2013 | 06/12/2013 | 11    |
| 6         |   | Structural Analysis,<br>ISTE  | 04/01/2016 | 09/01/2016 | 06    |
| 7         |   | Advanced Topics in<br>Control Systems   | 27/01/2016 | 28/01/2016 | 02    |
| 8         | Instrumention & Control   | Industrial Automation using PLC & SCADA   | 02/09/2015 | 05/09/2015 | 04    |
| 9         | Engineering   | Control Systems   | 02/12/2014 | 12/12/2014 | 11    |
| 10        |   | DCS & PLC overview  | 21/7/2014  | 25/07/2014 | 05    |
| 11        | Master of<br>Business<br>Administration   | One Day Workshop on<br>Making Rakhi for<br>Ashram School students<br>at NDMVP KBT COE<br>NASHIK | 10/8/2016  | 10/8/2016  | 01    |
| 12        | 1 ministration  | Soft Skill Development<br>By Gordon Sir   | 22/8/2016  | 22/8/2016  | 01    |
| 13        |   | Soft Skill Development<br>By Gordon Sir   | 05/03/2015 | 05/03/2015 | 01    |
| 14        |   | Soft Skill Development  | 01/09/2014 | 01/09/2014 | 01    |

|     |   | By Mrs Neeta Nigam  |                          |                          |    |
|-----|---|---|--------------------------|--------------------------|----|
| 15  | Master of Computer Applications Hibernate Spring MVC (A_JAVA) |   | 08/10/2016               | 08/10/2016               | 01 |
| II  | FDP   |   |                          |                          |    |
| 1   | Mechanical<br>Engineering                                     | Faculty Development program on Entrepreneurship Development   | 18/12/2014               | 30/12/2014               | 12 |
| 2   |   | Faculty Development program on Entrepreneurship Development   | 11/03/2016               | 22/03/2016               | 12 |
| 3   | Master of<br>Business<br>Administration                       | Faculty Development<br>Program in<br>Enterpreurship-2016  | 11/03/2016               | 22/03/2016               | 12 |
| III |   | Training Progr  | ams                      |                          |    |
| 1   | Mechanical<br>Engineering                                     | STTP on use of ICT in<br>education for online and<br>blended learning<br>organized by IIT<br>Mumbai | 02/06/2016               | 10/06/2016               | 08 |
| 2   | Civil Engineering   | STTP on Introduction to<br>Structural Engineering   | 4/01/2016                | 9/01/2016                | 07 |
| 3   |   | DeltaV DCS  | 15/06/2015               | 19/06/2015               | 05 |
| 4   |   | PLC Training  | 19/09/2016<br>20/09/2016 | 25/09/2016<br>26/09/2016 | 04 |
| 5   | Instrumentation and Control Engineering                       | Personality Development By- AryaHycinth -Pune   | 27/09/2016               | 27/09/2016               | 01 |
| 6   |   | Personality Development By- AryaHycinth -Pune   | 8/10/2015                | 8/10/2015                | 01 |
| 7   |   | Personality Development By- AryaHycinth -At Pachgani  | 25/02/2015               | 27/02/2015               | 03 |
| IV  |   | Seminar   | T                        |                          |    |
| 1   | Instrumentation   | Embedded Systems & Applications   | 17/9/2016                | 17/09/2016               | 01 |
| 2   | & Control Engineering   | Comparisons of Power Plants   | 02/3/2016                | 02/03/2016               | 01 |
| 3   |   | Instrumentation in Thermal Power Plants   | 11/2/2016                | 11/02/2016               | 01 |
| 4   |   | HPC Research & Career   | 05/2/2016                | 05/02/2016               | 01 |

| 5  |             | New Technological Developments & Career Opportunities in Japan | 5/01/2016                | 05/01/2016               | 01 |
|----|-------------|--|--------------------------|--------------------------|----|
| 6  |             | Power Plants   | 29/9/2015                | 29/09/2015               | 01 |
| 7  |             | Instrumentation in Thermal Power Plants                        | 21/1/2015                | 21/01/2015               | 01 |
| 8  |             | Automation A Booming<br>Field                                  | 7/3/2014                 | 07/03/2014               | 01 |
| 9  |             | Scope of Engineer in<br>Astronomy                              | 31/12/2013               | 31/12/2013               | 01 |
| 10 |             | Scope of DeltaV in<br>Industrial Automation                    | 17/7/2013                | 17/07/2013               | 01 |
| V  |             | NMEICT   |                          |                          |    |
| 1  | Civil       | Half Day ISTE Workshop on Green Building Awareness             | 24/8/2014                | 24/08/2014               | 01 |
| 2  | Computer    | Cyber Security   | 10/07/2014               | 20/07/2014               | 10 |
|    | 1           | Cyber Becamey  | 10/07/2014               | 20/07/2014               | 10 |
| 3  | IT          | Computer Networking  | 30/06/2014               | 05/07/2014               | 07 |
| 3  | -           | · ·  |                          |                          | _  |
|    | IT          | Computer Networking  | 30/06/2014               | 05/07/2014               | 07 |
| 4  | IT Computer | Computer Networking Computer programming                       | 30/06/2014<br>16/06/2014 | 05/07/2014<br>21/06/2014 | 07 |



Figure 3.6.1.(A) Workshop Photographs





IET sponsored Two days Workshop: "Advanced Topics in Control Systems " By- Dr. Minkesh D Patil, Dr. Vishwesh Vyawahare, Dr.K.S.Holkar Between 27-28 Jan 2016.



Training Programs
One week training on "DeltaV DCS" by Saurabh Karandikar,
Akshay Dusane and Digvijay Kanoje.
From 15-6-2015 to 19-6-2015.





Seminar on "Power Plants"

By Mr, Pralhad Dhumal, General Manager, Fox Solutions
Nashik. On 29-9-2015





IET sponsored Two days Workshop: "Advanced Topics in Control Systems " By- Dr. Mukesh D Patil, Dr. Vishwesh Vyawahare, Dr.K.S.Holkar Between 27-28 Jan 2016.



Training Programs
One week training on "DeltaV DCS" by Saurabh Karandikar,
Akshay Dusane and Digvijay Kanoje.
From 15-6-2015 to 19-6-2015.





Seminar on "Power Plants"

By Mr, Pralhad Dhumal, General Manager, Fox Solutions
Nashik On 29-9-2015

Figure 3.6.1.(B) Workshop Photographs

### 3.1.7 Provide details of prioritized research areas and the expertise available with the institution.

• The following are the prioritized research areas.

Table 3.1.7. Prioritized Research areas.

| Sr.<br>No | Name of Department          | Name of Expertise   | Prioritized Research areas             |
|-----------|-----------------------------|---------------------|--|
|           |                             | Dr. K. S. Holkar    | Model Predictive Control               |
|           |                             | Dr. B. B. Musmade   | Sliding Mode Control                   |
|           |                             | Dr. N. S. Patil     | Stochastic Control System              |
| 1.        | Instrumentation and control | Dr. A. R. Kulkarni  | Control System                         |
| 1.        | Engineering                 | Mrs. S.H. Jadhav    | Hybrid Based PID Contoler              |
|           |                             | Mr. Y. P. Patil     | Discrete Time Sliding Mode<br>Control  |
|           |                             | Mrs. A. K. Patil    | Fault Tolerant control                 |
|           |                             | Dr. M. P. Kadam     | Concrete Technology &                  |
|           |                             |                     | Structural Engineering                 |
|           |                             | Dr. K. T. Patil     | Geology, Geo-hydrology                 |
| 2.        | Civil Engineering           |                     | Hydrology                              |
|           | Civil Engineering           | Mr. M. P. Chaugale  | Geotechnical & Geo-                    |
|           |                             |                     | environmental Engineering              |
|           |                             | Mr. A. P. Shelorkar | Concrete Technology &                  |
|           |                             | D 0 D 1 ( 1         | Structural Engineering                 |
|           |                             | Dr. S.P. Mogal      | Vibration and Wear Analysis            |
|           |                             | Dr. S.B. Sonawane   | Heat Transfer in Nanofluids            |
| 3.        | Mechanical Engineering      | Mr. A.B. Kakade     | Tribology                              |
|           |                             | Mr. A.A. Kapse      | I.C. Engines and Heat Transfer         |
|           |                             | Mr. V.C. Shewale    | Heat Transfer                          |
|           |                             | Mr. N.K. Kharate    | CAD/CAM                                |
|           |                             | Mr. H. V. Patil     | Image processing                       |
|           |                             | Mr. S. P. Jadhav    | Cloud Computing and Data               |
| 4.        | Information Tashnalogy      | Mrs. J. R.          | Mining Embedded System and Network     |
| 4.        | Information Technology      | Surywanshi          | on Chip                                |
|           |                             | Mrs. R. R.          | Optical Network and Machine            |
|           |                             | Tajanpure           | Learning                               |
|           |                             | Dr. V. S. Pawar     | Image Processing, Pattern              |
|           |                             | 21                  | Recognition and Graph Theory           |
|           |                             | Mr. B. S. Tarle     | information Security and Data          |
| _         |                             |                     | Mining                                 |
| 5.        | Computer Engineering        | Mr. S. A. Talekar   | Mobile AdHoc Network and               |
|           |                             |                     | Wireless Network                       |
|           |                             | Mrs. V. S. Tidake   | information Security and Data          |
|           |                             |                     | Mining                                 |
|           |                             | Mr. V. M. Birari    | Wireless communication                 |
|           | Electronics and             | Mr. A. P. Meshram   | Speech processing                      |
| 6.        | Telecommunication           | Mr. B. J. Pawar     | Power electronics                      |
|           | 1 ciccommunication          | Mr. B. N. Rajole    | Image Processing and Neural<br>Network |
| 7         | Master of Business          | Dr.D.T.Khairnar     | Organizational Management              |
| 7.        | Administration              | Dr.S.R. Pachorkar   | Marketing Management                   |
|           | Master of Computer          | Ms. M.V. Malode.    | Data Mining                            |
| 8.        | Applications                | Ms. D.L.Tidke       | Data Mining                            |
| L         | I I                         | = :=: 1 14114       |  |

### 3.1.8 Enumerate the efforts of the institution in attracting researchers of eminence to visit the campus and interact with teachers and students?

- Encouraging faculties to talks and interaction with eminent personalities from industries, research and development organization, from many reputed national and international institute.
- Institute has Remote Center of IIT Bombay which gives opportunity to faculty and student to interact with researchers through video conferencing.
- Few of the eminent persons have visited the campus and interacted with faculties and students. The details are as follows.

Table 3.1.8. List of Visiting eminent scientists/ Industrial Person

| Name of<br>Department | Name of Visitor                                      | Academicians /Scientists / Visitors                          |
|-----------------------|--|--|
|                       | Dr. Vinod Parekh                                     | Education Advisior.  |
|                       | Dr. K. N. Iyer (IITBombay)                           | Academicians   |
|                       | Dr. R. P. Vedula (IITBombay)                         | Academicians   |
|                       | Dr. Shreedhara Sheshadri (IITBombay)                 | Academicians   |
|                       | Dr. R. S. Jha (IIT Bombay)                           | Academicians   |
| Mechanical            | Dr. Absar Lakdawala (Nirma<br>University, Ahmedabad) | Academicians   |
| Engineering           | Dr. Parag Sonawane (IITBombay)                       | Academicians   |
|                       | Dr. Pankaj Jagad (Nirma University,<br>Ahmedabad)    | Academicians   |
|                       | Dr. Atul Shrivastava (IIT Bombay)                    | Academicians   |
|                       | Dr. D. V. Bhat (SVNIT Surat)                         | Academicians   |
|                       | Mr. N. L. Soni, (Senior Scientist, BAARC Mumbai)     | Scientists   |
|                       | Dr. V. M. Palhe (VJTI, Mumbai)                       | Academicians   |
|                       | Dr. OmprakashKulkarni                                | Advisor, Mentor,<br>Consulting Engineer &<br>Young Scientist |
|                       | Arya Hycinth   | Corporate Trainer  |
|                       | Gordon Noronha                                       | Corporate Trainer  |
|                       | Hanmantrao Rao (TCS)                                 | CEO, TCS   |
| MBA                   | Daniel Goodman & Mohammad                            | Scientists (MIT Media<br>Lab, USA)                           |
|                       | CA Tushar Jagtap                                     | Practicing CA  |
|                       | Mansukhbhai Prajapati                                | Awarded Most Powerful<br>Rural Entrepreneur                  |
|                       | Yashovardhan Baramatikar                             | CEO, KVIC, Mumbai  |
|                       | S.R.Patil  | Director (R-SETI, Bank of Maharashtra)                       |

|                              | Manas Gajare              | Entrepreneur                              |
|------------------------------|---------------------------|---|
|                              | CA-Sanjivan Tambulvadikar | Practicing CA                             |
|                              | Amit Pandey               | Entrepreneur                              |
|                              | Kalyani khodake           | Entrepreneur                              |
|                              | Shaunak chafekar          | Entrepreneur                              |
|                              | Bhagyashri dashpute       | Entrepreneur                              |
| 100                          | Aishwarya Bodke           | Entrepreneur                              |
| MBA                          | Bhavesh Bhatia            | Entrepreneur                              |
|                              | Uddhav Aher               | Entrepreneur                              |
|                              | Pramod Gaikwad            | Entrepreneur                              |
|                              | CA Vishal Poddar          | Practicing CA                             |
|                              | Kiran Bhide               | Entrepreneur                              |
|                              | Aditya Oak                | Music Director                            |
|                              | Amol Kadam                | Entrepreneur                              |
|                              | Dr. D.B. Pathak           | Scientists                                |
|                              | Dr. Rajeev Papaneja       | Scientists                                |
|                              | Mr. Sunil Khandbahale     | Scientists                                |
|                              | Mr. Vikash Naik           | Scientists                                |
| Computer                     | Mr. Suchit Tiwari         | Scientists                                |
| Engineering                  | Dr. Manesh Kokare         | Academicians                              |
|                              | Dr. S. S.Sane             | Academicians                              |
|                              | Dr. V.H.Patil             | Academicians                              |
|                              | Dr. M.U.Kharat            | Academicians                              |
|                              | Dr. D.V.Patil             | Academicians                              |
|                              | Dr. M.R. Sanghvi          | Academicians                              |
| MCA                          | Swapnil P.Kulkarni        | Project Manager,<br>KanakaSoftwares,Pune. |
|                              | Dr. N.V. Ramamurthi       | Academicians NIT<br>Warangal              |
|                              | Dr Deepak Khare           | IIT. Roorkee                              |
| Civil                        | Dr. H.S. Patil            | SVNIT Surat                               |
| Engineering                  | Dr. V.L. Manekar          | SVNIT Surat                               |
|                              | Dr. Y.D. Patil            | SVNIT Surat                               |
|                              | Er. Thomos Scoanrich      | MD G. S. Wasr, Germany                    |
| Instrumentatio               | Mr. Henry Hans            | Industrialist-Emerson<br>Global Head      |
| n and Control<br>Engineering | Mr. Rajesh Bhave          | Industrialist-Emerson Pune-Vice Presient  |
|                              | Mr. Shirish Chapekar      | Industrialist-Emerson,                    |

|                     | Nashik-Director                          |
|---------------------|--|
| Dr. Pankaj Koinkar  | Faculty of Tukushima<br>University Japan |
| Mr. Sunil Jadhav    | Instru. Manager, Emerson<br>Dubai.       |
| Mr. Sameer Patil    | Director-Sigma Controls Automation Pune  |
| Dr. P. S. V. Natraj | Professor, IIT Mumbai                    |
| Mr. A. K. Das       | Director, Louis Berger<br>Group          |





Hon. Vice Chanceller SPPU, Pune, Sirchitnis NDMVP samaj,

Er. Thomas Schonrich, MD, BGS Wasser Germany intracting with faculty.

Fig 3.1.8 Eminent Persons visit to Institute

- 3.1.9 What percentage of the faculty has utilized Sabbatical Leave for research activities? How has the provision contributed to improve the quality of research and imbibe research culture on the campus?
  - Yes, institute has the provision of sabbatical leave.
  - Institute grants leave for participating/ attending STTP/ workshop/ conferences/ seminars.
  - Institute has a policy for leave allotment of research work.
  - The faculty members who are pursuing Ph.D. research works are granted leave to carry out their research works, course works and to meet the respective guides.

Table 3.1.9. List of Faculty granted leave for research work

| Name of Department | Year      | Name of Faculty<br>Granted Leave for<br>Ph.D | Name of research institute |
|--------------------|-----------|--|----------------------------|
| Civil Engineering  | 2015-2016 | Mr. S. M. Waysal                             | SVNIT, Surat               |
|                    | 2016-2017 | Mrs. M. C. Aher                              | SVNIT, Surat               |
|                    | 2016-2017 | Mr. R. V. Devalkar                           | SVNIT, Surat               |

| Instrumentation &         | on & 2012 to 2016 Mr. A. R. Kulkarni |                 | MNNIT,       |
|---------------------------|--------------------------------------|-----------------|--------------|
| Control engineering       | ng                                   |                 | Allahabad    |
|                           | 2015-2016                            | Mr.Y. P. Patil  | SVNIT, Surat |
| Mechanical<br>Engineering | 2011-2012                            | Mr. S.P. Mogal  | SVNIT Surat  |
| Engineering               | 2011-2012                            | Mr. A.B. Kakade | SVNIT Surat  |

## 3.1.10 Provide details of the initiatives taken up by the institution in creating awareness/advocating/transfer of relative findings of research of the institution and elsewhere to students and community (lab to land).

- Research findings of faculty members are usually shared with students and the community.
- Completed projects of faculty are put up in laboratories so that student can update themselves by the research findings.
- Institute organizes every year a technical event and invites the other college student and community.
- At department level conduct the national level conference.
- Following work has done by college.

Table 3.1.10. Initiatives taken by department and their implementation.

| Name of     | Name of Labs  | Name of Research work | Application /       |
|-------------|---------------|-----------------------|---------------------|
| Departments |               |                       | Implementation      |
| Civil       | Environment & | Water Audit           | Nashik Municipal    |
| Engineering | WRE           |                       | corporation, Nashik |
|             | Survey        | Survey of Campus      | College Campus      |
|             | Geology       | Ground Water          | College Campus      |
|             |               | Prospecting and Rain  |                     |
|             |               | Water Harvesting      |                     |

#### 3.2 Resource Mobilization for Research

### 3.2.1 What percentage of the total budget is earmarked for research? Give details of major heads of expenditure, financial allocation and actual utilization.

• Nearly 10% of total budget is allocated for research and development with respect to total budget. Major heads of the expenditure is as follows.

Table 3.2.1. Research Budget on Major heads.

| Year    | Library<br>Resource<br>in lakhs | Software<br>in lakhs | SAP<br>in<br>lakhs | Travel Expense for Research activity in lakhs | New<br>Equipment<br>in lakhs | Salary of<br>staff on<br>Ph.D<br>Leave in<br>lakhs |
|---------|---------------------------------|----------------------|--------------------|---|------------------------------|--|
| 2013-14 | 15.01                           | 6.17                 | -                  | 0.88  | 70.32                        | 3.08   |
| 2014-15 | 4.01                            | 8.58                 | -                  | 0.75  | 40.34                        | 4.03   |
| 2015-16 | 4.22                            | 6.79                 | 160.30             | 1.05  | 72.34                        | 7.17   |
| 2016-17 | 0.28                            | 1.40                 | -                  | 0.58  | 5.59                         | 3.66-  |

## 3.2.2 Is there a provision in the institution to provide seed money to the faculty for research? If so, specify the amount disbursed and the percentage of the faculty that has availed the facility in the last four years?

- Instead of providing seed money institute offers travel expenses of faculty attending National/International conferences seminar workshop.
- Attending the state conference/National conference /International conference the encouragement amount will be given rupees one thousand for state level conference.
- Encouragement amount rupees two thousand for international conference in within the state and rupees four thousand outside the state.
- Encouragement amount rupees ten thousand international conferences outside of India and rupees one thousand for best paper award at international conference.
- Non sponsoring workshop/STTP/Training programs registration amount is paid.

### 3.2.3 What are the financial provisions made available to support student research projects by students?

- The institute intra-department students participated in SAE SUPRA activity every year.
- It is a formula one racing competition in which students are given certain specifications according to which they design, manufacture the formula one car
- Institute has financial support in academic year 2014-15 (Rs. 3, 75,000/-) and 2015-16 (Rs, 1, 00,000/-) for Development of innovative vehicle for SAE SUPRA Competition in Mechanical Department.
- Institute support, student research project by providing fund to the department for purchasing hardware equipment's and software for student projects.

## 3.2.4 How does the various departments/units/staff of the institute interact in undertaking inter-disciplinary research? Cite examples of successful endeavors and challenges faced in organizing interdisciplinary research.

- The research committee identifies the interdisciplinary areas of research by considering facilities and expertise available.
- Institute Faculty and HODs along with student interacts and finds the interdisciplinary areas.
- The institute has recently submitted two proposals to NITI Aayog, Govt. of India for getting Atal Incubation Center on "Nanomaterials" & "Sensor technology" which is inter disciplinary.
- The SAE committee members of Mechanical department involve interdisplinary student participation.

### 3.2.5 How does the institution ensure optimal use of various equipment and research facilities of the institution by its staff and students?

• Optimal use of various equipment and research facilities are ensured by keeping equipment history register, lab utilization register, sharing of major equipment among the various department records are maintain at department

- level.
- The research committee monitors the research activities and keeps track of the usage of various resources and facilities.
- Laboratories are also used to conduct IIT spoken tutorial test, NPTEL courses and for various FDPs and STTPs.
- Institute central library is open for the students and faculties from 8:30 am to 12:00 pm.
- Reading room facility provided to students and researchers its capacity around 200 seats.

### 3.2.6 Has the institution received any special grants or finances from the industry or other beneficiary agency for developing research facility? If 'yes' give details.

- Yes department of MBA received Rs. 90,000 grants under QIP-SPPU-Pune for purchasing the equipment.
- Department of E& TC received equipment grant Rs 60,000 in academic year 2013-14 and Rs 1, 00,000 in academic year 2014-15 under QIP-SPPU-Pune for purchasing the equipment.
- Institute Aakash R&D center received 224 tablet are used for clicker application purpose, quiz of every workshop and Module assignment upload on IIT Bombay server.
- Aakash R&D center and remote center received funds for development of research facility, purchasing the equipment and conduction of workshop.
- Institute received funds from BCUD-SPPU/DST under minor research grants.

Table 3.2.6. (A) Grants received minor and major research project BCUD/DST during last four years.

| Nature of the Project | Duration<br>Year | Name of the funding agency | Total Gra<br>Lak |          |
|-----------------------|------------------|----------------------------|------------------|----------|
|                       |                  |                            | Sanctioned       | Received |
| Minor                 | 2011-13          | BCUD SPPU                  | 0.5              | 0.50     |
| Projects              | 2012-14          | BCUD SPPU                  | 4.1              | 3.35     |
|                       | 2014-16          | BCUD SPPU                  | 4.8              | 4.49     |
|                       | 2016-18          | BCUD SPPU                  | 8.4              | 4.2      |
| Major projects        | 2016-19          | SERB, DST, Govt. India     | 19.028           | 6.34     |

Table 3.2.6 (B). Detail of Grants Recived to Aakash R&D and Remote center

| Sr.<br>No | Center           | Grant Received   | Year    |
|-----------|------------------|--|---------|
| 1.        | Aakash<br>Center | Rs.1,00000 (13/11/2014) For Aakash server equipment Purchase | 2014-15 |
| 2.        | Remote           | Rs.1,17,083/- (Workshop and seminar)                         | 2013-14 |

| Center | Rs.5,79,888/- (Workshop and seminar)                         | 2014-15 |
|--------|--|---------|
|        | Rs.2,80,000 (15/9/2015) for Remote center equipment purchase | 2015-16 |
|        | Rs.1,77,843/- Workshop                                       |         |

3.2.7 Enumerate the support provided to the faculty in securing research funds from various funding agencies, industry and other organizations. Provide details of ongoing and completed projects and grants received during the last four years.

Table 3.2.7. Grants received for research project.

| Nature of         |                 |                      | Name of                  | Total Grant in Lakhs |          | Total                              |
|-------------------|-----------------|----------------------|--------------------------|----------------------|----------|------------------------------------|
| the Project       | Year<br>From To |                      | the<br>funding<br>agency | Sanctione<br>d       | Received | grant<br>receiv<br>ed till<br>date |
| Minor<br>Projects | 2011-13         | Dr. B.B.<br>Musmade  | BCUD,<br>SPPU,<br>Pune   | 0.5                  | 0.5      | 0.5                                |
|                   | 2012-14         | Dr.P.G.<br>Gaikwad   | BCUD,S<br>PPU,<br>Pune   | 2.6                  | 2.6      | 2.6                                |
|                   | 2012-14         | Mr.Y.B.<br>Chaudhary | BCUD,<br>SPPU,<br>Pune   | 1.5                  | 0.75     | 0.75                               |
|                   | 2014-16         | Mr.S.Y.<br>Pawar     | BCUD,<br>SPPU,<br>Pune   | 2.0                  | 1.69     | 1.69                               |
|                   | 2014-16         | Dr. A. B<br>Saner    | BCUD,<br>SPPU,<br>Pune   | 2.8                  | 2.8      | 2.8                                |
|                   | 2016-18         | Mr. V. C.<br>Shewale | BCUD,<br>SPPU,<br>Pune   | 2.1                  | 1.05     | 1.05                               |
|                   | 2016-18         | Mrs.S.H.<br>Jadhav   | BCUD,<br>SPPU,<br>Pune   | 1.4                  | 0.7      | 0.7                                |
|                   | 2016-18         | Mrs.R.N.<br>Mahale   | BCUD,<br>SPPU,<br>Pune   | 2.0                  | 1.0      | 1.0                                |
|                   | 2016-18         | Dr.S.R.<br>Pachorkar | BCUD,<br>SPPU,           | 1.0                  | 0.5      | 0.5                                |

|                                   |         |   | Pune  |        |      |      |
|-----------------------------------|---------|---|---|--------|------|------|
|                                   | 2016-18 | Dr.S.J.<br>Kokate                                 | BCUD,<br>SPPU,<br>Pune                                    | 1.9    | 0.95 | 0.95 |
| Major<br>projects                 | 2016-19 | Dr.S.B.<br>Sonawane                               | SERB,<br>DST,<br>Govt. of<br>India                        | 19.028 | 6.34 | 6.34 |
| Interdiscipli<br>nary<br>projects | 2016-19 | Dr. N. S.<br>Patil (Asst.<br>Coordinator<br>-DIC) | SPPU,<br>Pune &<br>MHRD<br>New<br>Delhi                   | 150    |      |      |
| Industry<br>sponsored             | 2016-17 | Mr. Y. P.<br>Patil                                | Sponsore d by Excel Industrie s Ltd.,Nav i Mumbai         | 0.35   |      |      |
| Students' research projects       | 2014-15 | Prasad<br>Chavan<br>(Mechanica<br>1 Student)      | NDMVP<br>S's KBT<br>College<br>Engineer<br>ing,<br>Nashik | 3.75   | 3.75 | 3.75 |
|                                   | 2015-16 | Sachin<br>Kulkarni                                | NDMVP<br>S's KBT<br>College<br>Engineer<br>ing,<br>Nashik | 1.0    | 1.0  | 1.0  |

#### 3.3 Research Facilities

#### 3.3.1 What are the research facilities available to the students and research scholars within the campus?

- Facilities provided to the students through Library are Associated Membership of DELNET, Delhi.
- 155 Mbps Dedicated Internet Lease Line.
- 800 Computers in LAN.
- Wi-Fi Campus.
- Central library with OPAC search facility & departmental library.
- e-Library Books, e-Learning.

- Dedicated reference section with reading room in library.
- Institute has Remote Center and Aakash R & D center affiliated to IIT Mumbai.
- Institute provides Aakash Tablets to students and faculties under the research promotion scheme in association with IIT Mumbai.
- Apart from computer systems, sophisticated instruments, modeling tools, data processing software and modern equipment's are provided to create infrastructural facilities to meet the needs of new and emerging areas of research.
- Research Committee identifies the requirement of equipment, literature etc. required for research and ensures its availability.
- Established first Design Innovation Center Spoke Center in Nashik District ( Jointly supported by S P Pune University and MHRD New Delhi)
- Skill Development Center Pradhan Mantri Kaushal Vikas Yojana (PMKVY).
- Well-Equipped Laboratories with latest software, modern tools and equipments.
- Establishment of MVP SAP center.



Figure 3.3.1.(A)Library Photographs



Figure 3.3.1.(B) Library Photographs

## 3.3.2 What are the institutional strategies for planning, upgrading and creating infrastructural facilities to meet the needs of researchers especially in the new and emerging areas of research?

- Institutes have research committee in order to inculcate and promote research culture.
- Encouraging faculty members to organize research workshop, seminars, and conferences with funding internally and from AICTE/DST/BCUD-SPPU etc.
- Institute also uses the research funding by different agencies for development of research facilities.
- To undertake collaborative projects which offer opportunities for long-term interaction with society, academia and industry.
- To develop technically-sound engineers by engaging the students in progressive technical education and to promote students for academic growth by offering state-of-the-art undergraduate, postgraduate programmes.
- Continual improvements in the infrastructural facilities.
- Institute has started MVP SAP center under this various courses are started viz. HCM (Human Capital management), SD (sales and Distribution), ABAP (Advanced Business Application Programing, FI (Financial Accounting) and MM (material Mangment)
- Institute has established the design and innovation center-spoke center in collaboration with SPPU-Pune and MHRD New Delhi under this three module courses are started viz. Design and Development of Signal Conditioning & Sensor Technologies, Advanced Techniques for Environment Watershed Management, Post graduate Diploma in Computer-Aided Product Designs.

## 3.3.3 Has the institution received any special grants or finances from the industry or other beneficiary agency for developing research facilities? If 'yes', what are the instruments / facilities created during the last four years.

- Yes, institute received grants from different funding agencies to procure equipments/machinery.
- Principal Investigator can procure books from BCUD grants and are available in the library reference section.
- Principal Investigator can procure Instruments from research grants and are available in the department.

Table 3.3.3. (A) List of Faculty Purchase Equipment/ Machinery on funded projects.

| Sr. | Name of           | Name of PI     | Name of    | Name of Equipment/           |
|-----|-------------------|----------------|------------|------------------------------|
| No  | Department        |                | Funding    | Machinery Purchase           |
|     |                   |                | Agency     |                              |
| 1   | Civil Engineering | Dr.P.G.        | BCUD,      | Blain air Permeability       |
|     |                   | Gaikwad        | SPPU, Pune |                              |
| 2   |                   | Dr. A. B Saner | BCUD,      | Agitator Machine             |
|     |                   |                | SPPU, Pune | Mechanical Stirrer           |
| 3   | Mechanical        | Mr.S.Y.Pawar   | BCUD,      | Ball mill, O.H.N.S. Die set  |
|     | Engineering       |                | SPPU, Pune |                              |
| 4   |                   | Mr.Y.B.        | BCUD,      | DC Motor, Transistor,        |
|     |                   | Chaudhary      | SPPU, Pune | Pneumatic cylinder, PCB      |
| 5   | Instrumentation   | Dr. B.B.       | BCUD,      | USB Based data acquisition   |
|     | and Control       | Musmade        | SPPU, Pune | system from Data Translation |
|     | Engineering       |                |            | USA, Model NoDT9812-10V      |
|     |                   |                |            | With Measure foundry & Go    |
|     |                   |                |            | software                     |

Table 3.3.3(B). Grants received minor and major research project BCUD/DST during last four years.`

| Nature of the  | Duration                                | Name of the funding agency | Total Grant in Lakhs |          |  |
|----------------|---|----------------------------|----------------------|----------|--|
| Project        | Project Year Yame of the funding agency |                            | Sanctioned           | Received |  |
|                | 2011-13                                 | BCUD SPPU                  | 0.5                  | 0.50     |  |
| Minor Projects | 2012-14                                 | BCUD SPPU                  | 4.1                  | 3.35     |  |
|                | 2014-16                                 | BCUD SPPU                  | 4.8                  | 4.49     |  |
|                | 2016-18                                 | BCUD SPPU                  | 8.4                  | 4.2      |  |
| Major projects | 2016-19                                 | SERB, DST, Govt. India     | 19.028               | 6.34     |  |

Table 3.3.3 (C). Detail of Grants Recived to Aakash R&D and Remote center

| Sr.<br>No | Center           | Grant Received   | Year    |
|-----------|------------------|--|---------|
| 1.        | Aakash<br>Center | Rs.1,00000 (13/11/2014) For Aakash server equipment Purchase | 2014-15 |
| 2.        | Remote           | Rs.1,17,083/- (Workshop and seminar)                         | 2013-14 |

| Center | Rs.5,79,888/- (Workshop and seminar)                | 2014-15 |
|--------|---|---------|
|        | Rs.2,80,000 (15/9/2015) for Remote center equipment | 2015-16 |
|        | purchase  |         |
|        | Rs.1,77,843/- workshop                              |         |

### 3.3.4 What are the research facilities made available to the students and research scholars outside the campus / other research laboratories?

• Yes, institute have facility outside campus are listed below table Table 3.3.4. Facilities to students and research scholars outside campus.

| Sr. | Name of                                 | Name of   | <b>Location and Detail</b>  | Purpose                           |
|-----|---|---|-----------------------------|-----------------------------------|
| No  | Department                              | Research<br>Facility                                  |                             | -                                 |
| 1   | Mechanical<br>Engineering               | Bhayashri Pvt.Ltd                                     | G-9, Ambad, MIDC,<br>Nashik | Training and project work         |
|     | 8 11 8                                  | Deol Industries                                       | Ambad, MIDC, Nashik         | Training and project work         |
|     |   | Aakash Industries                                     | Ambad, MIDC, Nashik         | Training and project work         |
| 2   | Instrumentation and Control Engineering | Mungi Engineers<br>Pvt. Ltd.                          | Ambad, MIDC, Nashik         | Under<br>Graduate<br>Project Work |
|     |   | Excel Industries Pvt. Ltd., Mumbai                    | Jogeshwari West,<br>Mumbai  | Collaborative<br>Research         |
|     |   | Nexus Control   | MIDC, Nashik                | Under<br>Graduate<br>Project Work |
| 3   | Information<br>Technology               | Winjit<br>Technology,<br>Nashik                       | MIDC, Nashik                | Under<br>Graduate<br>Project Work |
|     |   | Glostream<br>Technology,<br>Nashik                    | MIDC, Nashik                | Under<br>Graduate<br>Project Work |
|     |   | Neumann<br>Systems<br>Consultancy Pvt.<br>Ltd, Nashik | MIDC, Nashik                | Under<br>Graduate<br>Project Work |
| 4   | Master of<br>Computer<br>Applications   | Cyberedge Web<br>Solutions Pvt.<br>Ltd. Nashik        | Nashik                      | Training &Project Work            |
|     |   | Emerging Technologies Nashik                          | Nashik                      | Training & Project work           |
|     |   | UMS Tech Labs<br>Nashik                               | Nashik                      | Training & Project work           |
|     |   | Internauts ,A Web<br>Design                           | Nashik                      | Training & Project work           |

|   |             | Agency, Nashik |      |               |
|---|-------------|----------------|------|---------------|
| 5 | Computer    | Zensar         | Pune | To train the  |
|   | Engineering | Technologies,  |      | students in   |
|   |             | Pune.          |      | employability |
|   |             |                |      | skills, JAVA  |
|   |             |                |      | and Advanced  |
|   |             |                |      | JAVA course   |

### 3.3.5 Provide details on the library/ information resource center or any other facilities available specifically for the researchers?

- Institute has Central as well as departmental libraries.
- Separate reading room facility with 200 seating capacity.
- Campus is Wi-Fi and the entire department has LAN connectivity.
- Library has National / International research journals, digital library facility available researchers.

Sr. No **Library Details Number of resources** 1 Number of Volumes 35210 3 Number of National Journals 49 (2015-16) 4 Number of National Magazine 24 (2015-16) Total Number of bound volume of the journals 577 5 6 Number of e-Journal as IEEE-ASPP, Springer, 06 ASME, ASCE, Elsevier J-Gate. 7 Number of Articles/E-books 20000 (E-Books)

Table 3.3.5.Detail of Library Resource

## 3.3.6 What are the collaborative research facilities developed/ created by the research institutes in the college. For ex. Laboratories, library, instruments, computers, new technology etc.

- Institute has established Remote center on 10<sup>th</sup> October 2012 list of program conducted under remote center in association with IIT Mumbai the grant received from National Mission on Education through ICT (MHRD Govt. of India).
- Institute has established Aakash center on 10<sup>th</sup> October 2012. Total 214 Aakash tablet received to Institute remote center along with two solar chargers.
- Institute established Design Innovation Center- Spoke Center with three modules are established such as Post Graduate Diploma in Product Development, Design and implementation of signal and sensor technologies and Advanced and innovative techniques of environment and watershed management in collaboration with SPPU and MHRD.
- Institute has Skill Development Center Pradhan Mantri Kaushal Vikas Yojana, Govt.of India in collaboration three courses are started such as Construction-Assistant Electrician, Electronics & Hardware Test & Repair Technician and Iron & steel fitter and maintenance water cooler and Plumbing (Plumber after sales service).

- Institute has signed 36 MoU's with different industries for the purpose of industrial training, project work, industrial visit, guest lectures etc.
- The List of MoU's
  - 1. Syestems, Applications & Products in Data Processing (SAP), Banglore.
  - 2. Zensar Technologies, Pune.
  - 3. Fox Solutions Nashik
  - 4. Microtech System Services, Nashik
  - 5. Boost Electronics, Ambad, Nashik
  - 6. Visionary Technologies, Nashik
  - 7. Teknocrat's academy of Automation & Control Technologies Nashik
  - 8. Copper Track Industries, Nashik
  - 9. Shriharsh Electronics, Nashik
  - 10. Cyberedge Web Solutions Pvt. Ltd. Nashik
  - 11. Emerging Technologies, Nashik
  - 12. UMS Tech Labs, Nashik
  - 13. Internauts, A Web Design Agency, Nashik
  - 14. Zabuza Labs, Nashik
  - 15. Sampoorna Bamboo Kendra, Amravati.
  - 16. Sunrise Candles, Satara.
  - 17. Sahyadri Agro Farms, Nashik
  - 18. Startup Farms, Nashik
  - 19. Swati Investment, Nashik
  - 20. Astiwz Infotech, Nashik.
  - 21. Avasthi's IT Training and Solution(AITS), Nashik.
  - 22. Advent Engineer's, Nashik
  - 23. Spectra Innovation, Nashik
  - 24. Quantaflux Technology Solution Pvt. Ltd, Pune
  - 25. Yashika Energy Systems Pvt. Ltd, Nashik
  - 26. Celestial Plastic Hub, MIDC Ambad, Nashik
  - 27. Digilog Systems, Nashik
  - 28. Anubhooti Infractructures Pvt. Ltd. Nashik
  - 29. Niwara Builders and Developers, Nashik
  - 30. Jalchintan Engineering Trust, Nashik
  - 31. Akash Industries, Nashik
  - 32. Deol Industries, Nashik
  - 33. Bhagyashree Engineering Pvt. Ltd, Nashik
  - 34. Winjit Technology, Nashik.
  - 35. Glostream Technology, Nashik.
  - 36. Neumann Systems Consultancy Pvt. Ltd, Nashik.



Fig 3.3.6 (A) Inauguration function of Pradhan Mantri Kaushal Vikas Yojana by Mr. Sudhir Mutulaik and Sirchitnis NDMVP samaj



Fig 3.3.6 (B) Signing of MoU with Fox Solution for Automation training center.

#### 3.4 Research Publications and Awards

#### 3.4.1 Highlight the major research achievements of the staff and students in terms of

- Patents obtained and filed (process and product)
- Original research contributing to product improvement

- Research studies or surveys benefiting the community or improving the services
- Research inputs contributing to new initiatives and social development

Table 3.4.1. Staff and students patents obtained and filed (Process and Product)

| Name of     | Faculty      | Title                              | Status     |
|-------------|--------------|------------------------------------|------------|
| Department  | Name         |                                    | Received / |
|             |              |                                    | Applied    |
| Mechanical  | Dr.S.B.      | Nano Coolant for heavy Gearbox     | Applied    |
| Engineering | Sonawane     | cooling                            |            |
|             | Mr. A. A     | Obtaining purified drinking water  | Applied    |
|             | Kapse        | from boiler blow down in thermal & |            |
|             |              | nuclear power plant                |            |
|             | Miss. Sayali | A system for Four wheeler Vehicle  | Received   |
|             | Kerure       | Tire maintenance                   |            |

- 3.4.2 Does the Institute publish or partner in publication of research journal(s)? If 'yes', indicate the composition of the editorial board, publication policies and whether such publication is listed in any international database?
  - Institute is in the process of starting a journal.
- 3.4.3 Give details of publications by the faculty and students:
  - Publication per faculty
  - Number of papers published by faculty and students in peer reviewed journals (national / international)
  - Number of publications listed in International Database (for Eg: Web of Science, Scopus, Humanities International Complete, Dare Database International Social Sciences Directory, EBSCO host, etc.)
  - Monographs
  - Chapter in Books
  - Books Edited
  - Books with ISBN/ISSN numbers with details of publishers
  - Citation Index
  - SNIP
  - SJR
  - Impact factor
  - h-index

Table 3.4.3. Faculty Publication / Conference at National International level.

| Sr.<br>No. | Name of Faculty   | International Journals | National Journals | International Conference | National Conference | Monograph | Chapter in Books | Books Edited | Impact Factor | h-index | Citation Index | Average SNIP | Average SJR |
|------------|-------------------|------------------------|-------------------|--------------------------|---------------------|-----------|------------------|--------------|---------------|---------|----------------|--------------|-------------|
| 1          | Dr.K.S. Holkar    | 5                      | -                 | 2                        | -                   | -         | -                | -            | _             | 2       | 86             | -            | -           |
| 2          | Dr.N.S. Patil     | 4                      | -                 | 6                        | -                   | -         | 1                | -            | 2.327         | 2       | 11             | 1.411        | 1.454       |
| 3          | Dr.B.B. Musmade   | 4                      | -                 | 7                        | 1                   | -         | -                | -            | 0.963         | 4       | 50             | -            | -           |
| 4          | Mrs. S.H.Jadhav   | 3                      | -                 | 1                        | -                   | -         | -                | -            | -             | -       | -              | -            | -           |
| 5          | Dr. A.R. Kulkarni | 1                      | -                 | 2                        | -                   | -         | -                | -            | -             | -       | -              | -            | -           |
| 6          | Mr. Y.P.Patil     | -                      | -                 | 3                        | -                   | -         | -                | -            | -             | -       | -              | -            | -           |
| 7          | Mrs. A.K. Patil   | 1                      | -                 | 2                        | -                   | -         | -                | -            | -             | -       | -              | -            | -           |
| 8          | Mr. S.D. Nikam    | -                      | -                 | 2                        | -                   | -         | -                | -            | _             | -       | -              | -            | -           |
| 9          | Mr. D.B. Ghodke   | -                      | -                 | 1                        | -                   | -         | -                | -            | -             | -       | -              | -            | -           |
| 10         | Mr. S.B. Lukare   | -                      | -                 | 1                        | -                   | -         | -                | -            | _             | -       | -              | -            | -           |
| 11         | Mr. V.M. Birari   | 3                      | -                 | 1                        | 1                   | -         | -                | -            | _             | -       | -              | -            | -           |
| 12         | Mr. B.J.Pawar     | -                      | -                 | 2                        | -                   | -         | -                | -            | -             | -       | -              | -            | -           |
| 13         | Mrs. S.M. Jagtap  | -                      | -                 | 1                        | -                   | -         | -                | -            | _             | -       | -              | -            | -           |

| 14 | Mrs. D.V. Patil     | 1  | - | - | - | - | - | - | -     | - | - | - | - |
|----|---------------------|----|---|---|---|---|---|---|-------|---|---|---|---|
| 15 | Mr. V.R. Sonawane   | 2  | - | - | - | - | - | - | -     | - | - | - | - |
| 16 | Mrs. S.M. Dharrao   | 2  | - | 1 | - |   | - | - | -     | - | - | - | - |
| 17 | Dr. M. P. Kadam     | 6  | - | 3 | - | - | - | - | 1.277 | - | - | - | - |
| 18 | Dr. A. B. Saner     | 2  | - | 1 | - | - | - | - | 1.2   |   |   |   |   |
| 19 | Mr. M.P. Chougale.  | 1  | - | 1 | - | - | - | - | -     | - | - | - | - |
| 20 | Mr. A. P. Shelorkar | 5  | - | - | - | - | - | - | -     | 1 | 1 | - | - |
| 21 | Mrs. M.C. Aher      | 2  | - | 2 | 1 | - | - | - | -     | - | - | - | - |
| 22 | Mr. R.P. Kajale     | -  | - | 2 | - | - | - | - | -     | - | - | - | - |
| 23 | Mr. R.V. Devalkar.  | 6  | - | 8 | 5 | - | - | - | -     | - | - | - | - |
| 24 | Mr. S.J. Kadbhane   | 2  | - | 5 | 1 | - | - | - | -     |   | - | - | - |
| 25 | Mr. P.D. Aher       | 2  | - | 2 | - | - | - | - | -     | - | - | - | - |
| 26 | Mr. D.N. Nathe.     | -  | - | 1 | - | - | - | - | -     | - | - | - | - |
| 27 | Mr. P.S. Kapadnis   | 1  | - | 3 | - | - | - | - | -     | - | - | - | - |
| 28 | Ms. M.B. Murkute.   | 3  | - | 3 | - | - | - | - | -     | - | - | - | - |
| 29 | Dr.D.T. Khairnar    | 10 | - | 7 | 6 | - | - | - | -     | - | - | - | - |
| 30 | Dr.S.R. Pachorkar   | 1  | - | - | - | - | - | - | -     |   | - | - | - |
| 31 | Mr. N.J.Salunke     | 1  | 1 | - | - | - | - | - | -     | - | - | - | - |
| 32 | Mr. L.C. Sontakke   | 1  | 1 | - | - | - | - | - | -     | - | - | - | - |
| 33 | Mrs. R.N. Mahale    | 1  | 2 | - | - | - | - | - | -     | - | - | - | - |
| 34 | Mr. S.V. Bachhav    | 1  | 2 | - | - | - | - | - | -     | - | - | - | - |
| 35 | Mrs. M.V. Malode    | 3  | - | 1 | 1 | - | - | - | -     | - | - | - | - |
| 36 | Mrs. D.L. Tidke     | 3  | - | 1 | 1 | - | - | - | -     | - | - | - | - |
| 37 | Dr.S.P Mogal        | 4  | - | 4 | - | - | - | - | -     | - | - | - | - |
|    | •                   |    |   |   |   |   |   |   | •     | • | • | • | • |

| 20 | D. C.D. C           | 2 | 1 | 1 | 1 | <u> </u> | <u> </u> | 1 | 2.77 | 2 | 40 |      |      |
|----|---------------------|---|---|---|---|----------|----------|---|------|---|----|------|------|
| 38 | Dr.S.B. Sonawane    | 2 | 1 | 1 | 1 | -        | -        | - | 2.77 | 3 | 49 | -    | -    |
| 39 | Mr. A.B .Kakade     | 2 | - | 3 | - | -        | -        | - | 2.32 | - | -  | 1.89 | 1.55 |
| 40 | Mr. Y.B. Chaudhary  | - |   | 1 | - | -        | -        | - | -    | - | -  | -    | ı    |
| 41 | Mr. A.A. Kapse      | 2 | - | - | - | -        | -        | - | -    | - | -  | -    | -    |
| 42 | Mr. V.C. Shewale    | 5 | - | 3 | - | -        | -        | - | -    | - | -  | -    | -    |
| 43 | Mr. N.K. Kharate    | 1 | - | - | - | -        | -        | - | -    | - | -  | -    | -    |
| 44 | Mr. S.Y. Pawar      | - | - | 1 | - | -        | -        | - | -    | - | -  | -    | -    |
| 45 | Mr. P.C. Shete      | - | - | 1 | - | -        | -        | - | -    | - | -  | -    | -    |
| 46 | Mr. R.B.Jagtap      | 1 | - | - | - | -        | -        | - | -    | - | -  | -    | -    |
| 47 | Mr. N.V.Lokare      | - | - | 1 | - | -        | -        | - | -    | - | -  | -    | -    |
| 48 | Mr. N.S.Gaikwad     | 1 | - | 1 | - | -        | -        | - | -    | - | -  | -    | -    |
| 49 | Mr. V.V Shinde      | - | - | 1 | 1 | -        | -        | - | -    | - | -  | -    | -    |
| 50 | Mr. S.J.Suryawanshi | 2 | - | 1 | - | -        | -        | - |      |   |    |      |      |
| 51 | Mr. T.D.Dabhade     | - | - | 1 | - | -        | -        | - | -    | - | -  | -    | -    |
| 52 | Mrs. G.M.Shirsath   | 1 | - | - | - | -        | -        | - | -    | - | -  | -    | -    |
| 53 | Mrs. P.B.Sonawane   | 1 | - | - | - | -        | -        | - | -    | - | -  | -    | -    |
| 54 | Mr. M.N.Gadakh      | 2 | - | - | - | -        | -        | - | -    | - | -  | -    | -    |
| 54 | Mr. D.V. Kushare    | 3 | - | - | - | -        | -        | - | -    | - | -  | -    | -    |
| 55 | Mr. P.S.Tile        | 1 | - | - | - | -        | -        | - | -    | - | -  | -    | -    |
| 56 | Mrs. V.V.Ahire      | 3 | - | 1 | - | -        | -        | - | -    | - | -  | -    | -    |
| 57 | Dr. V.S. Pawar      | 1 | - | 1 |   | -        | -        | - | -    | - | -  | -    | -    |
| 58 | Mr. B.S.Tarle       | 1 | - | 2 | - | -        | -        | - | -    | - | -  | -    | -    |
| 59 | Mrs. R.R. Tajanpure | 3 | - | 2 | - | -        | -        | - | -    | - | -  | -    | -    |
| 60 | Mrs. S.R. Bhamare   | 1 | - | - | - | -        | -        | - | -    | - | -  | -    | -    |
|    |                     |   | • |   |   |          |          |   | •    | • |    |      |      |

| 61 | Mrs. S.V. Pawar    | 2 | - | - | 1 | - | - | - | - | - | - | - |   |
|----|--------------------|---|---|---|---|---|---|---|---|---|---|---|---|
| 62 | Mrs. P.P. Boraste  | 2 | - | - | 2 | - | - | - | - | - | - | - | - |
| 63 | Mrs. M.B.Thombare  | 2 | - | 1 | - | - | - | - | - | - | - | - | - |
| 64 | Mr. B.S. Gholap    | 1 | - | 1 | 1 | - | - | - | - | - | - | - | - |
| 65 | Mr. H.V.Patil      | 1 | - | 2 | 2 | - | - | - | - | - | - | - | - |
| 66 | Mr. S. P. Jadhav   | 1 | 1 | - | 1 | - |   | - | - | - | - | - | - |
| 67 | Mrs. T.S. Pawar    | 1 | - | - | 1 | - | - | - | - | - | - | - | - |
| 68 | Mrs. A.G. Khairnar | 1 | - | - | 1 | - | - | - | - | - | - | - | - |
| 69 | Mrs. A.D. Deore    | 2 | - | - | 1 | - | - | - | - | - | - | - | - |
| 70 | Mr. Y.H. Palve     | 2 | - | - | - | - | - | - | - | - | - | - | - |
| 71 | Mrs. S.S. Bhamre   | 2 | - | - | 1 | - | - | - | - | - | - | - | - |
| 72 | Mrs. U.S. Tambe    | 3 | - | - | 1 | - | - | - | - | - | - | - | - |
| 73 | Mr. N.S. Ujgare    | 2 | - | - | - | - | - | - | - | - | - | - | - |
| 74 | Mr. D.A. Birari    | 2 | - | - | 1 | - | - | - | - | - | - | - | - |
| 75 | Mrs. V.P. Harak    | 1 | - | ı | - | - | ı | ı | - | - | - | - | - |
| 76 | Mr. P. V. Joshi    | - | - | 3 | 3 | - | 1 | ı | - | - | - | - | - |
| 77 | Mr. Y.S. Bhavsar   | - | - | 3 | - | - | - | - | - | - | - | - | - |

#### 3.4.4 Provide details (if any) of

- research awards received by the faculty
- recognition received by the faculty from reputed professional bodies and agencies, nationally and internationally
- incentives given to faculty for receiving state, national and international recognitions for research contributions.

Table 3.4.4. (A) Awards received by the faculty

| Name of Departments       | Name of Faculty      | Award /<br>Recognitions                | Awarding<br>Organization                               | Year |
|---------------------------|----------------------|--|--|------|
| MBA                       | Dr.S.R.Pachorkar     | State level-<br>Avishkar-13            | Government of<br>Maharashtra                           | 2013 |
| Mechanical<br>Engineering | Dr. S.B.<br>Sonawane | Promising Engineer Award               | Institution of<br>Engineers, Nashik<br>Center          | 2014 |
|                           | Dr. S.B.<br>Sonawane | IEI Young<br>Engineer Award<br>2015-16 | Institution of<br>Engineers, India                     | 2015 |
| E & TC                    | Mr. V. M. Birari     | Best Paper<br>Award                    | IEEE Sponsored International conference at PCCOE, Pune | 2015 |



Dr. S.B.Sonawane received National Level 'IEI Young Engineer Award' in the presence of Padma Shri Prof. Vasagam, Dr. Murlikrishana Reddy, Chairman, IEI (India)



Dr. S.B.Sonawane received 'Promising Engineer Award' at the hands of Shri. Subhash Dandekar, Chairman, Kokuyo-Camlin Ltd., Mumbai

Figure 3.4.4 Awards Received by Staff

Table 3.4.4.(B) Faculty serving on the editorial boards of national, international journals and reviewers

| Name of         | Name of        | Name of Journal                             |
|-----------------|----------------|---|
| Department      | Reviewer       |   |
| Instrumentation | Dr.K.S.Holkar  | ISA Transaction                             |
| & Control       | Dr.B.B.Musmade | ISA Transaction                             |
| Engineering     |                | Transaction of Institute of Measurement and |
|                 |                | Control                                     |
|                 |                | Journal of System Science                   |
|                 |                | Journal of Process Control                  |

|                   | Dr. N.S.Patil    | International Journal of ISA Transactions   |
|-------------------|------------------|---|
|                   | Prof. A.K. Patil | Elsevier Automatica Journal                 |
| Mechanical        | Dr.              | Chemical Engineering Communications,        |
| Engineering       | S.B.Sonawane     | Taylor & Francis Journal                    |
| Civil Engineering | Dr. A. B. Saner  | International Journals of Sustainable       |
|                   |                  | Engineering                                 |
|                   | Mr. M. P.        | International journals for Research in      |
|                   | Chaugale         | Engineering Technology.                     |
| Information       | Mr. N.S. Ujgare  | International Journal on Computer Trends    |
| Technology        |                  | and Technology                              |
|                   |                  | International Journal in Emerging Trends &  |
|                   |                  | Technology.                                 |
|                   |                  | International Journal of Advent Research in |
|                   |                  | Computer & Electronics                      |
| MBA               | Dr.D.T.Khairnar  | Journal of Business and Economics           |

Table 3.4.4.(C) Faculty members on the organization committees of international conferences, recognized by reputed organizations / societies.

| Name of Name of |                 | Name of National /             | Role of       |
|-----------------|-----------------|--------------------------------|---------------|
| Department      | Faculty         | International Conference       | Faculty       |
|                 | Dr.Sonawane S.  | Recent Trends In Nano          | Committee     |
|                 | B.              | Science Techniques For Life    | member        |
|                 |                 | Science (19-20 Dec.2014)       |               |
|                 | Mr. Kakade A.B  | International Conference on    | Reviewer      |
| Mechanical      |                 | Recent Trends in Mechanical    |               |
| Engineering     |                 | Engineering for Sustainable    |               |
|                 |                 | Growth (29-30 Dec.2016)        |               |
|                 | Mr. Kharate N.K | International Conference on    | Reviewer      |
|                 |                 | Recent Trends in Mechanical    |               |
|                 |                 | Engineering for Sustainable    |               |
|                 |                 | Growth (29-30 Dec.2016)        |               |
|                 | Mr. Gaikwad N.  | Recent Trends In Engineering   | Reviewer      |
|                 | S               | And Technology (28-30          |               |
|                 |                 | March 2014)                    |               |
| Instrumentation | Dr. B. B.       | International conference on    | Session Chair |
| and Control     | Musmade         | Industrial Instrumentation and |               |
| Engineering     |                 | control                        |               |
|                 |                 | National conference on         | Session Chair |
|                 |                 | "Entrepreneurship              |               |
|                 |                 | Development A Road Map to      |               |
|                 |                 | Make in India                  |               |
| MBA             | Dr.D.T.Khairnar | International Conference –     | Member of     |
|                 |                 | Global Sustainability Path for | Steering      |
|                 |                 | Globalization -2016            | Committee     |

Table 3.4.4.(D). Incentives given to faculty for receiving state, national and international recognitions for research contributions.

| Sr.<br>No | Name of<br>Staff      | Year          | Incentive given Rs | Purpose of Incentive  |
|-----------|-----------------------|---------------|--------------------|---|
| 1         | Dr. S. B.<br>Sonawane | 2015-<br>2016 | 5,237/-            | Incentive given for participation & presentation of research paper for IHMTC 2015conference organized by ISRO, Thiruvananthapuram |
| 2.        | Dr. B. B.<br>Musmade  | 2015          | 4,000/-            | IEEE ICIC 2015  |
| 3.        | Mr. D. B.<br>Ghodke   | 2014          | 11,986/-           | International conference on advances in Recent Technologies in electrical and electronics ARTEE 2013                              |

#### 3.5 Consultancy

### 3.5.1 Give details of the systems and strategies for establishing institute-industry interface?

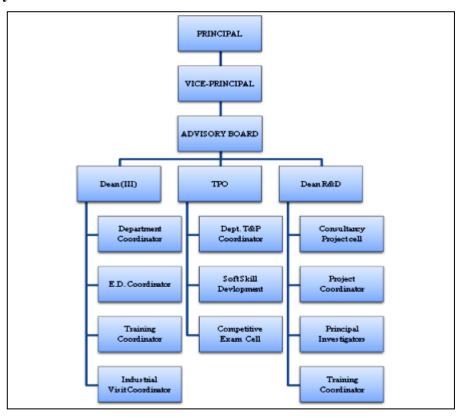


Fig 3.1.5 Structure of Industry-Institute-Interaction Cell, Training and Placement Cell, Research Committee

- Industry-Institute-Interaction Cell, Training and Placement Cell, Research Committee and Academic Council are the systems for establishing the institute industry relationship.
- Institute level guidelines have been set for strengthening institute industry interface as per these guidelines, 50% UG & PG projects of students are industry sponsored.

- Institute motivates to the students and staff members for industrial visits in order to bridge gap between theory & practice.
- The feedback from the stake holders also helps in deciding the Industry-Institute-Interaction activities.
- Structure of Industry-Institute-Interaction Cell, Training and Placement Cell and dean R&D is as above.

#### **Objectives: Institute Industry Interface (III Cell)**

- To cultivate the strong links with industry.
- To promote various industrial activities by the faculty members and students.
- To catalyze the further growth and development of interaction between the Institute and Industry.
- To have a closer linkage and promote research suited to industry needs, and consultancy which creates a sense of owning among faculty members.
- To provide continuing education to people working in industries so that they can upgrade their technical knowledge.
- To enable academics to take internships for students in industries, this will prepare the students better for entering the industry.
- To enable the of experienced industry resource persons as visiting faculty in the College
- To bring about MoU's and Agreements with various industrial and research organizations in different fields and sectors to promote various forms of interactions.

Table 3.5.1(A) Members of Local Industry Advisory Board

| Sr.<br>No | Name of<br>committee<br>Member | Designation                                | Name Organization   | Representation                 |
|-----------|--------------------------------|--|---|--------------------------------|
| 1         | Mr. Avinash<br>Pradhan         | General<br>Manager,<br>Engineering<br>Dept | CEAT, Satpur, Nashik.   | Mech. Engg.<br>Dept            |
| 2         | Mr. Vinod B.<br>Patil          | Proprietor,                                | Aakash Industries, Ambad, Nashik.   |                                |
| 3         | Mr. Sujoy<br>Gupta             | Chairman                                   | Samraat Group Nashik  | Civil Engg. Dept               |
| 4         | Mr. Avinash<br>Shirode         | Leading<br>Consulting<br>Engineer          | Consulting Engineer,<br>Nashik.   |                                |
| 5         | Mr. Amol<br>Deshmukh           | Sr. Manager<br>R&D                         | Rishbh Industries,Satpur,<br>Nashik.  | E&TC Engg. Dept                |
| 6         | Mr. Milind<br>Jagtap           | Vice-<br>President                         | AlCON CAP, Satpur<br>,MIDC, Nashik  |                                |
| 7         | Dr.Omprakash<br>G. Kulkarni    | Scientist                                  | Mentor adviser technology provider and consulting engineering in automation instrumentation energy management IPR CDM & | Instru & Control<br>Engg. Dept |

|    |                 |               | Renewable Energy         |             |
|----|-----------------|---------------|--------------------------|-------------|
| 8  | Pralhad G.      | General Mgr - | FOX SOLUTIONS -          |             |
|    | Dhumal          | Drives &      | M9 - M.I.D.C. Ambad      |             |
|    |                 | Services      | Nashik - 422010, India   |             |
| 9  | Mr. Rajeev      | EVP & COO     | ESDS (Software Solution  | Comp. Engg  |
|    | Papneja         |               | Private Limited), Nashik | Dept        |
| 10 | Mr. Suchit      | CEO           | Cognifront Software      |             |
|    | Ramchandra      |               | Private Limited, Nashik  |             |
|    | Tiwari          |               |                          |             |
| 11 | Mr. Milind      | MD, TRIARQ    | Co-founder and MD,       | Information |
|    | Ghyar           | Health,       | Glostream, Nashik        | Technology  |
| 12 | Mr. Milind      | Director,     | Neumann Systems          | Dept.       |
|    | Tanksale        |               | Consultancy Private      |             |
|    |                 |               | Limited, Nashik          |             |
| 13 | Mr. Shashank    | CEO           | UMS Tech Labs, Nashik.   | MCA Dept.   |
|    | Todwal          |               |                          |             |
| 14 | Mr. Sameer      | Asst Manager  | Zabuza Labs, Nashik      |             |
|    | Choudhari       | / HR Chief    |                          |             |
| 15 | Dr. Kiran Patil | Sr. G.M.      | Glennmark                | MBA Dept.   |
|    |                 |               | Pharmaceuticals Ltd,     |             |
|    |                 |               | Nashik                   |             |
| 16 | Mr. Rupesh      | R & D Head    | Sahyadri Farms, Nashik   |             |
|    | H. Khiste       |               |                          |             |

## 3.5.2 What is the stated policy of the institution to promote consultancy? How is the available expertise advocated and publicized?

- The management and institution promotes consultancy for their staff members and departments.
- The consultant fee is shared in the percentage 40:40:20 between the consultants, institution, MVP Sanstha respectively.
- The amount received from consultation is spent for further development of the research.

### 3.5.3 How does the institution encourage the staff to utilize their expertise and available facilities for consultancy services?

- The institution provides laboratory, testing & library facilities for the faculty.
- The institution also encourages the faculty for visits to industry and innovation Center.
- Faculty members are identifying the need based projects in the Industrial visit.
- The students are also work on these projects along with faculty members.

### 3.5.4 List the broad areas and major consultancy services provided by the institution and the revenue generated during the last four years.

Table 3.5.4. Area of Consultancy and Revenue Generated.

| Name of the | Academic | Area of Consultancy | Revenue      |
|-------------|----------|---------------------|--------------|
| Departments | Year     |                     | generated in |
|             |          |                     | Rs           |

|                         | 2013-14 | Surveying and Construction work  | 80,300/-    |
|-------------------------|---------|--|-------------|
| a                       | 2014-15 | Construction, structural audit and ground water surveying)                     | 1,97,000/-  |
| Civil<br>Engineering    | 2015-16 | Material Testing, Soil testing,<br>Rock Testing and Geological<br>Consultancy. | 1,54,700/-  |
|                         | 2016-17 | Material Testing, Ground water<br>Surveying, Soil Testing                      | 62,49,425/- |
|                         | 2014-15 | Vibration analysis   | 3,000/-     |
|                         |         | Tribology  | 8,500/-     |
| Mechanical              |         | Thermodynamics   | 10,000/-    |
| Engineering             | 2015-16 | Vibration analysis   | 1,03000/-   |
|                         |         | Tribology  | 2400/-      |
|                         | 2016-17 | Stress analysis  | 3000/-      |
|                         |         | Vibration analysis   | 20000/-     |
| Computer<br>Engineering | 2016-17 | Computer maintenance and printer repairing of MVP institutes                   | 1,00000/-   |



Fig 3.5.4 Inauguration of Soil testing Counsultancy work in civil engineering department.

## 3.5.5 What is the policy of the institution in sharing the income generated through consultancy (staff involved: Institution) and its use for institutional development

- The consultant fee is shared in the percentage 40:40:20 between the consultant, institution & NDMVP Sanstha respectively.
- The amount received from consultation is spent for further development of the research facilities.
- Facilities available in the institution are given for the consultancy.

#### 3.6 Extension Activities and Institutional Social Responsibility (ISR)

## 3.6.1 How does the institution promote institution-neighbourhood- community network and student engagement, contributing to good citizenship, service orientation and holistic development of students?

- To develop social responsibility, institute has established National Service Scheme unit in 2004 under the affiliating University SPPU-Pune.
- NSS unit arrange the seven day residential camp in which almost 75 students (both boys and girls) participate.
- This has helped in building a relation with the villagers and an understanding of their problems.
- Organizing cleaning camps at nearby villages through NSS.
- Social awareness programs like Blood donation camps organized.
- Making the college playground available to neighboring communities on weekends and allowing for hosting sports.
- Faculty publishes the articles in the leading newspapers which help to literate the common man for development in technology and scope of branch.
- List of program arrange for overall development of students detail is as follows.

Table 3.6.1 Student activity details

| Years   | Activity                   | Participant | Venue                            |
|---------|----------------------------|-------------|----------------------------------|
| 2016-17 | Road Safety Abhiyan        | 45          | Children Traffic Park,<br>Nashik |
|         | Health Checkup             | 580         | KTHM Campus                      |
|         | Blood Donation             | 102         | NDMVPS's KBTCOE                  |
|         | SwachhataMohim             | 75          | NDMVPS's KBTCOE                  |
|         | Matdar Nondani Abhiyan     | 250         | NDMVPS's KBTCOE                  |
| 2015-16 | Health Checkup             | 681         | KTHM Campus                      |
|         | Blood Donation Camp        | 85          | NDMVPS's KBTCOE                  |
|         | Road Safety Abhiyan        | 45          | NDMVPS's KBTCOE to               |
|         |                            |             | Gangapur road                    |
| 2014-15 | <b>Blood Donation Camp</b> | 103         | NDMVPS's KBTCOE                  |
|         | Tree Plantation            | 20          | NDMVPS's KBTCOE                  |
| 2013-14 | Blood Donation Camp        | 121         | NDMVPS's KBTCOE                  |
|         | Tree Plantation            | 20          | NDMVPS's KBTCOE                  |
|         | Ahinsa Din                 | 60          | NDMVPS's KBTCOE                  |



Figure 3.6.1 Student Activity

## 3.6.2 What is the Institutional mechanism to track students' involvement in various social movements / activities which promote citizenship roles?

- Institute has appointed senior faculty as Dean Student affairs.
- Institute has mentor scheme, class coordinator and Student's Association coordinator through which the students involvement in various social activities are observed.
- Mentors record the student achievement in such extension activities in the respective file.
- Institute has started Earn and Learn scheme in association with SPPU-Pune.
- The groups of students are actively involved in carrying out various social activities under Student welfare organization (SWO) SPPU-Pune under guideline.
- Academic Monitoring through ERP and ERP ID for each student.



Figure 3.6.2 Social Activities by Students

## 3.6.3 How does the institution solicit stakeholder perception on the overall performance and quality of the institution?

- External stakeholder and internal stakeholders are involved in overall performance and quality of institute.
- Certain formats have been designed to collect feedbacks from the internal stakeholders such as students, parents, and faculty.
- Student feedback conducted twice in year and corrective measures are taken.
- Suggestion boxes are kept at prime location in college building.
- Periodically performance reports are being sent regularly to parents through monthly attendance letter.
- Alumni meet are conducted and their feedback and suggestion are implemented for overall development of institute.
- Industry feedback collected and implemented at ground level.
- Management actively support and involved for implementation of suggestion and opinion of stakeholders.
- Assessment mechanisms such as placement survey result analysis and feedback analysis are also carried out simultaneously.
- Regular staff meetings to keep the staff updated about changes and developments of the institute.
- Parent-Teachers meeting are conducted to know about academic performance and quality of their wards and to provide constructive suggestions to improve the overall performance and quality of their wards and quality of institution.

# 3.6.4 How does the institution plan and organize its extension and outreach programmes? Providing the budgetary details for last four years, list the major extension and outreach programmes and their impact on the overall development of students.

- Every academic year various extension and outreach programmes are planned and executed viz. Blood donation camp, Engineers Day, Awareness Programme, NSS camp and tree plantation.
- The College arranges Industrial Visits & Vocational training for the students.
- The institute is arranging NSS camp in association with SPPU.
- The following table shows the details regarding extension and outreach programme.

Table 3.6.4 (A) NSS Activities details

| Years   | Activity               | Participant | Venue                            |
|---------|------------------------|-------------|----------------------------------|
| 2016-17 | Road Safety Abhiyan    | 45          | Children Traffic Park,<br>Nashik |
|         | Health Checkup         | 580         | KTHM Campus                      |
|         | Blood Donation         | 102         | NDMVPS's KBTCOE                  |
|         | SwachhataMohim         | 75          | NDMVPS's KBTCOE                  |
|         | Matdar Nondani Abhiyan | 250         | NDMVPS's KBTCOE                  |
| 2015-16 | Health Checkup         | 681         | KTHM Campus                      |
|         | Blood Donation Camp    | 85          | NDMVPS's KBTCOE                  |
|         | Road Safety Abhiyan    | 45          | NDMVPS's KBTCOE                  |
| 2014-15 | Blood Donation Camp    | 103         | NDMVPS's KBTCOE                  |
|         | Tree Plantation        | 20          | NDMVPS's KBTCOE                  |
| 2013-14 | Blood Donation Camp    | 121         | NDMVPS's KBTCOE                  |
|         | Tree Plantation        | 20          | NDMVPS's KBTCOE                  |
|         | Ahinsa Din             | 60          | NDMVPS's KBTCOE                  |





Blood Donation Camp



Students Volunteering for blood Donation Camp with Education Officer Dr.N.S.Patil, NSS Officer

Figure 3.6.4 NSS Activities

Table 3.6.4. (B) Budgetary provision and expenditure for NSS Scheme:

| Sr. No | Year    | Amount budgeted in Rs. |
|--------|---------|------------------------|
| 1      | 2016-17 | 75,750/-               |
| 2      | 2015-16 | 75,750/-               |
| 3      | 2014-15 | 75,750/-               |
| 4      | 2013-14 | 75,750/-               |

## 3.6.5 How does the institution promote the participation of students and faculty in extension activities including participation in NSS, NCC, YRC and other National/International agencies?

- The information about the proposed activities is display on the college notice board, circulars, web notifications and notice circulated in every class room for interested student participation.
- Provision of fund to conduct the NSS camp.
- University gives the special certification to each volunteer.
- Institute allots responsibility to the program officer for overall execution and activity related to NSS.

• Committee of NSS include-Principal (President), Programme Officer and, Members/Volunteers.



Figure 3.6.5. Staff and Student Activities

3.6.6 Give details on social surveys, research or extension work (if any) undertaken by the college to ensure social justice and empower students from under-privileged and vulnerable sections of society?

- Students have planted tree in college campus.
- Blood donation camps are organized by NDMVP, KBTCOE every year.

Table 3.6.6. College Social Activity for Students

| Activity                               | Venue              | Benefits  | Years   |
|--|--------------------|---|---------|
| Blood Donation Camp                    | NDMVPS's<br>KBTCOE | Social work   | 2016-17 |
| Blood Donation Camp<br>Tree plantation | NDMVPS's<br>KBTCOE | Social work, Environment awareness, climate control | 2015-16 |
| Blood Donation Camp<br>Tree plantation | NDMVPS's<br>KBTCOE | Social work, Environment awareness, climate control | 2014-15 |
| Blood Donation Camp<br>Tree plantation | NDMVPS's<br>KBTCOE | Social work, Environment awareness, climate control | 2013-14 |



Figure 3.6.6 College Social Activities

3.6.7 Reflecting on objectives and expected outcomes of the extension activities organized by the institution, comment on how they complement students' academic learning experience and specify the values and skills inculcated.

- **Objective:** The objective of extension activity is students from the NSS participated in annual rural camps enable the volunteers to get a feel of life in the rural areas through interaction with the local people, understanding their problems, encouraging their children to enroll in schools. The overall objective of NSS scheme is 'Education and Service' to the community and by the community.
- Outcomes: Students aware about their social responsibility and their role. Extension activity develops the skill of students in overall development in their personality, confidence level, team work and leadership quality. The entrepreneurships skills are also developed among the students.

# 3.6.8 How does the institution ensure the involvement of the community in its reach out activities and contribute to the community development? Detail on the initiatives of the institution that encourage community participation in its activities?

- The important initiative taken by institute to organized the various activities such as blood donation camp, tree plantation, Road Safety Abhiyan, Swachhata Mohim, Matdar Nondani Abhiyan and through these activities institute involves community in extension work.
- NSS students visits rural area and involve the villagers in their group activity.
- The NSS volunteers take initiative in developing a Technocratic Environment and also help the underprivileged people to develop themselves.
- Institute has established Dr. Vasantrao Pawar Young Engineers Lab at Horizon Academy school to provide technical knowledge to school children.
- Institute has established First Automation Training Center in collaboration with FOX CONTROLS Nashik.

- Institute organizes the various program at community places during NSS winter camp such as cultural program to involve the local people.
- Institute NSS volunteers during winter camp visit the rural areas and spread awareness about social issues such as environmental protection, tree plantation, Cleanliness Drives etc.
- The Institute has participated in the clean and green city campaign under the mission of 'Clean Godavari'.
- The Institute promotes environmental and social awareness amongst the faculty and student community by celebrating Yoga day and Environment day.



Fig no 3.6.8 Inauguration function of Dr. Vasantrao Pawar Young Engineers Lab by Scientist Dr. Govarikar.

## 3.6.9 Give details on the constructive relationships forged (if any) with other institutions of the locality for working on various outreach and extension activities.

- The institution involved communities to actively participate in all the extension activities.
- This has contributed to both community-institution networking and development of institute.
- The institute is arranging NSS camp at various villages.
- The following table shows the details regarding extension and outreach activities.

Table 3.6.9. List of Camp Organized by NSS Unit in last four years

| Name of Camp   | Date/Durati | Detail of work under taken | Place of  |
|----------------|-------------|----------------------------|-----------|
|                | on          | camp                       | Camp      |
| Special Winter | 19/12/2016  | 1.Avayav danAbhiyan        | Tiradshet |
| Camp           | to          | 2.Woman Empowerment        |           |

|                | 25/12/20 16 | 3.Personality Development Camp |              |
|----------------|-------------|--------------------------------|--------------|
|                |             | 4.Environment Awareness        |              |
|                |             | 5.ApattiManagement             |              |
| Special Winter | 21/12/2015  | 1.Gramswachhata Abhiyan        | Govardhan    |
| Camp           | to          | 2.Woman Empowerment            |              |
|                | 27/12/2015  | 3.Personality Development Camp |              |
|                |             | 4.Environment Awareness        |              |
|                |             | 5.Apatti Management            |              |
| Special Winter | 15/12/2014  | 1.GramSwachhata Abhiyan        | Trimbakeshwa |
| Camp           | to          | 2.Plastic Nirmulan             | r            |
|                | 21/12/2014  | 3.Road Safety Awareness        |              |
| Special Winter | 23/12/2013  | 1.Environment Awareness        | Matori       |
| Camp           | to          | 2.GramSwachhata Abhiyan        |              |
| _              | 30/12/2013  | 3.Tree Plantation              |              |
|                |             | 4.Woman Empowerment            |              |

## 3.6.10 Give details of awards received by the institution for extension activities and/contributions to the social/community development during the last four years.

- Institute received the award from SPPU-NSS Unit in magazine competition III<sup>rd</sup> Prize for college annual magazine 'Abhivyakti' in year 2012-13.
- NSS program officer received appreciation letter and momento at the various place of winter camp conducted by institute.



Figure 3.6.10 Award received by Institution

#### 3.7 Collaboration

3.7.1 How does the institution collaborate and interact with research laboratories, institutes and industry for research activities. Cite examples and benefits accrued of the initiatives - collaborative research, staff exchange, sharing facilities and equipment, research scholarships etc.

- The collaboration with professional society chapters provides opportunities to conduct number of events. Various departments have memberships with student chapters.
- In order to strengthen industry-institute interaction, 50% project, are industry sponsored and rest of the 50% is in-house project.
- Faculty granted for hand of equipment training at industry.
- Industrial visit are organized by department at every semester.
- Most of the faculty having membership in various Professional Bodies like IEEE, IETE, SAE, CSI, IEI, ISTE

# 3.7.2 Provide details on the MoUs/collaborative arrangements (if any) with institutions of national importance/other universities/ industries/Corporate (Corporate entities) etc. and how they have contributed to the development of the institution.

Table 3.7.2. List of MoUs/ Collaborations

| Sr. | Name of Organization       | Purpose of MoUs/ Activity       | Name of the     |
|-----|----------------------------|---------------------------------|-----------------|
| No. | Signing MoU                |                                 | Beneficiary     |
|     |                            |                                 | department      |
| 1   | Systems, Application and   | Train the students in SAP       | MBA, MCA,       |
|     | product in data Processing | modules HCM (Human              | Computer,       |
|     | (SAP), Banglore            | Capital management), SD         | Mechanical,     |
|     |                            | (sales and Distribution),       | E&Tc,           |
|     |                            | ABAP (Advanced Business         | IT, Civil       |
|     |                            | Application Programing, FI      | and             |
|     |                            | (Financial Accounting) and      | Instrumentation |
|     |                            | MM (material Mangment) to       | and Cotrol      |
|     |                            | understand the busness          | Engineering     |
|     |                            | activites of the organization   |                 |
| 2   | Zensar Technologies, Pune. | To train the students in        | Computer        |
|     |                            | employability skills, JAVA      | Engineering     |
|     |                            | and Advanced JAVA course        | and Information |
|     |                            |                                 | Technology      |
| 3   | Fox Solutions Nashik       | Industrial Training, Industrial |                 |
|     |                            | Visit, Projects, Placements,    |                 |
|     |                            | Expert Talks                    |                 |
| 4   | Microtech System Services  | Knowledge sharing, In plant     |                 |
|     | Nashik                     | Training, Industrial Visit,     |                 |
|     |                            | Campus Placement                | T., . 4 4 . 4   |
| 5   | Boost Electronics, Ambad,  | Industrial Training, Industrial | Instrumentation |
|     | Nashik                     | Visit, Projects, Placements.    | and Control     |
| 6   | Visionary Technologies,    | Knowledge sharing, In plant     | Engineering     |
|     | Nashik.                    | Training, Industrial Visit,     |                 |
|     |                            | Campus Placement                |                 |
| 7   | Teknocrat's academy of     | Industrial Training, Industrial |                 |
|     | Automation & Control       | Visit, Projects, Placements.    |                 |
|     | Technologies Nashik        |                                 |                 |
| 8   | Copper Track Industries,   | Industrial Training, Industrial |                 |
|     | Nashik                     | Visit, Projects, Placements.    |                 |

| 9          | Shriharsh Electronics,           | Industrial Training, Industrial      |          |
|------------|----------------------------------|--------------------------------------|----------|
| 2          | Nashik                           | Visit, Projects, Placements.         |          |
| 10         | Cyberedge Web Solutions          | Knowledge sharing, Industrial        |          |
| 10         | Pvt. Ltd. Nashik                 | Visit, Campus Placement,             |          |
|            | 1 vt. Ltd. Tvasink               | Internship                           |          |
| 11         | Emerging Technologies            | Knowledge sharing, Industrial        |          |
| 1.1        | Nashik                           | Visit, Campus Placement,             |          |
|            | Tushik                           | Internship                           |          |
| 12         | UMS Tech Labs Nashik             | Knowledge sharing, Industrial        |          |
| 1,2        | OWIS Teen Labs Ivasilik          | Visit, Campus Placement,             | MCA      |
|            |                                  | Internship                           |          |
| 13         | Internauts ,A Web Design         | Knowledge sharing, Industrial        |          |
| 13         | Agency, Nashik                   | Visit, Campus Placement,             |          |
|            | 7 igency,i tusink                | Internship                           |          |
| 14         | Zabuza Labs, Nashik              | Knowledge sharing, Industrial        |          |
| 1          | Zaodza Zaos, rasink              | Visit, Campus Placement,             |          |
|            |                                  | Internship                           |          |
| 15         | Sampoorna Bamboo                 | Knowledge Sharing                    |          |
| 10         | Kendra Address: Lavada,          | This wrongs smaring                  |          |
|            | Melghat, Amravati.               |                                      |          |
| 16         | Sunrise Candles                  | Knowledge sharing, Industrial        |          |
| 10         | Moreshwar,                       | Visit, Campus Placement              |          |
|            | Mahabaleshwar, Satara            | Tisto, Cumpus Tiucemoni              | MDA      |
| 17         | Sahyadri Agro Farms              | Knowledge sharing, In plant          | MBA      |
|            | Nashik                           | Training, Industrial Visit,          |          |
|            |                                  | Campus Placement                     |          |
| 18         | Startup Farms Nashik             | Knowledge sharing, Campus            |          |
|            |                                  | Placement                            |          |
| 19         | Swati Investment Nashik          | Knowledge sharing, Campus            |          |
|            |                                  | Placement                            |          |
| 20         | Astiwz Infotech, Nashik          | Knowledge sharing, In Plant          |          |
|            | ,                                | Training                             |          |
| 21         | Avasthi's IT Training and        | Knowledge sharing, In Plant          | Computer |
|            | Solution(AITS), Nashik.          | Training                             | 1        |
| 22         | ·                                |                                      |          |
| 22         | Advent Engineer's, Nashik        | Knowledge sharing, In Plant Training |          |
| 23         | Spectra Innovation, Nashik       | Knowledge sharing, In plant          |          |
| 23         | Specifa Innovation, Nasilik      | Training, Industrial Visit,          |          |
|            |                                  | Campus Placement                     |          |
| 24         | Quantaflux Technology            | Knowledge sharing, In plant          |          |
| <i>∠</i> + | Solution Pvt. Ltd Pune           | Training, Industrial Visit,          |          |
|            | Solution 1 vt. Ltd 1 unc         | Campus Placement                     |          |
| 25         | Yashika Energy Systems           | Knowledge sharing, In plant          | E & TC   |
| 23         | Pvt. Ltd, Ashok Shambh,          | Training, Industrial Visit,          |          |
|            | Nashik                           | Campus Placement                     |          |
| 26         | Celestial Plastic Hub,           | Knowledge sharing, In plant          |          |
| 20         | MIDC Ambad, Nashik               | Training, Industrial Visit,          |          |
|            | initional, mastire               | Campus Placement                     |          |
| 27         | Digilog Systems, Nashik          | Knowledge sharing, In plant          |          |
| <i></i> /  | 1 2 151105 by sterins, I tasilik | 1 mo wrouge snaring, in plant        |          |

|    |                           | Training, Industrial Visit,    |            |
|----|---------------------------|--------------------------------|------------|
|    |                           | Campus Placement               |            |
| 28 | Anubhooti Infractructures | Site Visit, Knowledge          |            |
|    | Pvt. Ltd. Nashik          | Shearing, On -Site training    |            |
| 29 | Niwara Builders and       | Site Visit, Knowledge Sharing, | G1 11      |
|    | Developers Nashik         | On -Site training              | Civil      |
| 30 | Jalchintan Engineering    | Site Visit, Knowledge Sharing, |            |
|    | Trust Nashik              | On -Site training              |            |
| 31 | Akash Industries Nashik   | Industrial Visit, Project work |            |
| 32 | Deol Industries Nashik    | Industrial Visit knowledge     |            |
|    |                           | sharing                        | Mechanical |
| 33 | Bhagyashree Engineering   | Industrial Visit. Project      |            |
|    | Pvt. Ltd Nashik           | knowledge sharing              |            |
| 34 | Winjit Technology, Nashik | Training, Projects, Visits     |            |
| 35 | Glostream Technology,     | Training, Projects, Visits     |            |
|    | Nashik                    |                                | IT         |
| 36 | Neumann Systems           | Training, Projects, Visits     | 11         |
|    | Consultancy Pvt. Ltd,     |                                |            |
|    | Nashik                    |                                |            |

3.7.3 Give details (if any) on the industry-institution-community interactions that have contributed to the establishment / creation/up-gradation of academic facilities, student and staff support, infrastructure facilities of the institution viz. laboratories/library/new technology/placement services etc.

Table 3.7.3 Industry donated parts of equipments to department

| Sr. | Name of       | Activity       | Contributed to                    |           |                |
|-----|---------------|----------------|-----------------------------------|-----------|----------------|
| No  | Industry      | conducted      | Establishment Student Infrastruct |           | Infrastructure |
|     | Intuition     |                | of Facility                       | and staff | Facility       |
|     | community     |                |                                   | support   |                |
| 1.  | Kirloskar Oil | Donated        | 2006                              | Practical | Development    |
|     | Engine Ltd,   | accessories of |                                   | exposure  | of Thermal     |
|     | Ambad,        | Thermal        |                                   |           | Engg.Lab       |
|     | Nashik        | Engg.Lab       |                                   |           |                |

• Institute established a industry institute interaction cell

#### **Activities:**

- Formation of the III Cell at Institute.
- Framing the Manual /guidelines of Industry Institute Interaction and distribute to department.
- Formation of Departmental Advisory body & Institute level advisory board.
- To finalize the training need.
- Activity Calendar, Expert lectures by eminent personalities, Industry experts on recent trends in correlation with syllabus.
- Workshops organized based on industry need.
- Industrial visits.
- Sponsored projects, training programs, symposiums etc.
- In plant training to students and staff.
- National level symposiums for students.
- Sponsored consultancy work.

## 3.7.4 Highlighting the names of eminent scientists/participants who contributed to the events, provide details of national and international conferences organized by the college during the last four years.

Table 3.7.4. List of resource person of eminent scientists at institute organized conference

| Name of<br>Departmen<br>t          | National/<br>Internation<br>al<br>Conference   | Name of the Eminent Scientists / participant  | Descripti<br>on of<br>contribut<br>ion to<br>Event | Year                           |
|------------------------------------|--|---|--|--------------------------------|
| Mechanical                         | Tribological<br>Aspects in<br>Design"<br>State Level<br>Workshop                       | 1.Mr.N.L.Soni.Senior Scientist,<br>BARC,Mumbai<br>2. Dr.D.V.Bhat, Professor, SVNIT,<br>Surat.<br>3.Dr.V.M.Phalle,Head<br>VJTI,Mumbai  | Resource<br>Person                                 | 2013-14                        |
|                                    | State level<br>workshop on<br>Emerging<br>Trends In<br>Heat<br>Transfer<br>Engineering | 1.Dr. K.N. Iyer (IIT Mumbai) 2.Dr. R.P.Vedula (IIT Mumbai) 3.Dr. SridharaSheshadri (IIT Mumbai) 4.Dr.R.S.Jha, Manager (Innovation), ThermaxLtd,Pune. 5.Dr.AvsarLakdawala,NirmaUniver sity,Ahmedabad. 6. Dr.ParagSonawane, Director (R &D), AIMID Ltd,Shenzen,China 7. Shri. Rajendra Kumar Das, Vice President, CEAT Ltd, Nashik. 8. Dr. PankajJagad, Nirma University, Ahemedabad. 9.Dr.Atul Srivastava (IIT Mumbai) | Resource<br>Person                                 | 2015-16                        |
| Computer                           | Kshitij 2014   | Mr. Sunil Khandbhale  | Marathi<br>Shabdhko<br>sh                          | 2013 -<br>2014                 |
|                                    | Kshitij 2015  Kshitij 2016   | Mr. Suchit R. Tiwari  Dr. Rajeev Papneja  | Innovativ e Learning Cyber                         | 2014-<br>2015<br>2015-         |
| Instrumentat<br>ion and<br>Control | NVIDIA<br>CCOE IITB<br>Professors<br>Meet  | Mr. VikasNaik Dr. Paluri S. V. Nataraj  | Security Resource Person                           | 2016<br>2013-<br>2014          |
| MBA                                | National<br>Conference   | Mr.MansukhbhaiPrajapati<br>Mr.Bhavesh Bhatia  | Key Note<br>Speaker<br>Key Note<br>Speaker         | 2016-<br>2017<br>2016-<br>2017 |
|                                    |  | Dr.OmprakashKulkarni and<br>Mr.YashovardhanBaramatikar  | Panelist   | 2017<br>2016-<br>2017          |

- 3.7.5 How many of the linkages/collaborations have actually resulted in formal MoUs and agreements? List out the activities and beneficiaries and cite examples (if any) of the established linkages that enhanced and/or facilitated -
- a) Curriculum development/enrichment
- b) Internship/On-the-job training
- c) Summer placement
- d) Faculty exchange and professional development e) Research
- f) Consultancy
- g) Extension
- h) Publication
- i) Student Placement
- j) Twinning programmes
- k) Introduction of new courses
- 1) Student exchange
- m) Any other
- c) Summer placement

Table 3.7.5.(A). Detail of Summer placement

| Sr. | Name of         | Name of Placement program                | Name of             |
|-----|-----------------|--|---------------------|
| No  | Department      |  | Organization        |
| 1.  | Instrumentation | Vacational training program on Study     | Rashtriya           |
|     | and Control     | of DCS, PLC and Instrumentation          | Chemicals &         |
|     | Engineering     | Maintenance Practices in Nitric Acid     | Fertilizers LTD     |
|     |                 | Plant from 15-30 <sup>th</sup> June 2014 |                     |
|     |                 | Vocational training program on Study     | TAACT, Nashik       |
|     |                 | of PLC and Instrumentation from May      |                     |
|     |                 | 2016                                     |                     |
| 2.  | Computer        | Zensar Java Training                     | Zensar              |
|     | Engineering     |  | Technology, Pune    |
|     |                 | Zensar SQL training                      | Zensar              |
|     |                 |  | Technology, Pune    |
| 3.  | Mechanical      | Summer/Winter Training                   | Drill Bit Pvt. Ltd, |
|     | Engineering     | (2015-16)                                | Satpur,             |
|     |                 |  | MIDC.BOSCH          |
|     |                 |  | Ltd., Satpur,       |
|     |                 |  | MIDC.               |
|     |                 |  | Atlas Copco Ltd     |
|     |                 |  | Mahindra Sona       |
|     |                 |  | Pvt. Ltd.           |
| 4   | Mechanical      | Summer/Winter Training (2014-15)         | BOSCH Ltd.          |
|     | Engineering     |  | Satpur, MIDC.       |
|     |                 |  | HAL, Ozar Nashik    |
|     |                 | Summer/Winter Training (2013-14)         | Mahindra &          |
|     |                 |  | Mahindra Ltd.       |

#### d) Faculty exchange.

Table 3.7.5.(B) Faculty exchange detail

| Sr.<br>No. | Name of<br>Faculty                      | Name of the Programme | Name of institute   | Duration   |            |
|------------|---|-----------------------|---------------------|------------|------------|
|            | _ = =================================== |                       |                     | From       | To         |
| 1          | Dr. B. B.                               | Visiting              | K.K W. Institute of | 13/07/2015 | 30/06/2016 |
|            | Musmade                                 | Professor             | Engineering         |            |            |
|            |   | M.E.                  | Education and       |            |            |
|            |   | (Electrical)          | Research, Nashik    |            |            |
| 2          | Mr.N.J.Salunke                          | Visiting              | IGNOU,Nashik        | 01/06/2013 | Till date  |
|            |   | Lecture               |                     |            |            |
|            |   | Management            |                     |            |            |

#### k) Introduction of new courses

Table 3.7.5.(C) Detail of New courses started by institute

| Name of     | Acade | Name of               | Name of the              | Intake      |
|-------------|-------|-----------------------|--------------------------|-------------|
| Department  | mic   | Course                | Programme                |             |
|             | Year  |                       | Sanctioned               |             |
| Mechanical  | 2012- | PG                    | Design Engineering       | 24          |
| Engineering | 2013  |                       |                          |             |
| Civil       | 2012- | PG                    | ME Construction and      | 24          |
| Engineering | 2013  |                       | Management               |             |
| NDMVPS's    | 2016- | Pradhan Mantri        | 1 Construction-          | 25          |
| KBTCOE-     | 2017  | Kaushal VikasYojana,  | Assistant Electrician    |             |
| Nashik      |       | Govt.of India         | 2 Electronics &          | 25          |
|             |       |                       | Hardware Test &          |             |
|             |       |                       | Repair Technician        |             |
|             |       |                       | 3.A. Iron & steel fitter | 25          |
|             |       |                       | and maintenance water    |             |
|             |       |                       | cooler                   | 25          |
|             |       |                       | 4.B. Plumbing (Plumber   |             |
|             |       |                       | after sales service)     |             |
| NDMVPS's    | 2016- | PGD In Computer       | PGD In Computer          | 20          |
| KBTCOE-     | 2017  | Aided Product         | Aided Product Design     |             |
| Nashik      |       | Design, MHRD,         |                          |             |
|             |       | SPPU, Pune            |                          |             |
|             |       | Degine and            | Design and               | No limit    |
|             |       | implementation of     | implementation of        | for         |
|             |       | signal and sensor     | signal and sensor        | participati |
|             |       | technology, MHRD,     | technology               | on          |
|             |       | SPPU, Pune            |                          |             |
|             |       | Advance and           | Advance and innovative   |             |
|             |       | innovative techniques | techniques of            |             |
|             |       | of envornment and     | envornment and           |             |
|             |       | watershed             | watershed management     |             |
|             |       | management MHRD,      | MHRD, SPPU, Pune         |             |
|             |       | SPPU, Pune            |                          |             |
| NDMVPS,s    | 2016- | Authorized SAP        | SAP Modules              |             |

| KBTCOE- | 2017 | Center | 1. HCM (Human        |
|---------|------|--------|----------------------|
| Nashik  |      |        | Capital management)  |
|         |      |        | 2. SD (sales and     |
|         |      |        | Distribution),       |
|         |      |        | 3.ABAP (Advanced     |
|         |      |        | Business Application |
|         |      |        | Programing,          |
|         |      |        | 4. FI (Financial     |
|         |      |        | Accounting) and      |
|         |      |        | 5. MM (Material      |
|         |      |        | Mangment)            |

#### i) Student Placement

Table 3.7.5.(D) Shows Institute student Placement

| Academic year | No of student placed | Organizations   |
|---------------|----------------------|---|
| 2016-17       | 19                   | Infosys Ltd, Mahindra and   |
| 2015-16       | 86                   | Mahindra Ltd. Nashik, TCS   |
| 2014-15       | 71                   | Bridgestone Ltd., Persistent  |
| 2013-14       | 49                   | Computer System Ltd., Zensar Ltd, L&T Infotech Ltd, Eternus Solutions Ltd., Rishabh Instruments Ltd., Softenger, Triveni Turbines Ltd., Aress Software Ltd., Armstrong machine Builders Pvt Ltd, XL Dynamics Ltd., Technoforce Ltd, ACE solutions Ltd, Netwininfoystems Ltd.,           |
|               |                      | Datamatics Ltd, Quickheal Ltd, Indian Oil nashik, Mphasis, Amazon(I) Ltd, Syntel, FACE, Saama Technologies Ltd, Ukay Metals, Anix Ltd, Bosch Ltd CMS Ltd, AGS Transact Technologies, Prompeii, DigiteInfotech Ltd, Winjit Technologies, GlaxoSmithkine, Mylan, Prothious Ltd, Capgemini |

3.7.6 Detail on the systemic efforts of the institution in planning, establishing and implementing the initiatives of the linkages/ collaborations. Any other relevant information regarding Research, Consultancy and Extension which the college would like to include.

- Institute departments organized Industrial visit with the help of various collaborating agencies.
- Institute grants leave for faculty to take advanced training in related institutions/industries.
- Institute inviting expertise from various industries for delivering guest lectures, key note address in conferences, workshops and symposiums.
- Institute offers the labs, library, training and other facilities for development of linkages.
- Institute has appointed senior faculty member as a Dean Industry institute interaction Cell for enhancing the collaboration/linkages.

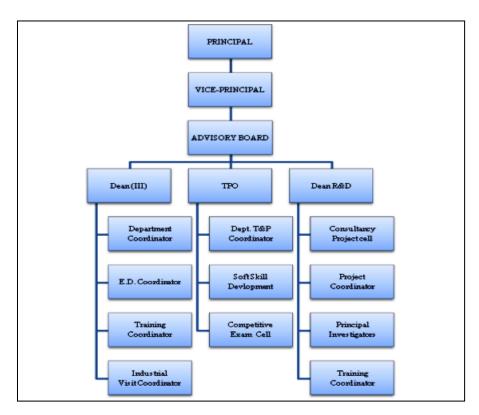


Fig 3.7.6 (A) Organogram shows structure of Industry-Institute-Interaction Cell, Training and Placement Cell, Research consultancy.



Figure 3.7.6 (B) Industrial Visits

#### CRITERION IV: INFRASTRUCTURE AND LEARNING RESOURCES

## 4.1.1 What is policy of the institution for creation and enhancement of infrastructure that facilitate effective teaching and learning.

- Institute has sufficient infrastructure which meets the needs of all the stakeholders in the institutes.
- Institute provides LCD projectors and internet facility in all the classrooms for easy teaching and learning of the students.
- Institute has well equipped laboratories for the students to do practical and demonstrations which enhance the learning process.
- Institute provides huge collections of books in its library with OPAC software to search the status of the book.
- There is provision of digital library to get access to e-books ,e-journals and e-Learning
- Institute has always tried to maintain the comfortable environment and infrastructure for teaching and learning.

#### 4.1.2 Detail the facilities available for

(a) Curricular and co curricularactivities- class rooms, technology enabled learning spaces, seminar hall, tutorial spaces, labrotories, botanical garden, animal house, specialized facilities and equipment for teaching learning and research.

Name of Branch: Civil Engineering

Sanctioned Intake: UG-60 Sanctioned Intake: PG-24

Table 4.1.2.(A) Detail description of the spaces at Civil Engineering Department

| Room<br>No | Particulars           | Required Area as per<br>AICTE in Sq. Mtrs. | Available Area in Sq. Mtrs. |
|------------|-----------------------|--|-----------------------------|
| C505       | Class Room            | 66.00                                      | 90.66                       |
| C102       | Class Room            | 66.00                                      | 90.66                       |
| C103       | Tut/common Room       | 33.00                                      | 34.81                       |
| C104       | Seminar hall          | 132.00                                     | 242.00                      |
| C105       | Staff/ room /Dept lib | -  | 32.22                       |
| C106       | Geo Technical         | 66.00                                      | 80.93                       |
| C106A      | Class Room            | 66.00                                      | 66.00                       |
| C107       | Transportation engg.  | 66.00                                      | 77.10                       |
| C107A      | Class Room            | 66.00                                      | 66.00                       |
| C108       | Fluid Mechanics Lab   | 66.00                                      | 77.00                       |
| C109       | Material testing Lab  | 66.00                                      | 66.00                       |
| C109A      | Concrete tech. Lab    | 66.00                                      | 66.00                       |
| C109B      | Tutorial Room         | 33.00                                      | 34.16                       |
| C201       | Class Room            | 66.00                                      | 84.138                      |
| C202       | Class Room/ Drawing   | 132.00                                     | 132.00                      |

|       | hall                  |          |        |
|-------|-----------------------|----------|--------|
| C204  | Chemistry Lab         | 66.00    | 146.00 |
| C203  | Physics lab Lab       | 66.00    | 146.00 |
| C207  | Environment           | 66.00    | 80.92  |
| C207A | PG Lab                | 66.00    | 66.00  |
| C208  | Engineering mechanics | 66.00    | 77.103 |
| C208A | Survey Lab            | 66.00    | 66.00  |
| C209  | Engineering Geology   | 66.00    | 77.103 |
| C210  | PG Lab                | 66.00    | 93.06  |
| C210  | Computer Lab          | 150.00   | 72.40  |
|       | Total Are             | 2064.264 |        |



Fig 4.1.2. (A) Civil department experiment laboratory

## Name of Branch: Instrumentation and control Engineering Sanctioned Intake: 60

Table 4.1.2. (B) Detail description of the spaces at instrumentation and control Engg.

| Room<br>No | pariculars            | Required Area in Sq.<br>Mtrs. | Available Area in Sq.<br>Mtrs. |
|------------|-----------------------|-------------------------------|--------------------------------|
| C301       | Class Room            | 66.00                         | 90.66                          |
| C302       | Class Room            | 66.00                         | 90.66                          |
| C303       | Common Room           | 33.00                         | 34.81                          |
| C304A      | Electronics Lab       | 66.00                         | 72.6                           |
| C304B      | Basic Instrumentation | 66.00                         | 85.56                          |

| C305  | Class Room         | 66.00 | 95.20  |
|-------|--------------------|-------|--------|
| C307A | Process            | 66.00 | 72.72  |
|       | Instrumentation    |       |        |
| C307B | Lab                | 66.00 | 66.00  |
| C308  | Sensor Transducer  | 66.00 | 72.89  |
| C309  | DCS and Simulation | 66.00 | 72.89  |
|       | Lab                |       |        |
| C310  | BMI Lab & AI lab   | 66.00 | 77.39  |
| C311A | Computer center    | 66.00 | 66.00  |
| C311B | DSP and microwave  | 66.00 | 66.00  |
|       | Lab                |       |        |
| C311C | Tutorial room      | 33.00 | 33.00  |
|       | Total              |       | 996.38 |

## Name of Branch: Electronics and Telecommunication Engineering Sanctioned Intake: 60

Table 4.1.2.(C) Detail description of the spaces at E&TC Engg.

| Room<br>No | Particulars                                     | Required Area in Sq. Mtrs. | Available Area in Sq. Mtrs. |
|------------|---|----------------------------|-----------------------------|
| C401       | Class Room                                      | 66.00                      | 90.66                       |
| C402       | Class Room                                      | 66.00                      | 90.66                       |
| C403       | Common Room                                     | 33.00                      | 34.81                       |
| C404A      | PCB design project Lab                          | 66.00                      | 79.23                       |
| C404B      | Lab   | 66.00                      | 66.00                       |
| C405       | Class Room                                      | 66.00                      | 95.20                       |
| C406       | HOD cabin                                       | 10.00                      | 32.22                       |
| C407       | Power Electronics Lab & Mech.<br>Mesurement Lab | 66.00                      | 146.93                      |
| C408       | Elex.measurement Lab                            | 66.00                      | 110.12                      |
| C409       | Analog Lab                                      | 66.00                      | 110.00                      |
| C410       | VLSI Design Lab                                 | 66.00                      | 72.47                       |
| C410A      | Comp Center                                     | 66.00                      | 46.03                       |
| C501       | Class Room                                      | 66.00                      | 90.66                       |
| C502       | Class Room                                      | 66.00                      | 90.66                       |
| C503       | Common Room                                     | 33.00                      | 34.81                       |
| C505       | Common Room                                     | 10.00                      | 32.22                       |
| C507       | Electrical M/C Lab                              | 66.00                      | 146.93                      |
| C507       | Basic electronics Lab                           | 66.00                      | 110.00                      |
| C508       | Basic electrical Lab                            | 66.00                      | 110.00                      |

| C510A | Microprocessor Lab    | 66.00 | 72.87   |
|-------|-----------------------|-------|---------|
| C510B | Digital Microwave Lab | 66.00 | 46.03   |
| Total |                       |       | 1853.74 |



Fig 4.1.2 (B) Electrical lab

Name of Branch: Information Technology Engineering Sanctioned Intake: 60

Table 4.1.2. (D) Detail description of the spaces at Information Technology

| Particulars | Room No/Name    | Required Area in Sq. Mtrs. | Available Area in Sq. Mtrs. |
|-------------|-----------------|----------------------------|-----------------------------|
| C601        | Class Room      | 66.00                      | 90.66                       |
| C602        | Class Room      | 66.00                      | 90.66                       |
| 605         | Class Room      | 66.00                      | 95.66                       |
| C603        | L.common Room   | 33.00                      | 34.818                      |
| C604        | Language Lab    | 66.00                      | 72.75                       |
| C604A       | Computer Lab    | 150.00                     | 84.76                       |
| C607A       | Project Lab     | 66.00                      | 76.29                       |
| C607B       | Programming Lab | 66.00                      | 73.50                       |

| C608  | Software Lab            | 66.00 | 73.50   |
|-------|-------------------------|-------|---------|
| C609  | Multimedia Lab          | 66.00 | 73.50   |
| C610A | Microprocessor Lab      | 66.00 | 72.79   |
| C610B | Computer Network<br>Lab | 66.00 | 72.79   |
| C504  | IT Lab                  | 66.00 | 145.23  |
| Total |                         |       | 984.158 |



Fig 4.1.2.(C) Project lab



Fig 4.1.2 (D) Information Technology Department

Name of Branch: Computer Engineering

**Sanctioned Intake: 60** 

Table 4.1.2. (E). Detail description of the spaces at Computer Engg.

| Room No/<br>Name | Particulars        | Required Area in Sq.<br>Mtrs. | Available Area in Sq.<br>Mtrs. |
|------------------|--------------------|-------------------------------|--------------------------------|
| B301             | Class Room         | 66.00                         | 109.28                         |
| B302             | Class Room         | 66.00                         | 109.28                         |
| B401             | Class Room         | 66.00                         | 109.28                         |
| B402             | Class Room         | 66.00                         | 109.28                         |
| B303             | Drawing hall       | 132.00                        | 182.14                         |
| B304             | Dept. Library      | -                             | 39.33                          |
| B306             | Software Lab       | 66.00                         | 66.00                          |
| B306A            | Comp Lab           | 66.00                         | 80.517                         |
| B307             | Project Lab        | 66.00                         | 66.00                          |
| B308             | Computer center    | 150.00                        | 110.28                         |
| B309             | Network lab        | 66.00                         | 183.75                         |
| B309B            | Tutorial Room      | 33.00                         | 51.75                          |
| B403             | Seminar Hall       | 150.00                        | 182.14                         |
| B404             | Tutorial Room      | 33.00                         | 39.67                          |
| B406             | Programming<br>Lab | 66.00                         | 147.00                         |
| B407             | Linux lab          | 66.00                         | 109.28                         |
| B408             | Multimedia Lab     | 66.00                         | 109.28                         |
|                  | Total              |                               | 1804.257                       |

Name of Branch: Mechanical Engineering

Sanctioned Intake: UG-120 Sanctioned Intake: UG-24

Table 4.1.2.(F). Detail description of the spaces at Mechanical Engg.

| Particulars | Room No/Name | Required Area in Sq. Mtrs. | Available Area in Sq. Mtrs |
|-------------|--------------|----------------------------|----------------------------|
| B101        | Class Room   | 66.00                      | 109.28                     |
| B102        | Class Room   | 66.00                      | 109.28                     |

| B201  | Class Room               | 66.00  | 109.28  |
|-------|--------------------------|--------|---------|
| B202  | Class Room               | 66.00  | 109.28  |
| B103  | Seminar Hall             | 132    | 182.14  |
| B104  | Tutorial Room            | 33.00  | 39.33   |
| B105  | Staff Room               | -      | 20.35   |
| B106  | Thermal Engineering      | 66.00  | 183.75  |
| B107  | Fluid Mechanics          | 66.00  | 183.75  |
| B108  | Theory of Machine<br>Lab | 66.00  | 183.75  |
| B203  | Drawing Hall             | 132.00 | 182.14  |
| B205  | HOD Room                 | 10.00  | 20.36   |
| B206  | Heat Transfer            | 66.00  | 110.25  |
| B207  | Metallurgy Lab           | 66.00  | 66.00   |
| B207A | PG Lab                   | 66.00  | 66.00   |
| B207B | Lab                      | 66.00  | 51.75   |
| B208  | CAD/CAM Lab              | 66.00  | 66.00   |
| B208A | PG Lab                   | 66.00  | 66.00   |
| B208B | Tutorial Room            | 33.00  | 51.75   |
|       | Total                    |        | 1910.44 |



Fig 4.1.2.(E) Theory of Machine Laboratory



Fig 4.1.2.(F) Chemistry lab for First year students

Name of Branch: MCA Sanctioned Intake: 60

Table 4.1.2.(I) Detail Description of the spaces at MCA

| Particulars | Room No/name    | Required Area in Sq. Mtrs. | Available Area in Sq.<br>Mtrs. |
|-------------|-----------------|----------------------------|--------------------------------|
| A501        | Class Room      | 66.00                      | 66                             |
| A504        | Class Room      | 66.00                      | 66                             |
| Lab         | Programming Lab | 66.00                      | 66                             |
| Lab         | Software Lab    | 66.00                      | 66                             |
| Total       |                 |                            | 264                            |

Name of Branch: MBA Sanctioned Intake: 60

Table 4.1.2.(J) Detail description of the spaces at MBA

| Room No/name     | Particulars     | Required Area in Sq. Mtrs. | Available Area in Sq. Mtrs. |
|------------------|-----------------|----------------------------|-----------------------------|
| A402             | Meeting Room    | -                          | 12.24                       |
| A403             | HOD Cabin       | 10.00                      | 31.43                       |
| A404/405/406/507 | Staff Cabin     | 10.00                      | 51.28                       |
| A408             | Meeting Hall    | -                          | 50.20                       |
| A409             | Conference Room | -                          | 52.24                       |
| A410             | Comp.Center     | 150.00                     | 66.18                       |

| A411          | Comp. Center   | 150.00 | 66.75  |
|---------------|----------------|--------|--------|
| A412          | Dept.Library   | -      | 66.00  |
| A413          | Store Room     | -      | 29.59  |
| 501/502/503   | Syndicate Room | -      | 63.84  |
| A504 /505/506 | Staff Cabin    | 10.00  | 26.70  |
| 507           | Seminar Hall   | 132.00 | 150.10 |
| 508           | Class Room     | 66.00  | 66.00  |
| 509           | Tutorial Room  | 33.00  | 26.84  |
| 510           | Tutorial Room  | 33.00  | 26.84  |
| A511          | Class Room     | 66.00  | 66.00  |
|               |                | 852.83 |        |

#### **Administrative Area in Square Meters:**

Table 4.1.2.(K) Detail description of the Administrative area

| Particulars                  | Room<br>No | Required Area in Sq.<br>Mtrs. | Available Area in Sq.<br>Mtrs. |
|------------------------------|------------|-------------------------------|--------------------------------|
| Principal/Director<br>Office | 109A       | 30.00                         | 50.92                          |
| Faculty Rooms                | FR         | 30.00                         | 98.33                          |
| Board Room                   | A112       | 20.00                         | 20.00                          |
| Office                       | A100       | 150.00                        | 309.92                         |
| Placement office             | A116       | 30.00                         | 30.00                          |
| Maintenance                  | A115       | 10.00                         | 20.83                          |
| Central Stores               | ST         | 10.00                         | 10.00                          |
| House Keeping                | HK12       | 10.00                         | 46.44                          |
| Pantry                       | PT         | 10.00                         | 15.23                          |
| Security                     | SC         | 10.00                         | 10.00                          |
|                              | Total      | 1                             | 654.07                         |

#### **Amenities Area in Square Meters:**

Table 4.1.2.(L) Detail description of the Aminities

| Particulars | Nos / Capacity | Available Area in Sq. Mtrs. |
|-------------|----------------|-----------------------------|
| Canteen     | 70.00          | 200.00                      |

| Health Care Facilities | -        | 10.00    |
|------------------------|----------|----------|
| Common Room – Boys     | -        | 10.00    |
| Common Room - Girls    | GCR      | 10.00    |
| Boys Hostel            | ВН       | 340.89   |
| Girls Hostel           | GH       | 2858.00  |
| Total toilets          | -        | 584.57   |
| Guest House            | GST      | 83.64    |
| Play Ground            | PG       | 10117.00 |
| Total                  | 13629.53 |          |



Fig 4.1.2.(G) Playground



Fig 4.1.2.(H) Hostel mess facility

#### Other essential facilities available on the campus of the institute:

Table 4.1.2.(M) Detail description of the available facilities.

| Sr. No. | Particulars   | Availability |
|---------|---|--------------|
| 1       | Recreational Facilities                             | YES          |
| 2       | Sports Facilities                                   | YES          |
| 3       | Disabled Friendly Infrastructure Created            | YES          |
| 4       | All Weather Approach Road                           | YES          |
| 5       | Potable Water Supply                                | YES          |
| 6       | Electrical Generator                                | YES          |
| 7       | Parking Facilities                                  | YES          |
| 8       | Medical Facilities                                  | YES          |
| 9       | General Insurance Policy for Assets                 | YES          |
| 10      | Sewage Disposal                                     | YES          |
| 11      | General Notice Board and Departmental Notice Boards | YES          |
| 12      | Medical and Counseling Facilities                   | YES          |
| 13      | Institution Web Site                                | YES          |
| 14      | First Aid facility                                  | YES          |
| 15      | Backup Power Supply                                 | YES          |
| 16      | Telephone and FAX                                   | YES          |
| 17      | Safety Provision – Fire                             | YES          |

#### **Building area statement:**

Table 4.1.2.(N) Detail description of the total building area

| Sr | Name                | Area in Sq | Department                  |
|----|---------------------|------------|-----------------------------|
| No |                     | Mtrs.      |                             |
| 1  | Academic Block-1(B) | 2693.21    | Mechanical                  |
| 2  | Academic Block-1(B) | 2691.276   | Computer                    |
| 3  | Academic Block-2(C) | 2562.45    | Civil                       |
| 4  | Academic Block-2(C) | 297.971    | Engineering science         |
| 5  | Academic Block-2(C) | 1357.782   | Instrumentation and Control |

| 6  | Academic Block-2(C)        | 1846.638 | E & TC  |
|----|----------------------------|----------|---------|
| 7  | Academic Block-2(C)        | 912.292  | MCA     |
| 8  | Academic Block-2(C)        | 1347.292 | IT      |
| 9  | Administrative Building(A) | 1542.27  | MBA     |
| 10 | Administrative Building(A) | 1476.63  | Library |
| 11 | Administrative Building(A) | 728.52   | Office  |



Fig 4.1.2.(I) Fire Fighting System

b) Extra-curricular activities – sports, outdoor and indoor games, gymnasium, Auditorium, NSS, NCC, cultural activities, Public speaking, communication skills development, yoga, health and hygiene etc.

- Institute has adequate playground of area 10117 sq. mtr and all the facilities of outdoor games such as football, cricket, badminton, volleyball, basketball, etc,
- Institute also encourages indoor games such as chess, carrom, table-tennis, and had well equipped gymkhana for the students.
- Institute organizes NSS camp every year for the students in which activities like blood donation camp, Godavari cleaning, village cleaning and awareness demonstration by students in nearby villages.
- Institution conducts various soft skill and personality development programs for students and faculty.
- Institution has also conducted a yoga session for students and staff in association with "art of living".
- Institute has provided water purifiers to all the departments as well in college premises and hostels.
- Canteen and mess facilities with proper hygiene are available for the student.

4.1.3 How does the institution plan and ensure that the available infrastructure is in line with its academic growth and is optimally utilized? Give specific examples of the facilities developed/augmented and the amount spent during the last four years (Enclose the Master Plan of the Institution / campus and indicate the existing physical infrastructure and the future planned expansions if any).

Institute has enough number of classrooms and laboratories as per AICTE norms.

#### **Investment on Equipment (Department wise)**

Table 4.1.3 Detail of investment on equipment

| Sr. No | Department                              | <b>Equipment Cost Rs.</b> |
|--------|---|---------------------------|
| 1      | Mechanical Engineering                  | 2,87,46,578.16            |
| 2      | Civil Engineering                       | 1,27,69,678.14            |
| 3      | Computer Engineering                    | 1,62,13,271.90            |
| 4      | Information Technology                  | 65,34,407.00              |
| 5      | Electronics & Telecommunication Engg.   | 15715705.25               |
| 6      | MBA                                     | 29,19,479.00              |
| 7      | Engineering Science                     | 50,55,703.18              |
| 8      | Instrumentation and Control Engineering | 1,31,34,711.76            |
| 9      | MCA                                     | 29,76,117.00              |
| 10     | Library                                 | 9,77,786.00               |
| 11     | Gymkhana                                | 970150.9                  |

## 4.1.4 How does the Institution ensure that the infrastructure facilities meet the requirements of students with physical disabilities?

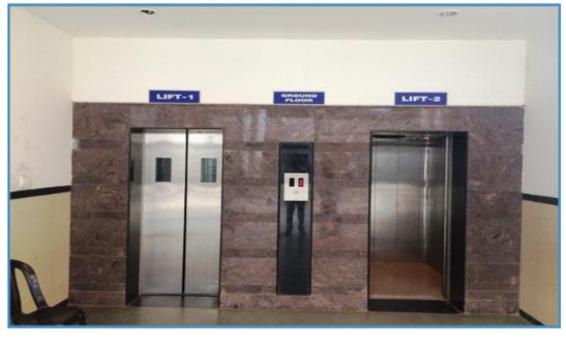


Fig 4.1.4 Lift facility

- Provision of ramp for wheelchair users.
- Lift facility is provided.
- Separate toilet construction for physical disability.

### 4.1.5 Give the details on residential facility and various provisions available within them?

• **Hostel Facility** –Hostel facility is available for girls inside the campus, total area of the hostel is 2858sq.mtrs having capacity of 240 girls.

The boy's hostel is located outside the campus. Total area of the boy's hostel is 340.89 sq.mtrs

- Recreational facilities, gymnasium, yoga center, etc.-- Available
- Computer facility, including access to internet in hostel -- Available
- Facilities for medical emergencies -- Available
- **Library facility in the hostels** Not Available
- **Internet and Wi-Fi facility** Wi-Fi internet facility with 10 Mbps of speed is made available to the hostel
- Recreational facility- Available
- Available residential facility for the staff and the occupancy constant supply of safe drinking water- water purifiers are made available at all the places required in the campus
- **Security** Available CCTV /security guard

### 4.1.6 What are the provisions made available to students and staff in terms of health care on the campus and off the campus?

Medical insurance policy is made available to staff and students on the campus and off the campus.

First aid facility is provided.

# 4.1.7 Give details of the Common Facilities available on the campus—spaces for special units like IQAC, Grievance Redressal unit, Women's Cell, Counseling and Career Guidance, Placement Unit, Health Center, Canteen, recreational spaces for staff and students, safe drinking water facility, auditorium, etc.

Table 4.1.7 Details of the common facility

| Sr.no | Particular               | Availability |
|-------|--------------------------|--------------|
| 1     | IQAC Cell                | Yes          |
| 2     | Grievance Redressal Unit | Yes          |
| 3     | Women's Cell             | Yes          |
| 4     | Placement Unit           | Yes          |
| 5     | Health Center            | Yes          |
| 6     | Safe Drinking Water      | Yes          |

| 7  | Auditorium   | Yes |
|----|--|-----|
| 8  | Recreational Facilities                                      | Yes |
| 9  | Sports Facilities Yes  |     |
| 10 | Disabled Friendly Infrastructure Created                     |     |
| 11 | All Weather Approach Road                                    | Yes |
| 12 | Potable Water Supply   | Yes |
| 13 | Electrical Generator   | Yes |
| 14 | Parking facilities   | Yes |
| 15 | Medical facilities (medical insurance for staff and student) | Yes |
| 16 | General Insurance Policy for Assets                          | Yes |
| 17 | Sewage Disposal  | Yes |
| 18 | General Notice Board and Departmental Notice Boards          | Yes |
| 19 | Medical and Counseling Facilities                            | Yes |
| 20 | Institution Web Site   | Yes |



Fig 4.1.7. Water purifiers at each department

#### 4.2 Library as a Learning Resource

4.2.1 Does the library have an Advisory Committee? Specify the composition of such a committee. What significant initiatives have been implemented by the committee to render the library, student/user friendly?

Yes, the library has Advisory Committee. The details are as follows:

Table 4.2.1 Details of Library Advisory Committee

| Sr.<br>No. | Faculty Name               | Committee<br>Designation             | Department                         |
|------------|----------------------------|--------------------------------------|------------------------------------|
| 1          | Dr. S.B. Sonawane          | I/C Library                          | Mechanical Engineering             |
| 2          | Prof. P.V. Joshi.          | Member                               | Instrumentation and Control        |
| 3          | Prof. S. J.<br>Suryawanshi | Member                               | Mechanical Engineering             |
| 4          | Prof. R. R.<br>Tajanpure   | Member                               | Computer Engineering               |
| 5          | Prof. S. B.Lukare          | Member                               | Instrumentation and Control        |
| 6          | Prof. A. R.<br>Chaudhari   | Member                               | Electronics and Telecommunications |
| 7          | Prof. D. N. Nathe          | Member                               | Civil Engineering                  |
| 8          | Prof. U.S. Tambe           | Member                               | Information Technology             |
| 9          | Prof. S. M.<br>Yawalkar    | Member                               | MCA                                |
| 10         | Prof. N .J. Salunke.       | Member                               | MBA                                |
| 11         | Ms. V. D. Junnare          | Secretary/<br>Convenor of<br>Library | Library                            |

#### Significant Initiatives taken to make library student/ user friendly:

- Library committee recommends books and journals required for students and staff to purchase as per syllabus.
- Library has excellent environment for studies.
- Library provides daily newspapers, magazines in the reading room.
- Considering the students request library reading room timings have been extended during examination period. The students are allowed to carry their own books in the library for study.
- To identify and to minimize the theft cases CCTV cameras are installed in the reading and reference section.
- Online library portal is made through which student and staff can access elearning resources such as NPTEL videos and e-books within the campus network.
- Library offers Automated catalogue OPAC.
- Spacious reading room with 200 seating capacity.

#### 4.2.2 Provide details of the following:

- Total area of the library (in Sq. Mts.)
- Total seating capacity
- Working hours (on working days, on holidays, before examination days, during Examination days, during vacation)

### • Layout of the library (individual reading carrels, lounge area for browsing and relaxed reading, IT zone for accessing e-resources)

Table 4.2.2 Library Details

| Sr. | Particular  | Availability                 |
|-----|---|------------------------------|
| No. |   |                              |
| 1   | Total Area of The Library   | 730.78 Sq. m.                |
| 2   | Seating Capacity of the Library   | 200                          |
| 3   | Reprographic facility   | Yes                          |
| 4   | Working Hours of Library  | 8:30 am To 12:00<br>midnight |
| 5   | Library Networking Facility   | Yes                          |
| 6   | Data Usage of the library (in terms of books issued to the Faculty and students etc.) | 65%                          |

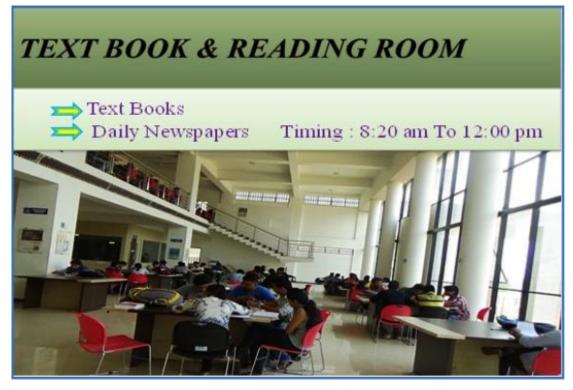


Fig 4.2.2. (A) Reading Room



Fig 4.2.2. (B) Reading Room



Fig 4.2.2.(C) Stack Section

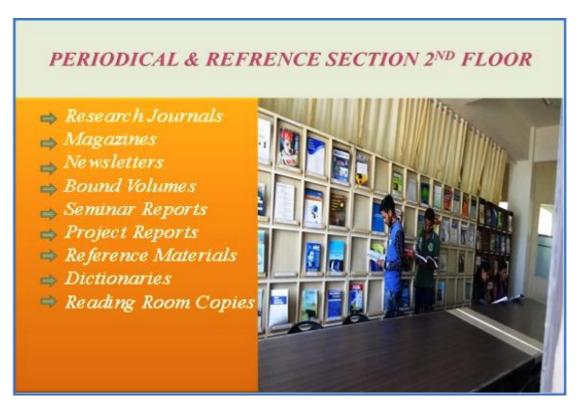


Fig 4.2.2 (D) Perodical Section



Fig 4.2.2.(E) OPAC Section

4. 2.3 How does the library ensure purchase and use of current titles, print and e-journals and other reading materials? Specify the amount spent on procuring new books, journals and e-resources during the last four years.

Table 4.2.3 Library holding details

| Library Holding     | Year 2013-14 |       | Yea       | Year 2014-<br>15 |                  | Year 2015-<br>16 |                 | Year 2016-17 |  |
|---------------------|--------------|-------|-----------|------------------|------------------|------------------|-----------------|--------------|--|
|                     | No           | Total | No        | Total            | No               | Total            | No              | Total        |  |
|                     |              | cost  |           | cost             |                  | cost             |                 | cost         |  |
| Text book           | 2589         | 59749 | 629       | 6.58             | 949              | 6.48             | 462             | 3.08 lakh    |  |
|                     | 2309         |       | 629   lal |                  | J <del>4</del> J | lakh             | 402             |              |  |
| Reference Book      | 364          | 2.22  | 571       | 1.56             | 557              | 8.62             | 30              | 1.05 lakh    |  |
|                     | 304          | lakh  | 3/1       | lakh             | 337              | lakh             | 30              |              |  |
| Jouranal/Periodical | 25           | 34445 | 61        | 1.35             | 73               | 1.52             | Rene            | wal order    |  |
|                     | 23           |       | 01        | lakh             | 13               | lakh             | has be          | een placed   |  |
| e- resource         | 7            | 15.00 | 5         | 13.58            |                  | -                | Rene            | wal order    |  |
|                     | /            | lakh  | )         | lakh             | _                |                  | has been placed |              |  |
| Any other specify   | News Paper   |       | New       | 's Paper         | News Paper       |                  | Nev             | vs Paper     |  |
| (News paper Genral  |              | 13    |           | 14               |                  | 16               |                 | 16           |  |
| books)              |              |       |           |                  |                  |                  |                 |              |  |

### 4.2.4 Provide details on the ICT and other tools deployed to provide maximum access to the library collection?

#### a) OPAC:

For this purpose library uses computer based OPAC to keep a record of the books and of the user who borrow the books. Besides listing all the books and Journals available in the library, it allows the facility like, status of particular books. It is searchable by Author, Title, and accession number. and several other fields.

#### b) Electronic Resource Management package for e-journals:

The Library has access to e-journals and databases as per AICTE norms.

- 1. IEEE ASPP,
- 2. Springer
- 3. ASME
- 4 ASCE
- **5 ELSEVIER**
- 6. J-Gate
- c) Federated searching tools to search articles in multiple databases: Nil
- d) Library Website Yes, http://www.kbtcoe.org/library
- e) In-house /remote access to e-publications: Available
- **f)** Library automation: Yes, All the work related to issue and return has been computerized. All of the books are bar-coded.
- g) Total number of computers for public access: 33
- **h) Total numbers of printers for public access:** Yes, All PCs are attached to copier machine for printing.
- i) Internet band width/ speed: 06 Mbps (BSNL leased line)
- j) Institutional Repository: Yes.

- **k)** Content management system for e-learning: Yes, e-books, NPTELvideo lectures series, question paper soft copy.
- I) Participation in Resource sharing networks/consortia (inflibnet): DELNET Delhi.

#### 4.2.5 Provide details on the following items:

#### a) Average number of walk-ins:

Table 4.2.5.(A) walk-in details

| Sr. No. | Year 2013-14 | Year 2014-15 | Year 2015-16 | Year 2016-17 |
|---------|--------------|--------------|--------------|--------------|
| 1       | 1341/month   | 2990/month   | 3335/month   | -            |

#### b) Average number of books issued/ returned:

Table 4.2.5.(B)

| Sr. No. | Year 2013-14 | Year 2014-15 | Year 2015-16 | Year 2016-17 |
|---------|--------------|--------------|--------------|--------------|
| 1       | 870/15days   | 810/15days   | 795/15days   | 495/15days   |

#### c) Ratio of library books to students enrolled:

Table 4.2.5.(C)

| Sr.<br>No. | Year 2013-14 | Year 2014-15 | Year 2015-16 | Year 2016-17 |
|------------|--------------|--------------|--------------|--------------|
| 1          | 14:1         | 14:1         | 15:1         | 16:1         |

- d)Average number of books added during last three years: 1773
- e) Average number of login to OPAC: 40 per day
- **f)** Average number of login to e-resources: Yes, they are provided separately in digital library (40 numbers).
- g) Average number of e-resources downloaded/printed: NIL
- **h) Number of information literacy trainings organized:** Yes, at the time of orientation program for first year, direct second year.and PG, students are called and explained about library procedures and process, rules including OPAC.
- i) Details of "weeding out" of books and other materials: Yes.
  - 1. Books -118
  - 2. Periodicals / Magazines -57
- 4.2.6 Give details of the specialized services provided by the library: Yes,
  - 1. OPAC
  - 2. Open access

- 3. Increased library reading room time
- 4. Digital library
- 5. Book bank
- 6. News papers/ Magazines/ Journal

Manuscripts: NIL

**Reference Books:** 6491 reference books of various subjects are available.

**Reprography section:** 3 Machines are available at reprographic section where the entire institute is served as a need basis.

Inter Library Loan Service (ILL):.NO

**Information deployment and notification:** Regularly Notices have been displayed on ERP if needed to inform the user time to time.

**Download:** Yes, download facility is made available for the students.

**Printing:** Yes, Printing facility is made available.

**Reading list/ Bibliography compilation:** Electronically available.

**In-house/remote access to e-resources:** Available.

**User Orientation and awareness:** First year students and direct second year admitted students are being commonly called and are given information regarding how to use OPAC and are made aware about the facilities, rules and regulations of the library.

### 4.2.7 Enumerate on the support provided by the Library staff to the students and teachers of the college.

Library staff helps the students and teachers in case of difficulty in getting the books.

- Orientation
- OPAC service
- Use of Videos/ e-books
- Displaying of New arrivals
- Selection of books based on content need
- Provide the Library data/ Resource.

Also, the arrival of new books is informed to all departments through OPAC search. In addition to this, different websites for accessing and downloading the research papers, e-books to students as well as staff are provided. Orientation and awareness programmes are arranged for students as well as staff regarding accessing e-resources, OPAC, video lectures and e-books.

### 4.2.8 What are the special facilities offered by the library to the visually/physically challenged persons? Give details:

- Library staff members help the physically challenged person for getting the books.
- Wheel chair/ Support for ease of access.

### 4.2.9 Does the library get the feedback from its users? If yes, how is it analyzed and used for improving the library services. (What strategies are deployed by the

### Library to collect feedback from users? How is the feedback analyzed and used for further improvement of the library services?)

- Yes, Feedback form is taken ones in an academic year.
- Library gets the feedback from the users. feedback form is examined by the advisory committee and corrective measures are taken order to improve the existing system

#### 4.3 IT Infrastructure

### 4.3.1. Give details on the computing facility available (hardware and software) at the institution.

- Number of computers with Configuration (provide actual number with exact configuration of each available system).
- Computer-student ratio
- Standalone facility
- LAN facility
- Wi-Fi facility
- Licensed software
- Number of nodes/ computers with Internet facility.
- Any other

Table 4.3.1 Details of computing facility

| Sr.no | Name of the<br>Department                         | No of P-IV/Latest Configuration |        | Peripherals | Licensed<br>Software | Server |    |
|-------|---|---------------------------------|--------|-------------|----------------------|--------|----|
|       |   | UG                              | LAPTOP | PG          |                      | Count  |    |
| 1     | Mechanical Engg                                   | 67                              | 03     | 28          | 09                   | 12     | 01 |
| 2     | Civil Engg  | 42                              | 02     | 24          | 03                   | 05     | -  |
| 3     | Computer Engg                                     | 116                             | 5      | -           | 23                   | 27     | 4  |
| 4     | Information<br>Technology                         | 118                             | 02     | -           | 16                   | 06     | -  |
| 5     | Electronics and telecommunication                 | 68                              | 02     | -           | 09                   | 04     | 01 |
| 6     | MBA   | -                               | 01     | 55          | 13                   | -      | -  |
| 7     | Engineering Science                               | 65                              | 01     | -           | -                    | -      | -  |
| 8     | Instrumentation<br>and control and<br>Engineering | 60                              | 02     | -           | -                    | -      | -  |
| 9     | MCA   | -                               | 02     | 20          | 07                   | -      | -  |
| 10    | library   | 33                              | -      | -           | -                    | -      | -  |
| 11    | Administrative<br>Office                          | 33                              | 3      |             | 19                   | 3      |    |

### 4.3.2 Detail on the computer and internet facility made available to the faculty and students on the campus and off-campus?

• BSNL 155 Mbps leased line (1:1) Internet facility is available at the campus.

### 4.3.3 What are the institutional plans and strategies for deploying and upgrading the IT infrastructure and associated facilities?

- The institute has adequate IT infrastructure.
- The institute has router facility which is used for internet leased line connectivity.
- Institution always keeps track on changing technology and the change or addition of the infrastructure is made available accordingly.

### **IT Service Management**

- Service engineers are appointed for providing various services.
- Communication services LAN network, Wi-Fi connectivity.
- Provide maintenance to IT Infrastructure.

#### **Information Security**

Most of the computers are equipped with antivirus software Quick heals. And we also use open source software like Linux/Ubuntu etc. are used to provide information security.

#### **Network Security**

Sonic wall NSA2400 firewall is used to provide access and authority to users.

# 4.3.4 Provide details on the provision made in the annual budget for procurement, up gradation, deployment and maintenance of the computers and their accessories in the institution (Year wise for last four years)

Table 4.3.4.(A) Details of the Budget

| Sr. | Particulars                      | At actual | Budgeted | Budgeted | Budgeted | Budgeted |
|-----|----------------------------------|-----------|----------|----------|----------|----------|
| No  |                                  |           | 2013-14  | 2014-15  | 2015-16  | 2016-17  |
| 1   | Computer                         | 33895371  | 10575760 | 5939601  | 17240945 | 139065   |
| 2   | Computer software                | 2219367   | 617252   | 858323   | 679499   | 64293    |
| 3   | Computer repairs and maintenance | 1013619   | 220854   | 283463   | 440047   | 69255    |
|     | Total                            | 37128357  | 11413866 | 7081387  | 18360491 | 272613   |

Table 4.3.4.(B) Details of expenditure

|        | Tuest (12) 2 cours of emperiore |             |             |  |  |  |  |  |  |
|--------|---------------------------------|-------------|-------------|--|--|--|--|--|--|
| Sr. No | Year                            | Budget      | Expenditure |  |  |  |  |  |  |
| 1      | 2013-14                         | 12000000.00 | 11413866.00 |  |  |  |  |  |  |
| 2      | 2014-15                         | 7500000.00  | 7081387.00  |  |  |  |  |  |  |
| 3      | 2015-16                         | 20000000.00 | 18360491.00 |  |  |  |  |  |  |

| 4 | 2016-17 | 300000.00 | 272613.00 |
|---|---------|-----------|-----------|
|   |         |           |           |

## 4.3.5 How does the Institution facilitate extensive use of ICT resources including development and use of computer-aided teaching/learning materials by its staff and students?

Table 4.3.5 Details of ICT resources

| Sr. No | Particulars                  | Yes/ No |
|--------|------------------------------|---------|
| 1      | CCTV Security System         | Yes     |
| 2      | LCD Projectors in classrooms | Yes     |
| 3      | Audio-Video Room             | Yes     |
| 4      | Virtual Classrooms           | Yes     |

4.3.6 Elaborate giving suitable examples on how the learning activities and technologies deployed (access to on-line teaching-learning resources, independent learning, ICT enabled classrooms/learning spaces etc.) by the institution place the student at the Center of teaching learning process and render the role of a facilitator for the teacher.

Class rooms are equipped with LCD projectors and internet facility. Facilitator demonstrates the lecture and also explains the practical with help of live demo. Some online videos are shown by the facilitator to explain the topic with more ease of understanding to the students. i.e. the lecture become more impressive, interactive and understandable with the help of ICT Techniques.

4.3.7 Does the Institution avail of the National Knowledge Network connectivity directly or through the affiliating university? If so, what are the services availed of?

Yes the institution is Remote Center of IIT Bombay through which various workshops and seminars are conducted for the faculty members for enhancement of their knowledge and skill.

#### 4.4 Maintenance of Campus Facilities

- 4.4.1 How does the institution ensure optimal allocation and utilization of the available financial resources for maintenance and upkeep of the following facilities (substantiate your statements by providing details of budget allocated during last four years)?
- a. Building
- **b.** Furniture
- c. Equipment
- d. Computers
- e. Vehicles
- f. Any other

Table 4.4.1 Details of Maintenance

| Year |          | Total cost | Any other |         |             |                        |
|------|----------|------------|-----------|---------|-------------|------------------------|
| 1001 | Building | Furniture  | Equipment | Vehicle | Maintenance | Consumable in thousand |

| 2013-<br>14 | 28.68 | 0.67  | 4.73  | 4.06 | 00.00 | 00.00 |
|-------------|-------|-------|-------|------|-------|-------|
| 2014-<br>15 | 8.17  | 4.69  | 12.82 | 3.89 | 00.00 | 00.00 |
| 2015-<br>16 | 1.76  | 2.96  | 3.28  | 1.67 | 00.00 | 00.00 |
| 2016-<br>17 | 00.00 | 00.00 | 6.57  | 1.01 | 00.00 | 00.00 |

### 4.4.2 What are the institutional mechanisms for maintenance and upkeep of the infrastructure, facilities and equipment of the college?

- Institute provides an In-house maintenance team to maintain the equipment's.
- Various services are taken in case of emergency from the outside service provider e.g.multinet computers pvt.ltd for computer equipment's
- Housekeeping ladies are appointed on daily wages for cleaning of the campus.
- Water tanks are cleaned periodically

### 4.4.3 How and with what frequency does the institute take up calibration and other precision measures for the equipment/instruments?

The frequencies of calibration of the equipment/ instruments are done on basis of "as and when needed "and as per the norms and standard basis.

### 4.4.4 What are the major steps taken for location, upkeep and maintenance of sensitive equipment (voltage fluctuations, constant supply of water etc.)?

- Computer server room is providing with air conditioning.
- Alternative arrangement of water supply is made for the constant supply of water in the campus.
- Generator (75 KVA) is kept at safe location in the campus and is maintained periodically.
- Fire security system is installed for security purposes.



Fig 4.4.4.(A) Air condition at server room



Fig 4.4.4.(B) Generator at safe location

#### CRITERION V: STUDENT SUPPORT AND PROGRESSION

#### 5.1 STUDENT MENTORING AND SUPPORT

# 5.1.1 Does the institution publish its updated prospectus/handbook annually? If 'yes', what is the information provided to students through these documents and how does the institution ensure its commitment and accountability?

- Yes, Institute publishes prospectus/ leaflet every year pertaining to the information about Maratha Vidya Prasrak Samaj's pioneers and board of directors.
- It gives the information regarding to the establishment of KBT COE unit
- The Prospectus / leaflet foremost state the Vision and Mission of the institute.
- It contains the information about infrastructural facilities available in campus.
- It provides information regarding the courses offered by institute, its year of commencement, intake capacity.
- It also provides information regarding admission procedure, eligibility as per DTE.
- It provides the information about student's achievements other than academics and excellence of student in university exams.
- Department wise information about faculty achievements, number of books published, a number of papers published, and research grant received and university toppers in the department etc. is published in the prospectus.
- Sample copy of leaflet is shown in fig no 5.1.1

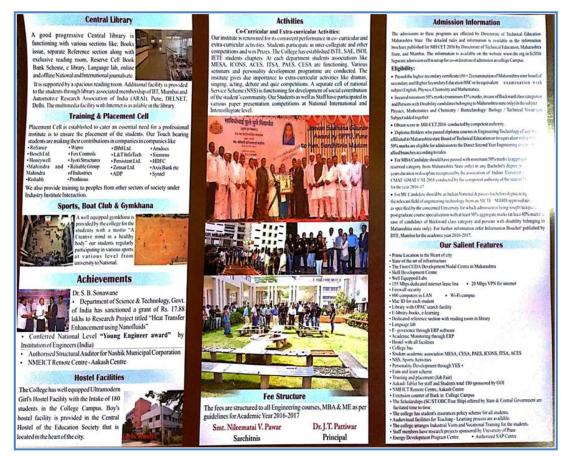


Fig 5.1.1 Institute leaflet photo

# 5.1.2 Specify the type, number and amount of institutional scholarships / free ships given to the students during the last four years and whether the financial aid was available and disbursed on time?

#### 1- Academic Scholarship

- Institute does not provide such scholarship however scholarship and free ship which are given by state/ central government on the basis of parental annual income and based on reservation policies of the government and GATE scholarships.
- Institute also implement 'Earn and Learn Scheme' as per the guidelines of SPPU for the students.
- The information regarding filling of scholarship form and necessary information is notified to the students through HOD's and Mentor.
- The scholarship section helps to students and ensures that all students have filled the scholarship forms and scholarship amount is disbursed from time to time.

Table 5.1.2 (A) Free ships and Scholarship given by state/central government

| Acade-         | le- Free ship /scholarship category and merit wise |        |         |           |         | se      |          |              |          |           |
|----------------|--|--------|---------|-----------|---------|---------|----------|--------------|----------|-----------|
| mic<br>year    | SC   | ST     | OB<br>C | VJ/N<br>T | SB<br>C | EB<br>C | TFW<br>S | Minorit<br>y | GAT<br>E | Tota<br>l |
| 2016 -<br>2017 | NA   | N<br>A | NA      | NA        | NA      | NA      | 19       | 13           | 06       | 38        |
| 2015 -<br>2016 | 199  | 71     | 701     | 184       | 22      | 180     | 19       | 15           | 03       | 1390      |
| 2014 -<br>2015 | 163  | 73     | 551     | 169       | 21      | 164     | 19       | 15           | NA       | 1172      |
| 2013 -<br>2014 | 187  | 68     | 615     | 161       | 19      | 175     | 19       | -            | NA       | 1244      |

Table 5.1.2 (B) Earn and learn scheme benefited student as follows

| Sr.No | Academic year | No. of student benefited |
|-------|---------------|--------------------------|
| 1     | 2016-2017     | NA                       |
| 2     | 2015-2016     | 06                       |
| 3     | 2014-2015     | 07                       |
| 4     | 2013-2014     | 08                       |

**2** Assistance for books:- The book bank facility is provided to the students by library.

Table 5.1.2 (C) Book bank facility

| Sr. No | Academic year | Number of student |
|--------|---------------|-------------------|
| 1      | 2016-2017     | 70                |
| 2      | 2015-2016     | 85                |
| 3      | 2014-2015     | 81                |
| 4      | 2013-2014     | 73                |

#### 3. Economical weak section:

Yes our institute provides the scholarship in monetary form to students through the following schemes

- a) Rajarshi Chhatrapati Shahu Maharaj scholarship: This scholarship is given to those students who are economically weak and not get any financial assistance from any other agencies.
- b) Women Education Scholarship:- Institute offer this scholarship for tribal and economically backward girls in the name of Ramabai Ambedkar, Ahilyabai Holkar, Bhinabai Choudhri, Venutai Chavan, Savitribai Phule and Ramabai Ranade

### 5.1.3 What percentage of students receives financial assistance from state government/ Central government and other national agencies?

The institute has facilitates the students to receive financial assistance from state and central Government based on category, EBC as per guidelines of State/ Central government The details are as below.

Table 5.1.4 Percentage of student taking scholarship

| Sr. | Year    | Total No.      | State Gov         | State Government |                   | <b>Central Government</b> |  |
|-----|---------|----------------|-------------------|------------------|-------------------|---------------------------|--|
| No. |         | of<br>Students | Number of student | Percentage       | Number of student | Percentage                |  |
| 1   | 2016-17 | 2037           | NA                | NA               | 06                | 0.29                      |  |
| 2   | 2015-16 | 2293           | 1387              | 60.48            | 03                | 0.13                      |  |
| 3   | 2014-15 | 2265           | 1172              | 51.71            | NA                | NA                        |  |
| 4   | 2013-14 | 2303           | 1244              | 54.02            | NA                | NA                        |  |

#### 5.1.4 What are the specific support services/facilities available for?

- a. Students from SC/ST, OBC and economically weaker sections
  - **Scholarship:** The institute guides the students from SC/ST, OBC & EBC student to get the benefit of scholarship from government as per the guide lines laid down by the State/ Central government.
  - **Book bank facility:** Institute provides a book bank facility for student from SC/ST, OBC & EBC category through the central library during their academic year.

• **Free ship:** - The institute guides the student from SC/ST, OBC & EBC Category to apply for free ship. The institute keeps the follow up of free ship amount to be deposited in their account.

#### b. Students with physical disabilities

- Ramps are provided in campus at entry level of college, passages, stairs for easy access of physical handicapped students.
- Lifts with lift man is provided to physically handicapped student for easy circulation from one floor to another floor to reach their classroom and laboratories.
- Toilets are also provided to Physically handicapped students for their convenience.
- Physically handicapped student are allowed to use their wheel chair in institute campus and class room.
- In theory examination conducted by SPPU extra time for writing is given to such student as per guidelines of SPPU.
- Institute gives admission to such student as per the guidelines by State/Central government.
- Classroom for such student can be allocated at ground floor.
- **c.** Overseas students: For overseas student institute does not have special quota.





Fig 5.1.2 Facilities for Physically disabeled student

### d. Students to participate in various competitions/National and International

- The institute encourages the student to participate in various competitions on state, national level such as Avishkar, Baja, IIT- tech fest, Force, etc.
- The institute provides financial support for expenses such as TA/DA if selected for state or national level.
- Faculty guides and encourages the student to participate in competition, paper presentation, workshops, etc. which helps student to build

- confidence, presentation skill, team spirit etc. which enhances students over all development.
- Institute also conduct annual gathering "FUSION" to show the skills of student other than academics such as drama, singing, art etc. Departments also conduct technical event which provides a platform for student to develop management skill such as event management, Marketing Skills, financial management and technical skills which helps them to become techno commercial. It also helps in preparedness plan to participate in technical event which are conducted in other institutes.

#### e. Medical assistance to students: health centre, health insurance etc.

The institute provides various medical assistance for students such as

- Institute has done insurance for each student which has coverage against Accident and educational insurance is also provided to student in case their parents met with an accident which may be cause of death or partial disablement results in to source of finance is stopped for such student will continue their education and fees will be paid from insurance.
- The medical college of our sanstha, Dr. Vasantrao Pawar Medical college and hospital Nashik provides the facility of medical check-up after admitting in institute to check the medical fitness.
- Emergency first aid facility is also provided in campus.
- Clinic facility is also provided for student at various locations decided by sanstha.
- Girl's common room is provided in campus with necessary facility.

### f. Organizing coaching classes for competitive exams

- In the competitive world student appeared for various competitive exams like UPSC, MPSC, IES etc. after or during their graduation while few appear for GRE, GMAT,GATE,CAT etc entrance exam for higher studies.
- To qualify in such exam institute provides a sincere support in the form of guidance and encouraging the student for appearing in exam by faculty.
- Experts Training sessions are arranged for final year students by institute or department.

#### g. Skill development (spoken English, computer literacy,etc,)

- Institute organises expert talk/ session for personality, skill development etc. of students.
- Institute has well equipped laboratories.
- Sanstha has an English academy, which guides the student and faculty for learning English.
- Institute arranges software training sessions for students to software skill.

#### h. Support for "slow learners"

- The Mentor takes care of slow learner by counselling/guiding to them and finding effective solutions for improvisation of those students.
- The model answer sheet of SPPU question paper is provided by respective subject faculty to improve their technique of writing and eliminating the mistakes in university question paper.
- Probable questionnaires for oral examination are provided by the respective subject teachers to student.
- The Mock oral are also conducted before final SPPU oral/ Practical exam which helps to face oral examination confidently.

### i. Exposure of students to other Institution of higher learning /corporate /business house etc.

- Institute/ department arranges industrial visits to understand modern techniques, trends, equipment's, process of work, etc.
- Industry visit helps the student in better understanding of academic with guidance of Industry person/ Engineer.
- Faculty encourages the student to carry out their final year projects in collaboration with industry.
- Students learn corporate etiquettes during industrial visit.
- Faculty encourages the student to participate in various national and international competitions.

### j. Publication of student magazines

- The institute publishes magazine "Abhivyakti" every academic year which includes appreciation of students for their achievements in various activities.
- Abhivyakti contains various sections and representatives are selected for each section among the students.
- It provides the platform for student to publish their literacy, art, and technical articles.
- It helps students to come up with new ideas and thinks creatively. This ultimately enhances the skill of the students.

### 5.1.5 Describe the efforts made by the institution to facilitate entrepreneurial skills, among the students and the impact of the efforts?

- The institute provides various sessions on employment development to incorporate the entrepreneurial skills in the students.
- To facilitate the entrepreneurship skill the ED cell is established by institute which includes training sessions by various successful entrepreneurs.
- **Impact** the student after completion of graduation enters in the world of business/ corporate and to survive in this professional world these skills are essential.
- 5.1.6 Enumerate the policies and strategies of the institution which promote participation of students in extracurricular and co- curricular activities such as sports, games, Quiz competitions, debate and discussions, cultural activities etc.

- Additional academic support, flexibility in examinations
- Special dietary requirements, sports uniform and materials
- Any other

For overall development of student the following strategy is adopted by the institute.

- To compensate academic loss special session for such student is carried out.
- Institute encourages to participate in various activities of their interest.
- The institute provides financial assistance for TA/DA.
- Student participating in events will be treated on Leave.
- As per rule the University to grant 10 marks for notable participation for two years in NSS activities in final year examination which was granted.
- Institute provides sports kit and sports material to students who participate in International, State or National, Lead College, Zonal, Inter-zonal, All India Inter University Tournament, for different types of Games and Sports. Institute gives Track Suits for University Players (selected as Member of Pune University Team) and also Medal winners.

# 5.1.7 Enumerating on the support and guidance provided to the students in preparing for the competitive exams, give details on the number of students appeared and qualified in various competitive exams such as UGC-CSIR- NET, UGC-NET, SLET,GATE / CAT / GRE / TOFEL / GMAT / Central /State services, Defence, Civil Services, etc.

Students are encouraged to prepare by faculty for various competitive exams. Soft copy of question bank for GATE is also maintained in the library. GATE forum conducts the session for students who are appearing for GATE exam. The students who opted for higher studies and not opting for campus placement are undergoing in a different competitive exams such as CAT / GRE / TOFEL / GMAT / Central /State services, Defence Services, Civil Services, etc.

| Sr.<br>No | Year     | GATE | CAT/<br>GRE | GMAT<br>/TOFEL | PGCET | MPSC | ZP/<br>BMC | Total |
|-----------|----------|------|-------------|----------------|-------|------|------------|-------|
| 1         | 2016- 17 | NA   | NA          | NA             | NA    | NA   | NA         | NA    |
| 2         | 2015 -16 | 06   | 02          | 05             | NIL   | NIL  | NIL        | 13    |
| 3         | 2014-15  | 05   | 07          | 06             | NIL   | 04   | 02         | 24    |
| 4         | 2013-14  | 10   | 03          | 04             | NIL   | 02   | NIL        | 19    |

Table 5.1.7 Students success in various competitive exam

### 5.1.8 What type of counselling services are made available to the students (academic, personal, career, psycho-social etc?)

- **Mentor:-** The mentoring scheme is implemented by institute to look after the each student for any problem faced by the student in his entire academic period the mentoring scheme is as follows
  - To distribute the student among the staff of respective department after admitting in institute.

- Monthly meetings are conducted by the mentor with the students to discuss academic performance, progress and personal problem of the allotted students
- Mentor maintains all the records related to the academic performance and extracurricular achievement for allotted to student.
- Mentors render guides in studies, career planning and also address personal and psycho social issues.
- Mentors also contributes for career guidance of external school students.

#### • Career -TPO: -

• Training and placement officer conducts meeting with the mentor regarding counselling for future career of students.

#### • Professional Mentor:-

• Professional mentor conducts various activities such as brain storming, group discussion, soft skill development, etc.

5.1.9 Does the institution have a structured mechanism for career guidance and placement of its students? If 'yes', detail on the services provided to help students identify job opportunities and prepare themselves for interview and the percentage of students selected during campus interviews by different employers (list the employers and the programmes).

- The institute has structured mechanism under the guidance of principal and training and placement officer in coordination with departmental TPO guides the student regarding training and placement.
- A dedicated training and placement cell works to benefit of student thorough out the year.
- TPO also arranges Pre-admission counselling for student who are planning for higher studies in abroad.

The details of Training and placement is tabulated as below

Table 5.1.9 Student placement

| Sr. No | Name of Department      | Academic year |         |         |         |
|--------|-------------------------|---------------|---------|---------|---------|
|        |                         | 2013-14       | 2014-15 | 2015-16 | 2016-17 |
|        |                         | No            | No      | No      | No      |
| 1      | Mechanical              | 07            | 12      | 13      | 07      |
| 2      | Computer                | 11            | 12      | 21      | 02      |
| 3      | E & Tc                  | 05            | 11      | 08      | 01      |
| 4      | Instrumention & Control | 01            | 05      | 07      | -       |
| 5      | IT                      | 07            | 09      | 11      | 04      |
| 6      | Civil                   | -             | -       | 03      | -       |
| 7      | MBA                     | 05            | 09      | 21      | 01      |
| 8      | MCA                     | -             | 01-     |         |         |

Table 5.1. 7 List of Employers

| Sr.<br>No. | Company Name                       | Sr.<br>No. | Company Name                 |
|------------|------------------------------------|------------|------------------------------|
| 1          | Infosys Ltd                        | 20         | Indian Oil nashik            |
| 2          | Mahindra and Mahindra Ltd. Nashik  | 21         | Mphasis                      |
| 3          | TCS                                | 22         | Amazon(I) Ltd                |
| 4          | Bridgestone Ltd.                   | 23         | Syntel                       |
| 5          | Persistent Computer System Ltd.    | 24         | FACE                         |
| 6          | Zensar Ltd                         | 25         | Saama Technologies Ltd       |
| 7          | L&T Infotech Ltd                   | 26         | Ukay Metals                  |
| 8          | Eternus Solutions Ltd.             | 27         | Anix Ltd                     |
| 9          | Rishabh Instruments Ltd.           | 28         | Bosch Ltd                    |
| 10         | Softenger                          | 29         | CMS Ltd                      |
| 11         | Triveni Turbines Ltd.              | 30         | AGS Transact<br>Technologies |
| 12         | Aress Software Ltd.                | 31         | Prompeii                     |
| 13         | Armstrong machine Builders Pvt Ltd | 32         | Digite Infotech Ltd          |
| 14         | XL Dynamics Ltd.                   | 33         | Winjit Technologies          |
| 15         | Technoforce Ltd                    | 34         | Glaxo Smithkine              |
| 16         | ACE solutions Ltd                  | 35         | Mylan                        |
| 17         | Netwin infoystems Ltd.             | 36         | Prothious Ltd                |
| 18         | Datamatics Ltd                     | 37         | Capgemini                    |
| 19         | Quickheal Ltd                      |            |                              |

### 5.1.10 Does the institution have a student grievance redressal cell? If yes, list (if any) the grievances reported and redressed during the last four years.

Yes, institute has student grievance redressal cell which actively interact with the student to sort their grievances. The students committee is as follows

Table 5.1.10 (A) Student Committee

| Sr.<br>No | Committee Member                | Designation    | Name of Department                    |
|-----------|---------------------------------|----------------|---------------------------------------|
| 1         | Prof. Dr. Kailas S.<br>Holkar   | Principal      | Instrumentation & Control Engineering |
| 2         | Prof. Dr. Nanasaheb S.<br>Patil | Vice-Principal | Instrumentation & Control Engineering |

| 3  | Prof. Balasaheb J. Pawar        | Dean_Student<br>Affairs | E & Tc Engineering                    |
|----|---------------------------------|-------------------------|---------------------------------------|
| 4  | Prof.Vishal V.Shinde            | Member                  | Mechanical Engineering                |
| 5  | Prof. Sopan A. Talekar          | Member                  | Computer Engineering                  |
| 6  | Prof. Dr. Krishndeo T.<br>Patil | Member                  | Civil Engineering                     |
| 7  | Prof. Ashwini K. Patil          | Member                  | Instrumentation & Control Engineering |
| 8  | Prof. Arvind P. Meshram         | Member                  | E & TC Engineering                    |
| 9  | Prof. Tejaswini S. Pawar        | Member                  | Information Technology                |
| 10 | Prof. Laxmikant C. Sontakke     | Member                  | MBA                                   |
| 11 | Prof. Nayana R. Kakad           | Member                  | MCA                                   |

Table 5.1.10 (B) Details of Number of Grievance Redressed are as follows

| Sr. No. | Year    | No. of Grievance Reported | No. of grievance Redressed |
|---------|---------|---------------------------|----------------------------|
| 1       | 2016-17 | Nil                       | Nil                        |
| 2       | 2015-16 | Nil                       | Nil                        |
| 3       | 2014-15 | Nil                       | Nil                        |
| 4       | 2013-14 | Nil                       | Nil                        |

Mandate: Student grievance redressal cell works as per the guidelines of AICTE/UGC/SPPU.

### 5.1.11 What are the institutional provisions for resolving issues pertaining to sexual harassment?

Institute has women's grievance cell which take care of safety and dignity of the women the committee is headed by a senior lady professor. Institution takes necessary steps if the incidents pertaining to sexual harassment require the intervention of the law. Till date no such case of sexual harassment has been reported in college.

Table 5.1.11 (A) Women's Redressal cell Members

| Sr.<br>No | Name                     | Department                                | Designation           |
|-----------|--------------------------|---|-----------------------|
| 1         | Mrs. Vanita<br>Deshmukh  | Secretary of yashoda samjik vikas sanstha | NGO<br>Representative |
| 2         | Prof. V.S. Tidake        | Computer                                  | Presiding officer     |
| 3         | Prof. R. R.<br>Tajanpure | Computer                                  | Member                |
| 4         | Prof. S. P. Jadhav       | Information technology                    | Member                |
| 5         | Prof. M. C. Aher         | Civil                                     | Member                |

| 6  | Mr. Sandip patil         | Instrumentation and control | Member         |
|----|--------------------------|-----------------------------|----------------|
| 7  | Ms.Salade Sonali         | MBA                         | Member         |
| 8  | Mrs. Gite Kiran          | Office                      | Member         |
| 9  | Rane chaitrali yuraj     | MCA/ (SE)                   | Student Member |
| 10 | Pradhan Sonali G         | Mechanical/ (BE)            | Student Member |
| 11 | Choudhri Unnati<br>Kiran | E& Tc/ (TE)                 | Student Member |

# 5.1.12 Is there an anti-ragging committee? How many instances (if any) have been reported during the last four years and what action has been taken on these?

The institute has anti-ragging committee is headed by Principal and all HODs are Members of the committee. In institute no case is reported till date. The anti-ragging committee is formed as per the rules and regulations of AICTE / UGC / DTE/ SPPU. Cell numbers of anti-ragging committee are made available to all the students.

Table 5.1.12 Anti-Ragging Committee: 2016-17

| Sr.<br>No. | Name                          | Designation                                      | Position                         | Contact<br>No. |
|------------|-------------------------------|--|----------------------------------|----------------|
| 1          | Prof. Dr. Kailas<br>S. Holkar | Principal  | Chairman                         | 9822379056     |
| 2          | Mr. Hansraj C.<br>Patil       | Tahasildar                                       | Member Civil<br>Administration   | 9421177673     |
| 3          | Mr. M. S.<br>Divekar          | Police Inspector,<br>Nashik                      | Member Police<br>Administration  | 8975566100     |
| 4          | Mr. Arun<br>Malani            | Journalist Dainik<br>Sakal, Nashik               | Member Local<br>Media            | 9175185333     |
| 5          | Mrs. Vanita<br>Deshamukh      | Yashodha Samajik<br>Vikas Sanstha,<br>Nashik     | Member Non Govt.<br>Organisation | 9923369363     |
| 6          | Mr. Ravindra B.<br>Patil      | Parent   | Member                           | 9850044651     |
| 7          | Prof. Balasaheb<br>J. Pawar   | Asst. Prof. & Dean<br>Student Affairs            | Member                           | 7588012633     |
| 8          | Prof. Ashwini<br>K. Patil     | Asst. Prof. & Chief<br>Warden (Girl's<br>Hostel) | Member                           | 9403709298     |
| 9          | Mrs. Poonam<br>B. Sonawane    | Asst. Prof.                                      | Member                           | 9604540206     |
| 10         | Mrs. Sunita<br>V.Khairnar     | Rector Girls Hostel                              | Member                           | 9403515534     |

| 11 | Mr. Sandip R.<br>Patil      | Technical Assistant | Member | 9850974189 |
|----|-----------------------------|---------------------|--------|------------|
| 12 | Ms. Chaitali Y<br>Rane      | Student S.Y         | Member | 9421742207 |
| 13 | Mr. Devendra<br>Suryawanshi | Student F. Y.       | Member | 9881331054 |
| 14 | Ms. Pranjal<br>Darekar      | Student T E         | Member | 7875191385 |
| 15 | Mr.Akash<br>Rathod          | Student S.E         | Member | 8390468696 |
| 16 | Mr. Ojas S.<br>Joshi        | Student F.E.        | Member | 8237315958 |

Table 5.1.12 Anti-Ragging Squad Committee: 2016-17

| Sr.<br>No. | Name                             | Designation                           | Position | Contact<br>No. |
|------------|----------------------------------|---------------------------------------|----------|----------------|
| 1.         | Dr. Kailas S. Holkar             | Principal                             | Chairman | 9822379056     |
| 2.         | Prof. Balasaheb J.<br>Pawar      | Asst. Prof. & Dean<br>Student Affairs | Member   | 7588012633     |
| 3.         | Prof. Jyoti J. Nerkar            | Asst. Prof.                           | Member   | 9970623735     |
| 4.         | Prof. Dr. Krishnadeo<br>T. Patil | Asst. Prof.                           | Member   | 8793275694     |
| 5.         | Dr. S. R. Pachorkar              | Asso. Prof.                           | Member   | 9822840601     |
| 6.         | Prof. Priti V. Shinde            | Asst. Prof.                           | Member   | 9423584181     |
| 7.         | Prof. Santosh P.<br>Jadhav       | Asst. Prof.                           | Member   | 8007499799     |
| 8.         | Prof. Sandeep N.<br>Palhe        | Asst. Prof.                           | Member   | 8983084176     |
| 9.         | Prof. Shailesh M.<br>Yawalkar    | Asst. Prof.                           | Member   | 9403233944     |

### 5.1.13 Enumerate the welfare schemes made available to students by the institution.

Welfare schemes available to students in the institute are as follow:

- 1. Earn and learn Scheme
- 2. National service scheme
- 3. Student group insurance scheme
- 4. Book Bank
- 5. Hostel for girls

# 5.1.14 Does the institution have a registered Alumni Association? If 'yes', what are its activities and major contributions for institutional, academic and infrastructure development?

Yes

- Institute has registered alumni association registration no Maharashtra /8854 /2004/ Nashik dated 29/09/2004.
- Every year in annual function institute invites the alumni and their suggestion for development are taken in consideration. Alumni meet is conducted and their feedbacks are taken.
- As every alumni is an asset for the institute and their suggestions are always considered for development of institute.
- The Alumni who are succeeding and working on various higher posts in government /corporate/An Entrepreneur are always invited for various sessions as a expert / Examiner for Final year exams.
- The institute also approaches the alumni who are searching for jobs during campus drive conducted at our institute.
- The institute offers the software training of SAP for alumni too.

#### **5.2 Student Progression**

### 5.2.1 Providing the percentage of students progressing to higher education or employment (for the last four batches) highlights the trends observed.

Student progression is tabulated and shown in table 5.2.1

Table no 5.2.1 Student Progression

| Student     | Branch                            | Stu         | ıdent pro   | gression    | (%)         |
|-------------|-----------------------------------|-------------|-------------|-------------|-------------|
| Progression |                                   | 2016-<br>17 | 2015-<br>16 | 2014-<br>15 | 2013-<br>14 |
|             | Mechanical                        | NA          | 1.58        | 13.70       | 9.77        |
|             | Civil                             | NA          | 25          | 31.66       | 16.67       |
| UG to PG    | Computer                          | NA          | 1.81        | 9.41        | 10          |
| Similarly   | Information technology            | NA          | Nil         | 13.69       | 9.52        |
|             | Electronics and telecommunication | NA          | 5.32        | 10.63       | 8.69        |
|             | Instrumentation and control       | NA          | 00          | 13.20       | 1.72        |
|             | Mechanical                        | NA          | 4.76        | 9.67        | 4.86        |
|             | Civil                             | NA          | 3.33        | Nil         | Nil         |
| Employed    | Computer                          | NA          | 25.3        | 12.94       | 15.70       |
| Campus      | Information technology            | NA          | 10.95       | 6.84        | 9.52        |
|             | Electronics and telecommunication | NA          | Nil         | Nil         | Nil         |
|             | Instrumentation and control       | NA          | 12.28       | 9.43        | 1.72        |

|  | Mechanical                        | NA | 10.58 | 19.34 | 35.63 |
|--|-----------------------------------|----|-------|-------|-------|
|  | Civil                             | NA | 10    | 20    | 38.33 |
| Employed                                 | Computer                          | NA | 13.25 | 15.29 | 37.14 |
| Other than                               | Information technology            | NA | 1.35  | 12.32 | 23.80 |
| Campus Electronics and telecommunication |                                   | NA | Nil   | Nil   | Nil   |
|  | Instrumentation and control       | NA | 14.03 | 28.30 | 31.0  |
|  | Mechanical                        | NA | Nil   | Nil   | Nil   |
| PG to Ph.D                               | Civil                             | NA | 01    | Nil   | Nil   |
|  | Computer                          | NA | Nil   | Nil   | Nil   |
|  | Information technology            | NA | Nil   | Nil   | Nil   |
|  | Electronics and telecommunication | NA | Nil   | Nil   | Nil   |
|  | Instrumentation and control       | NA | Nil   | Nil   | Nil   |

5.2.2 Provide details of the programme wise pass percentage and completion rate for the last four years (cohort wise/batch wise as stipulated by the university)? Furnish programme-wise details in comparison with that of the previous performance of the same institution and that of the Colleges of the affiliating university within the city/district

Table 5.2.2 Programme wise Pass percentage and completion rate for last four years

| Sr. No. | Branch                            | Result in Percentage (%) |         |         |         |
|---------|-----------------------------------|--------------------------|---------|---------|---------|
|         |                                   | 2016-17                  | 2015-16 | 2014-15 | 2013-14 |
| 1       | Mechanical engineering            | NA                       | 68.84   | 95.12   | 88.20   |
| 2       | Civil engineering                 | NA                       | 91.20   | 97.18   | 98.38   |
| 3       | Computer                          |                          | 92.30   | 98.67   | 92.42   |
| 4       | Information technology            | NA                       | 94.59   | 98.63   | 98.41   |
| 5       | Electronics & telecommunication   | NA                       | 94.66   | 97.36   | 85.71   |
| 6       | Instrumentation and control       | NA                       | 71.42   | 93.03   | 89.83   |
| 7       | Master in business administration | NA                       | 94.44   | 91.23   | 85.71   |
| 8       | Master of Computer Applications   | NA                       | 98.59   | 96.05   | 92.59   |
| 9       | M. E. Mechanical engineering      | NA                       | 87.50   | 83.33   | 66.66   |
| 10      | M. E. Civil Engineering           | NA                       | 100     | 100     | 100     |

5.2.3 How does the institution facilitate student progression to higher level of education and/or towards employment?

- The institution facilitates student progression to higher level of education and towards employment through T & P department.
- The institute cooperate with students those applying abroad for the higher studies.
- The institute take care of students to get their transcripts and recommendation letters with priority to facilitate the process of admission.
- The institute arranges special lecture on soft skill, technical, aptitude, mock interview, group discussion and personality development to shape the students for facing the professional world.
- The institute also guides the students to appear for exams such as GATE, GMAT, CAT, etc.
  - The institute arranges the curricular enrichment program for students as follows.

Table 5.2.3 Curricular enrichment programme

| Department | Department Title of Programme                 |      | No. of participant |
|------------|---|------|--------------------|
| Mechanical | Higher Education in foreign universities      | 2014 | 60                 |
| Mechanical | Higher Education in foreign universities      | 2015 | 60                 |
|            | Higher Education in Germany                   | 2015 | 100                |
|            | Higher Education in Germany                   | 2014 | 114                |
| MCA        | Workshop on Advance java                      | 2016 | 17                 |
| MCA        | UI Designing Sessions                         | 2016 | 17                 |
|            | Software testing Sessions                     | 2016 | 17                 |
|            | Virtual Reality Sessions                      | 2015 | 50                 |
| MCA        | IOT Interactive Sessions                      | 2015 | 51                 |
| MCA        | Web Development in PHP Sessions               | 2015 | 50                 |
|            | .NET Sessions                                 | 2015 | 40                 |
|            | Basics of Web Development                     | 2015 | 17                 |
|            | Google Apps Workshop                          | 2013 | 55                 |
| IT         | Android App Development                       | 2016 | 137                |
| 11         | Big data & Hadoop                             | 2016 | 75                 |
|            | Soft Skill session                            | 2016 | 56                 |
| Computer   | Applied CS with Android workshop              | 2016 | 30                 |
| Computer   | DST workshop on Entrepreneurship Development  | 2016 | 15                 |
|            | One day workshop on Python                    | 2016 | 120                |
|            | Hadoop-Big data workshop                      | 2015 | 71                 |
| Civil      | Entrepreneurship Development                  | 2016 | 200                |
| CIVII      | View towards the life                         | 2016 | 200                |
|            | MSP Software Training                         | 2015 | 24                 |
|            | ERP Software Training                         | 2015 | 50                 |
|            | Auto-CAD Software Training                    | 2015 | 100                |
|            | Water Audit Course                            | 2015 | 80                 |
|            | ERP Software Training                         | 2013 | 80                 |
| Instru.    | 5 Days training on Automation Using PLC,SCADA | 2016 | 28                 |

| &       | Six Days STTP on "C" Programming                          | 2016 | 11        |
|---------|---|------|-----------|
| Control |   |      |           |
|         | Workshop on "Automation Technology<br>Covers PLC & SCADA" | 2016 | 46        |
|         | Traffic Awareness Training Program at                     | 2016 | 78        |
|         | Children Traffic Education Park,                          | 2016 | 151       |
|         | Workshop on "Electronics Products"                        | 2016 | 151<br>37 |
|         | Workshop on "C Programming"                               |      | 70        |
|         | Visit at Dharampur Science Center,                        | 2016 | 70        |
|         | Gujrat.   | 2016 | 81        |
|         | Workshop on Embedded System                               |      | 56        |
|         | VLSI workshop   | 2016 |           |
|         | Workshop on "Personality Development"                     | 2015 | 59        |
|         | Workshop on "Ardino Procesor, Latex, PCB Design"          | 2015 | 62        |
|         | Workshop on "Personality Development"                     | 2014 | 10        |
| E& TC   | AICTE –BSNL Employability Enhancement Program             | 2014 | 30        |
|         | Automation System   | 2014 | 47        |
|         | Workshop on "Personal Power                               | 2014 | 74        |
|         | Power of MBA  | 2014 | 127       |
|         | Emotional Freedom Technique EFT                           | 2014 | 118       |
|         | Campus to Corporate                                       | 2013 | 129       |
|         | Etiquette & Manners                                       | 2013 | 130       |
|         | Workshop on "Practical Oriented                           | 2013 | 68        |
|         | Electronics Workshop on Industrial                        |      |           |
|         | Approach For Electronics                                  |      |           |
|         | How to Crack GATE   | 2013 | 66        |
|         | How to Crack GATE & CAT                                   | 2013 | 67        |
|         | Practical Orientation on Industrial                       | 2013 | 148       |
|         | Approach For Electronics                                  |      |           |
|         | Personality Development                                   | 2013 | 80        |
|         | Soft Skill Development By Nandita Ray                     | 2013 | 60        |
|         | Soft Skill Development By Neeta Nigam                     | 2014 | 60        |
|         | Inbound Training Program by                               | 2014 | 60        |
|         | AryaHycinth   |      |           |
|         | 03-Days Outbound Training Program by                      | 2015 | 20        |
|         | Arya Hycinth  |      |           |
|         | Soft Skill Development By Gordon Sir                      | 2015 | 60        |
| MBA     | One Day-Outbound Training Programme                       | 2015 | 60        |
| MBA     | by Shubhangi Kundalkar & Gordon                           |      |           |
|         | Noronha   | 2015 | <b>60</b> |
|         | Inbound Training Program by Arya Hycinth                  | 2015 | 60        |
|         | One Day-Outbound Training Programme                       | 2016 | 60        |
|         | by Gordon Noronha   |      |           |
|         | Inbound Training Program by Arya                          | 2016 | 60        |
|         | Hycinth   |      |           |

|           | Soft Skill Development By Gordon |      | 60 |
|-----------|----------------------------------|------|----|
|           | Noronha                          |      |    |
|           | Zensar Training                  | 2016 | 48 |
|           | Entrepreneurship Awareness Camp  | 2014 | 10 |
|           | Entrepreneurship Awareness Camp  | 2016 | 10 |
| Institute | Zensar Training                  | 2015 | 45 |
|           | Entrepreneurship Awareness Camp  | 2016 | 15 |
|           | Big data and Hadoop              | 2016 | 77 |

### 5.2.4 Enumerate the special support provided to students who are at risk of failure and drop out?

The Mentoring system helps to identify the student who is at risk of failure. The student who is failing in the subject is allowed to attend the lecture of the respective subject in next year

- Counselling by mentor.
- Assignments.
- Remedial Classes.
- Extra classes for theory
- Personal care.
- Notes and solved question paper given for ready reference

#### 5.3 Student Participation and Activities

### 5.3.1 List the range of sports, games, cultural and other extracurricular activities available to students. Provide details of participation and program calendar

Table 5.3.1 (A) Outdoor games

| Sr.<br>No. | Name of Sports/Games | Equipment  |
|------------|----------------------|--|
| 1          | Cricket              | Cricket Mat, Net, Helmet, Cricket Bat Match, Cricket Bat Practice, Batting Gloves, Abdominal Guards, Kit Bag, Wicket Keeper Gloves, Stump, Batting Thigh Pad, Elbow Guard, Leather Ball, Wicket Keeper Thigh Pad, Helmet, Session Ball |
| 2          | Volleyball           | Volleyball Poll Set, Volleyball Net, Volleyball  |
| 3          | Basketball           | Basketball Pole Set (Movable With Acrylic Board), Basket<br>Ball   |
| 4          | Lawn Tennis          | Lawn Tennis Pole Set, Tennis Racket, Tennis Ball,  |
| 5          | Athletic             | Hammer Throw, Hammer Belt, Javelin Men, Javelin Women, Shot Put Men, Shot Put Women, Discuss Men, Discuss Women,   |
| 6          | Baseball             | Baseball Slugger, Baseball Gloves, Base Ball   |
| 7          | Softball             | Softball Slugger, Gloves, Soft Ball  |
| 8          | Kabaddi              | Marking Tape   |

| 9  | Football | Football Goal Post, Football |
|----|----------|------------------------------|
| 10 | Handball | Handball                     |

Table 5.3.1 (B) Indoor games

| Sr.<br>No. | Name of<br>Sports/Games | Equipment  |
|------------|-------------------------|--|
| 1          | Water Polo              | Water Polo Ball  |
| 2          | Badminton               | Badminton Pole, Badminton Racket, Badminton Shuttle, Badminton Net           |
| 3          | Boxing                  | Boxing Gloves, Boxing Head Guard, Boxing Teeth Guard                         |
| 4          | Chess                   | Chess Set  |
| 5          | Carom                   | Carom Board, Carom Gits, Carom Power   |
| 6          | Table Tennis            | Table Tennis Table, Table Tennis Racket, Table Tennis Ball, Table Tennis Net |

Table 5.3.1 (C) List of Sports and Games with students participation detail are listed below  $\frac{1}{2}$ 

| Sr.<br>No | Name of<br>Sport                                | Date           | Place/Region  | Achievement/<br>Participation  | No. of<br>Students |  |  |  |  |
|-----------|---|----------------|---|--|--------------------|--|--|--|--|
|           | Academic year 2016-17 (Till Date on 24.11.2016) |                |   |  |                    |  |  |  |  |
| 1         | Table<br>Tennis<br>(Men)                        | 01/08/<br>2016 | Sir Visvesvaraya<br>Institute of<br>Technology,<br>Chincholi,<br>Nashik | Burkule Ishan<br>Avinash has<br>selected for<br>reserve in zonal<br>team                     | 05                 |  |  |  |  |
| 2         | Table<br>Tennis<br>(Women)                      | 01/08/<br>2016 | Sir Visvesvaraya<br>Institute of<br>Technology,<br>Chincholi,<br>Nashik | Bhagat Sandhya<br>Sharvan is<br>selected for<br>reserve in zonal<br>team                     | 03                 |  |  |  |  |
| 3         | Archery<br>(Women)                              | 20/08/<br>2016 | N.D.M.V.P.<br>Samajs K.T.H.M.<br>College, Nashik                        | Thete Punam Manohar his Selected in recover round event for zonal sports but he not reported | 01                 |  |  |  |  |
| 4         | Coneing<br>(Women)                              | 20/08/<br>2016 | N.D.M.V.P.<br>Samajs K.T.H.M.   | Kardile Rutuja<br>Jitendra his<br>Selected in  | 01                 |  |  |  |  |

|   |  |                | College, Nashik  | canoeing C1<br>500M event for<br>zonal sports but<br>he not reported   |    |
|---|--|----------------|--|--|----|
|   |  |                | Veer Savarkar<br>Swimming Pool,<br>Nashik<br>(N.D.M.V.P.<br>Samajs K.B.G.T.<br>College of<br>Engineering,<br>Nashik) | Patil Shivam Sudhir has Selected in Swimming 50 M Breast Stork event & Water Polo for zonal level sports competition         | 08 |
|   | Swimming,<br>Diving &<br>Water Polo<br>(Men) | 18/08/<br>2016 |  | Gite Aniket Ramchandra has Selected in Diving 1 Meter event for zonal level sports competition                               |    |
| 5 |  |                |  | Deore Kapil<br>Sanjay has<br>Selected in<br>Water Polo for<br>zonal level<br>sports<br>competition                           |    |
|   |  |                |  | Kalal Malhar<br>Rajendra has<br>Selected in<br>Water Polo for<br>zonal level<br>sports<br>competition                        |    |
|   |  |                |  | Bauskar Akshay<br>Ashok has<br>Selected in<br>Swimming 200<br>M Butter Fly<br>event for zonal<br>level sports<br>competition |    |
|   |  |                |  | Gawande<br>Mayur<br>Dyaneshwar has<br>Selected in<br>Swimming 200  |    |

|    |                                    |                         |   | M Butter Fly<br>event for zonal<br>level sports<br>competition   |                                 |
|----|------------------------------------|-------------------------|---|--|---------------------------------|
| 6  | Badminton (Men) 20 August 2016     |                         | Minatai Thakare<br>Stadium Nasik.<br>(C.B.C. College,<br>Nasik Road)  | Participation  | 05                              |
| 7  | Chess 1 to 3 (Men) September 2016  |                         | SNJB Pharmacy<br>College,<br>Chandwad                                 | Participation  | 05                              |
| 8  | Kabaddi (Men) 10 September 2016    |                         | MGV ACS<br>College,<br>Manmad, Dist-<br>Nashik                        | Participation  | 12                              |
| 9  | Kho-Kho<br>(Women)                 | 13<br>September<br>2016 | MVP'S K.R.T.<br>Art's &<br>Commerce<br>College, Vani,<br>Dist- Nashik | Aware Sonali<br>Madhukar his<br>Selected in kho-<br>kho team for<br>zonal level<br>sports<br>competition   | 03 (For<br>Selection<br>Trials) |
| 10 | Boxing<br>(Men)                    | 16<br>September<br>2016 | S.N.J.B. ASC<br>College,<br>Chandwad, Dist-<br>Nashik                 | Patil Krishna Arun has Selected in boxing 75 to 81 kg weight categories for zonal level sports competition | 04                              |
| 11 | Cricket (Men) 17<br>September 2016 |                         | CBC College<br>Nashik Road  | Participation  | 16                              |
| 12 | Baseball<br>(Men)                  | 27<br>September<br>2016 | N.V.P.<br>MANDAL'S<br>ACS College,<br>Lasalgaon                       | Participation  | 14                              |
| 13 | Kho-Kho (Men)  29 September 2016   |                         | L.V.H. ACS<br>College<br>Panchavati,<br>Nasik.                        | Participation  | 01 (for<br>selection<br>trail)  |

| 14 | Judo (Men)                                   | 6 Oct. 2016          | Shivaji Stadium<br>(K.P.G. ACS<br>College Igatpuri,<br>Nasik.)      | Participation  | 01 |
|----|--|----------------------|---|--|----|
| 15 | Yogasana<br>(Women)                          | 15 Oct.<br>2016      | N.S.P.Ma<br>ndal's LBRD<br>Mahila College,<br>Nashik Road,<br>Nasik | Raut Shweta Prakash his Selected in yogasana team for zonal level sports competition   | 03 |
| 16 | Athletics (Men)                              | 20 & 21<br>Oct. 2016 | Meenatai<br>Thakare Stadium<br>, Nasik                              | Participation in hammer throw event  | 01 |
|    | <u> </u>                                     | Acad                 | lemic year 2015-16  | 1  |    |
| 1  | Swimming,<br>Diving &<br>Water Polo<br>(Men) | 08.08.2015           | Veer Savarkar<br>Swimming Pool,<br>Nashik. (BYK<br>College, Nashik) | Fartale Jayesh Ambadas has Selected in water polo team for all india inter university sports competition  Deore Kapil Sanjay has | 10 |
|    |  |                      |   | Selected in water polo team for zonal level sports competition   |    |
| 2  | Swimming<br>(Women)                          | 08.08.2015           | Veer Savarkar<br>Swimming Pool,<br>Nashik. (BYK<br>College, Nashik) | Deore Kapil<br>Sanjay his<br>Selected in<br>swimming team<br>for zonal level<br>sports<br>competition                            | 01 |
| 3  | Table<br>Tennis<br>(Men)                     | 17.08.2015           | KKW College of<br>Engineering,<br>Nashik                            | Runner up team   | 05 |
| 4  | Archery<br>(Women)                           | 15.09.2015           | N.D.M.V.P.<br>Samajs K.T.H.M.<br>College, Nashik.                   | Thete Punam Manohar his Selected in archery team in recover round event for zonal  | 01 |

|    |                            |                    |  | level sports competition   |    |
|----|----------------------------|--------------------|--|--|----|
| 5  | Lawn<br>Tennis<br>(Women)  | 16.09.2015         | C.B.C. College,<br>Nashik Road,<br>Nashik          | Lokhande Ruchita Vijay his Selected in lawn tennis team for zonal level sports competition | 01 |
| 6  | Badminton (Men) 04.09.2015 |                    | R.H. Sapat<br>College of<br>Engineering,<br>Nashik | Participation  | 05 |
| 7  | Badminton<br>(Women)       | 04.09.2015         | R.H. Sapat<br>College of<br>Engineering,<br>Nashik | Participation  | 05 |
| 8  | Volleyball<br>(Men)        | 09 &<br>10.09.2015 | MVP'S<br>K.S.K.W.<br>College, Cidco,<br>Nashik.    | Participation  | 10 |
| 9  | Kabaddi<br>(Men)           | 07 & 08.09.2015    | MGV ACS<br>College,<br>Manmad, Dist-<br>Nashik     | Participation  | 11 |
| 10 | Boxing<br>(Men)            | 11.09.2015         | M.G.V. ACS<br>College,<br>Malegaon,<br>Nashik      | Chothave pratik rajendra his Selected in boxing team for zonal level sports competition    | 02 |
|    |                            |                    |  | Patil Shailesh Tukaram his Selected in boxing team for zonal level sports competition      |    |
| 11 | Cricket (Men)              | 24.09.2015         | HPT & RYK<br>College, Nashik                       | Participation  | 16 |
| 12 | Athletics<br>(Men &        | 06.10.2015         | Meenatai<br>Thakare Stadium<br>, Nasik. (MVP       | Lokare Harshali<br>Vinayak his<br>Selected in high   | 04 |

|    | Women)  Football                             |                    | Sinner College)  KKW College of  | jump for zonal level sports competition  Rajule Vishal Subhash has Selected in hammer throw for zonal level sports competition  Participation  | 15 |
|----|--|--------------------|--|--|----|
| 13 | (Men)  | 27.10.2015         | Engineering,<br>Nashik   |  |    |
|    |  | Acad               | lemic year 2014-15   |  |    |
| 1  | Swimming,<br>Diving &<br>Water Polo<br>(Men) | 12 &<br>13.09.2014 | Veer Savarkar<br>Swimming Pool,<br>Nashik. (D.S.M.<br>Art's College,<br>Abhona, Dist.<br>Nashik) | Fartale Jayesh Ambadas has Selected in water polo team for zonal level & all india inter university sports competition  Patil Shivam Sudhir has Selected in water polo & swimming team for zonal level sports competition  Potdar Kunal Girish has Selected in water polo team for zonal level sports competition  competition | 11 |
| 2  | Squash<br>Racket<br>(Men)                    | 23.11.2014         | C.B.C. College<br>Nashik Road,<br>Nashik   | Participation  | 01 |
| 3  | Table<br>Tennis<br>(Men)                     | 16.08.2014         | NDMVP'<br>K.B.G.T. College<br>of Engineering,<br>Nashik  | Participation  | 05 |
| 4  | Badminton                                    | 17.09.2014         | BYK College,   | Participation  | 05 |

|   | (Men)  |                                      | Nashik   |   |                            |
|---|--|--------------------------------------|--|---|----------------------------|
| 5 | Kabaddi<br>(Women)                           | 18.09.2014                           | MVP'S Art's and<br>Commerce<br>College,<br>Tryabakeshwar,<br>Nashik      | Participation   | 11                         |
| 6 | Cycling<br>(Men &<br>Women)                  | (Men & 30.08.2014   College, Harsul, |  | Participation   | 02                         |
| 7 | Cricket<br>(Men)                             | 30.09.2014                           | HPT & RYK<br>College, Nashik   | Participation   | 03<br>(selection<br>trail) |
| 8 | Cross<br>Country<br>(Men)                    | 27 &<br>28.08.2014                   | Dadasaheb Bidkar Art's and Commerce College, Peth, Nashik                | Participation   | 03                         |
| 9 | Football<br>(Men)                            | 06.10.2014                           | S.V.I.T. College<br>of Engineering,<br>Chincholi,<br>Nashik.             | Singh Manish Binodkumar has Selected in football team for zonal level sports competition              | 15                         |
|   |  | Acad                                 | lemic year 2013-14   |   |                            |
| 1 | Swimming,<br>Diving &<br>Water Polo<br>(Men) | 28.08.2013                           | D.S.M. ACS<br>College, Peth,<br>Nashik                                   | Patil Shivam Sudhir has Selected in water polo team for all India inter university sports competition | 02                         |
| 2 | Volleyball<br>(Men)                          | 27 August 2013                       | ACS College,<br>Kalwan, Nashik   | Participation   | 09                         |
| 3 | Badminton<br>(Men)                           | 27.09.2013                           | BYK College,<br>Nashik   | Participation   | 04                         |
| 4 | Basketball (Men)                             | 3 & 4 Sep.<br>2013                   | S.N.J.B. College<br>of Engineering,<br>Chincholi, Sinner<br>Dist. Nashik | Participation   | 08                         |
| 5 | Athletics (Men)                              | 25, 26 Oct.<br>2013                  | MVP'S ACS<br>College, Sinner   | Participation   | 05                         |
| 6 | Chess (Men                                   | 06 to 08                             | MVP'S ACS  | Participation   | 03                         |

|   | & Women)          | August<br>2013             | College, Ozer                            |   |    |
|---|-------------------|----------------------------|--|---|----|
| 7 | Football<br>(Men) | 23 to 25<br>August<br>2013 | KKW College of<br>Engineering,<br>Nashik | Shinde Bhushan<br>has Selected in<br>football team<br>for SPPU Inter<br>Group sports<br>competition | 15 |

# 5.3.2 Furnish the details of major student achievements in co-curricular, extracurricular and cultural activities at different levels: University / State / Zonal / National / International, etc. for the previous four years.

Table 5.3.2 Achievements of students

| Sr<br>No | Name<br>of event               | Department | Place/<br>Region  | Level  | Achieveme<br>nt  | No. of<br>Students           |  |  |  |
|----------|--------------------------------|------------|---|--|--|------------------------------|--|--|--|
|          | Academic year 2016-17          |            |   |  |  |                              |  |  |  |
| 1        | Judo<br>(M)                    | Mechanical | Triambakes<br>hwar,<br>Nashik   | 44 <sup>th</sup> Cadet and<br>Junior State<br>Judo<br>championships<br>2016-17 | Participant  | 1(Certifi<br>cate<br>Pending |  |  |  |
| 2        | Table<br>Tennis<br>(M)         | Mechanical | Sir<br>Visvesvaray<br>a Institute of<br>Technology,<br>Chincholi,<br>Nashik | Inter Colligate<br>Sports<br>Competition                                       | Selected<br>for inter<br>zonal<br>competitio<br>n in<br>reserve<br>players           | 01                           |  |  |  |
| 3        | Table<br>Tennis<br>(Wome<br>n) | Mechanical | Sir<br>Visvesvaray<br>a Institute of<br>Technology,<br>Chincholi,<br>Nashik | Inter Colligate<br>Sports<br>Competition                                       | Selected<br>for inter<br>zonal<br>competitio<br>n in<br>reserve<br>players           | 01                           |  |  |  |
| 4        | Archer<br>y<br>(Wome<br>n)     | MBA        | N.D.M.V.P.<br>Samajs<br>K.T.H.M.<br>College,<br>Nashik                      | Inter Colligate<br>Sports<br>Competition                                       | Selected<br>for inter<br>zonal<br>competitio<br>n but his<br>not<br>participate<br>d | 01                           |  |  |  |

| 5  | Canoei<br>ng<br>(Wome<br>n)          | Instrumenta<br>tion &<br>Control | N.D.M.V.P.<br>Samajs<br>K.T.H.M.<br>College,<br>Nashik  | Inter Colligate<br>Sports<br>Competition  | Selected<br>for inter<br>zonal<br>competitio<br>n but his<br>not<br>participate<br>d | 01 |
|----|--------------------------------------|----------------------------------|---|---|--|----|
| 6  | Swimm ing, Diving & Water Polo (Men) | Mechanical                       | LBRD<br>Mahila<br>College,<br>Nashik<br>Road,<br>Nashik | SPPU Inter<br>Group sports<br>competition | Participant  | 04 |
| 7  | Swimm ing, Diving & Water Polo (Men) | Instrumenta<br>tion &<br>Control | LBRD<br>Mahila<br>College,<br>Nashik<br>Road,<br>Nashik | SPPU Inter<br>Group sports<br>competition | Participant  | 01 |
| 8  | Swimm ing, Diving & Water Polo (Men) | Е&ТС                             | LBRD<br>Mahila<br>College,<br>Nashik<br>Road,<br>Nashik | SPPU Inter<br>Group sports<br>competition | Participant  | 01 |
| 9  | Kho-<br>Kho<br>(Wome<br>n)           | Mechanical                       | New ACS<br>College,<br>Nagar                            | SPPU Inter<br>Group sports<br>competition | Participant  | 01 |
| 10 | Boxing (Men)                         | Civil                            | B.J.S.<br>College,<br>Wagholi,<br>Pune                  | SPPU Inter<br>Group sports<br>competition | Participant  | 01 |
| 11 | Yogasa<br>na<br>(Wome<br>n)          | Mechanical                       | Indrayani<br>College,<br>Talegaon<br>Dhabade,<br>Pune   | SPPU Inter<br>Group sports<br>competition | Selected for inter zonal competitio n but this event date 07 &                       | 01 |

|   |                       |                                  |   |  | 08/12/2016                                       |    |  |
|---|-----------------------|----------------------------------|---|--|--|----|--|
|   | Academic year 2015-16 |                                  |   |  |  |    |  |
| 1 | Water polo (M)        | MBA                              | Punjab<br>University,<br>Punjab.                                      | All India Inter<br>University<br>Competition     | Participant                                      | 01 |  |
| 2 | Cricket (M)           | Mechanical                       | Reliance<br>Cricket<br>Stadum,<br>Vadodara                            | U-19 Cooch<br>Behar Thophy<br>& Mankad<br>Trophy | Participant                                      | 01 |  |
| 3 | Water polo (M)        | Instrumenta<br>tion &<br>Control | Rajmata Internation Swimming pool, Nashik Road Nashik.                | SPPU Inter<br>Group sports<br>competition        | Participant                                      | 01 |  |
| 4 | Foot<br>Ball<br>(M)   | Mechanical                       | rajasthan<br>University,<br>Jaipur                                    | West zone Inter<br>university<br>competitions    | Participant                                      | 01 |  |
| 5 | Athleti<br>c (M)      | Mechanical                       | B.J.S.<br>College,<br>Wagholi,<br>Pune                                | SPPU Inter<br>Group sports<br>competition        | Participati<br>on in<br>Hammer<br>Throw<br>Event | 02 |  |
| 6 | Athleti<br>c (M)      | Computer                         | B.J.S.<br>College,<br>Wagholi,<br>Pune                                | SPPU Inter<br>Group sports<br>competition        | Participati<br>on in High<br>Jump<br>Event       |    |  |
| 7 | Athleti<br>c (M)      | MBA                              | Fergusson<br>College,<br>Pune   | SPPU Inter<br>Group sports<br>competition        | Participant                                      | 01 |  |
| 8 | Archer y (W)          | MBA                              | Jijamata<br>College<br>Bhende BK.<br>Nagar                            | SPPU Inter<br>Group sports<br>competition        | Participant                                      | 01 |  |
| 9 | Swimm ing (W)         | Mechanical                       | Rajmata<br>Internation<br>Swimming<br>pool, Nashik<br>Road<br>Nashik. | SPPU Inter<br>Group sports<br>competition        | Participant                                      | 01 |  |

| 10 | Water<br>polo                        | FE<br>Mechanical   | Jilha Karida<br>Sankul<br>Samiticha<br>Wadiya Park<br>Jaltran<br>Talav,<br>Ahmednagar | 77 <sup>th</sup> senior & lower age group swimming championship 2015                        | Winner      | 01 |
|----|--------------------------------------|--------------------|---|---|-------------|----|
| 11 | Athleti<br>c (High<br>Jump)          | Computer           | B.J.S.<br>College,<br>Wagholi,<br>Pune  | Savitribai Phule<br>Pune Universit,<br>pune under<br>inter zonal<br>athletic<br>competation | First       | 01 |
| 12 | Boxing (M)                           | Civil & mechanical | B.J.S.<br>College,<br>Wagholi,<br>Pune  | SPPU Inter<br>Group sports<br>competition   | Participant | 02 |
|    |                                      |                    | Academic ye   | ar 2014-15  |             |    |
| 1  | Water polo (M)                       | MBA                | Jain<br>University,<br>Bangalore  | All India Inter<br>University<br>Competition  | Participant | 01 |
| 2  | Water polo (M)                       | Mechanical         | Arc of<br>Nairs, Thane  | 76th senior<br>state aquatic<br>championships<br>2014                                       | Participant | 01 |
| 3  | Swimm ing, Diving & Water Polo (Men) | Mechanical         | Rajmata<br>International<br>Swimming<br>Pool, Nashik                                  | SPPU Inter<br>Group sports<br>competition   | Participant | 03 |
| 4  | Badmin<br>ton (M)                    | Instru             | Modern<br>College,<br>Pune  | SPPU Inter<br>Group sports<br>competition   | Participant | 01 |
| 5  | Foot<br>Ball<br>(M)                  | Mechanical         | Ahmednagar<br>College,<br>Ahmednagar  | SPPU Inter<br>Group sports<br>competition   | Participant | 01 |
|    | Academic year 2013-14                |                    |   |   |             |    |
| 1  | Water polo                           | Mechanical         | Hyderabad   | 40 <sup>th</sup> Junir<br>National  | First       | 01 |

|   | (M)            |            |  | Aquatic<br>Championships<br>- 2016                                       |             |    |
|---|----------------|------------|--|--|-------------|----|
| 2 | Water polo (M) | Mechanical | Guru Nanak<br>Dev<br>University,<br>Amritsar | All India Inter<br>University<br>Competition                             | Participant | 01 |
| 3 | Footbal 1 (M)  | Mechanical | KKW<br>College of<br>Engineering,<br>Nashik  | SPPU Inter<br>Group sports<br>competition                                | Participant | 01 |
| 4 | Water<br>polo  | Mechanical | Hyderabad                                    | 40 <sup>th</sup> Junior<br>National<br>aquatic<br>championships<br>-2013 | First place | 01 |

# 5.3.3 How does the college seek and use data and feedback from its graduates and employers, to improve the performance and quality of the institution all provisions?

#### A) Student feedback

- The institute takes student feedback for improvisation of quality of teaching and learning process.
- The Student feedback process is conducted for each semester which becomes easy to analyse the performance of the faculty and corrective measures are taken.
- The feedback includes such as explanatory skills, materials for lectures, preparation, communication, behavioural, problem solving ability, etc. which are evaluated by Head of respective Department and Principal of Institute.

Sample of feedback form is shown in fig 5.3.1

| Till | College of Engineering, Nashik - 13.   |
|------|--|
| _    | (Do not disclose your identity)  |
| Dep  | sartment : Subject :   |
| Nan  | ne of Staff : Clase :  |
|      | Date :   |
| 1.   | How does the teacher explain the subject ?  Exceedingly well  Adequately  Inadequate  Totally inadequa   |
| _    |  |
| 2.   | Books referred / used by the teacher for teaching in classroom.  Standard Publications Local Publishers Self prepared Notes  |
| 3.   | Whether the teacher was wen prepared for the subject ?  Always Often Sometimes Never   |
| 4.   | How is the clarity of communication and speed of delivery?   |
|      | Excellent Good Satisfactory Poor   |
| 5.   | Whether the teacher encourages questions from students and provides satisfactory answers ?  Always  Often  Sometimes  Never  |
| 6.   | Whether teacher solves or discusses university question paper in classroom?  Always  Often  Sometimes  Never   |
| 7.   | How much of the class time does the teacher uses for teaching the subject (as against deviating town irrelevant or general matters)?  Above 90% 80 - 90 % 60 - 80 % Below 60 % |
| 8.   | Whether the teacher conducts the lectures regularly ?  Always  Often  Sometimes  Never   |
| 9.   | Neatness and clarity of writing on blackboard  Excellent Good Satisfactory Poor  |
| 10.  | What is the attitude of teachers towards you?  Usually Sympathetic and helpful  Sometimes sympathetic & helpful  |
|      | Avoids personal contact Appears to be indifferent to students  |
| 11.  | Classroom control and discipline  Maintains good discipline by his or her presence   |
|      | Class is in disorder frequently Class is noisy and in chaes  |

Fig 5.3.3. Feedback Form

#### **B)** Employers Feedback

- a) The institute collects the employer's feedback of alumni working with various organisations which will be helpful for growth of institute.
- b) The employer's feedback includes various aspects on which our graduates are assessed such as technical knowledge, Capability of analysis, knowledge of standards, professional and ethical attitude etc.
- c) This feedback will help the institute to impart necessary skills to graduates to face industry.

# 5.3.4 How does the college involve and encourage students to publish materials like catalogues, wall magazines, college magazine, and other material? List the publications/ materials brought out by the students during the previous four academic sessions.

- The institute publishes its annual magazine 'Abhivyakti to appreciate the curricular and extra-curricular activities of the students.
- The magazine consists of non-technical articles, poems, producing good quality of creative writing which helps in developing thinking ability of students.
- The students post their poetry, story, article and other material in magazine which enhances the literacy.

  Sample of Abhivyakti is shown in fig 5.3.2.





Fig 5.3.4 Abivyvakti college magzine

### 5.3.5 Does the college have a Student Council or any similar body? Give details on its selection, constitution, activities and funding. Yes

Yes, the institute has its independent student Council as per the UGC and SPPU norms. The Principal is the chairman of this council. The council also includes director of sport and physical education, student coordinators from FE to BE and lady student members.

Table 5.3.5 Student council

| Name                 | Designation                |
|----------------------|----------------------------|
| Dr. K. S. Holkar     | Principal                  |
| Dr. R.S. Kare        | Physical Director          |
| Prof. A.S. Talekar   | NSS Coordinator            |
| Mr. Shubham Kunde    | General Secretary          |
| Miss. Megah Shaha    | Cultural Student Secretary |
| Mr. Sushant Gaudhani | Sports Student Secretary   |
| Mr. Sayali Bhadke    | NSS Secretary              |
| Miss. Prachi Nikam   | Ladies Representatives     |
| Miss. Noopur lokwani |                            |

### 5.3.6 Give details of various academic and administrative bodies that have student representatives on them.

- Student Council
- Professional body's Student Chapter
- Anti-ragging Committee
- Hostel committee
- NSS (National Service Scheme)
- Departmental Students Associations of each Department

All the departments are having their student association the objective of association to encourage and motivate the student in co-curricular and extra-curricular activities.

Table 5.3.6 Students Association

| Sr.<br>No | Name of department                | Association   |
|-----------|-----------------------------------|---|
| 1         | Mechanical                        | Mechanical Engineering Student Association (MESA)                           |
| 2         | Computer                          | Association of Computer engineering student (ACES)                          |
| 3         | Electronics and telecommunication | Progressive Association of Electronics and telecommunication student (PAES) |
| 4         | Instrumentation and control       | Instrumentation and Control Student Association (ICON)                      |
| 5         | Information technology            | Information Technology Student Association (ITSA)                           |
| 6         | Civil                             | Civil Engineering Student Association (CESA)                                |
| 7         | First year                        | Arambh  |

Table 5.3.7 Student's anti-ragging committee UG

| Under graduate course committee   |  |  |   |  |  |
|-----------------------------------|--|--|---|--|--|
| Branch                            | FE   | SE   | TE  | BE   |  |
| Mechanical                        | Mr. Bhushan S.<br>Sagar  | Mr. Ekhande<br>Shubham<br>Sudam                            | Mr.<br>Katariya<br>Akash Lalit                                      | Mr. Mahajan<br>Vaibhav Dilip                                     |  |
|                                   | Ms. Samrudhi<br>Sanjay Godse                                       | Ms.Gadakh<br>Sujata<br>Suryabhan                           | Ms. Aher<br>Komal   | Ms. Ahuja<br>Geetanjali  |  |
|                                   | Mr. Gunjal<br>Sourav<br>Sachittanand                               | Mr. Toche<br>Tushar<br>Madhukar                            | Mr.Pawar<br>Pankaj<br>Kunal   | Mr.Vispute<br>Tanmay<br>Kishor                                   |  |
|                                   | Ms. Roshani<br>Nandkishor<br>Gaikwad                               | Ms.<br>Sonawane<br>Utkarsha<br>Vijay                       | Ms.<br>Kulkarni<br>Amruta<br>Vijay                                  | Ms.Pardhan<br>Sonali<br>Gawangi                                  |  |
| Computer                          | Ms. Vrinda<br>Prashant Patil<br>Mr.<br>Piyushkumar<br>Dinesh Singh | Mr. Husain<br>Dehnuwala<br>Ms. Neha N.<br>Chavan           | Mr. Akshay<br>Dixit<br>Ms.<br>Vijeyata<br>Mishra                    | Mr. Aaditya<br>Daga<br>Ms. Radhika<br>Bajaj                      |  |
| Civil                             | Mr. Sagar<br>Arjun<br>Gangurde<br>Ms. Himagauri                    | Mr. More<br>Hitesh B.                                      | Mr. Randhir<br>Nilesh Sunil<br>Ms. Jadhav                           | Mr. Patil<br>Divesh Sures<br>Ms. Deore                           |  |
|                                   | Rajendra Patil   | Diksha B.  | Rupam<br>Ramesh   | Sayali<br>Rajendra   |  |
| Instrumentation and control       | Mr. Aditya<br>Rakesh Desale  | Mr. Shreejay<br>P. Dhawale                                 | Mr. Pranav<br>Pravin<br>Avekar                                      | Mr. Shelke<br>Roshan<br>Ramdas                                   |  |
|                                   |  | Ms. Uphade<br>Madhri<br>Vishwas                            | Ms. Geeta<br>Rajendra<br>Kahandal                                   | Ms. Vidhate<br>Karishma<br>Hemant                                |  |
| Electronics and telecommunication | Ms. Prajakta<br>Santosh<br>Deshmukh                                | Mr. Joshi<br>Aakash<br>Jayant<br>Ms.<br>Sonawane<br>Nikita | Mr. Dixit<br>Sumedh<br>Santosh<br>Ms Nawale<br>Harshada<br>Rajendra | Mr. Kakade<br>Mayur<br>Mineshrao<br>Ms. Khairnar<br>Sujata Babaj |  |
| Information technology            | Mr. Dhurjad<br>Rohit Shivaji<br>Ms. Patil<br>Darshana<br>Sadashiv  | Ambadas Mr. Hire Shivam Ms. Sawale Snehal                  | Mr. Patil<br>Sameer<br>Ms. Bankar<br>Mayuri                         | Mr. Dusane<br>Mayur<br>Ms.<br>Ratlamwala<br>Rabaab               |  |

Table 5.3.8 Student's anti-ragging committee PG

|            | Postgraduate Student anti ragging committee |                               |  |  |  |
|------------|---|-------------------------------|--|--|--|
| Branch     | FY  | SY                            |  |  |  |
| ME Civil   | Mr. Shijo shaji Thomas                      | Mr. Kulkarni Vikram S.        |  |  |  |
|            | Ms. Aishwarya Raman                         | Ms. Ghuge Sayali S.           |  |  |  |
| ME         | Mr. Bharaskar Sandeep Kisan                 | Mr. Pote Mukunda              |  |  |  |
| Mechanical | Ms. Ahire Dhanashree<br>Pandharinath        | Ms. Patil Pratiksha           |  |  |  |
| MBA        | Mr. Hitendra Mahajan                        | Mr. Devendra Suryawanshi      |  |  |  |
|            | Ms. Leena Punjabi                           | Ms. Ashwini Shinde            |  |  |  |
| MCA        |   | Mr. Singh Girish Ramashray    |  |  |  |
|            |   | Ms.Kadam Gayatri<br>Balasaheb |  |  |  |

Table 5.3.9 Computer Society of India (CSI) council for academic year 2016-17

| Sr. no. | Name               | Designation      |
|---------|--------------------|------------------|
| 1       | Nupoor Lokwani     | President        |
| 2       | Himanshu Shrimavle | Vice - President |
| 3       | Akash Deshpande    | Treasurer        |

Table 5.3.10 Mechanical Engineering Student Association (MESA) council for academic year 2016-17

| Sr. no | Name          | Designation      |
|--------|---------------|------------------|
| 1      | Nilesh Palkar | President        |
| 2      | Komal Aher    | Vice - President |
| 3      | Mayur Hire    | Treasurer        |

Table 5.3.11 Association of Computer Engineering Student (ACES) council for academic year 2016-17

| Sr. no. | Name            | Designation        |
|---------|-----------------|--------------------|
| 1       | Anuja Tamboli   | President          |
| 2       | Neelam Nath     | Vice – President   |
| 3       | Shreya Sulakhe  | Secretary          |
| 4       | Asmita Badwar   | Treasurer          |
| 5       | Madhavi Sontake | Event- Coordinator |
| 6       | Husisn Yusuf    | Event- Coordinator |

Table 5.3.12 Progressive Association of Electronics and Telecommunication student (PAES) Council for academic year 2016-17

| Sr. no. | Name             | Designation      |
|---------|------------------|------------------|
| 1       | Sangram Shirsath | President        |
| 2       | Yash wagh        | Vice - President |
| 3       | Shewta Narwade   | Secretary        |
| 4       | Swargesh Pingale | Joint- Secretary |
| 5       | Sandip Murkute   | Treasurer        |

Table 5.3.13 Instrumentation and Control Student Association (ICON) council for academic year 2016-17

| Sr. no. | Name           | Designation             |
|---------|----------------|-------------------------|
| 1       | Madhuri Upadhe | SE Class representative |
| 2       | Sheta Gunjal   | TE Class representative |
| 3       | Roshan Shelke  | BE Class representative |

Table 5.3.14 Information Technology Student Association (ITSA) council for academic year 2016-17

| Sr. no. | Name           | Designation   |
|---------|----------------|---------------|
| 1       | Smith Nikam    | President     |
| 2       | Pranjal Deokar | Event Manager |
| 3       | Sonal Lahare   | Treasurer     |
| 4       | Ankita hase    | Secretary     |

Table 5.3.15 Civil Engineering Student Association (CESA) council for academic year 2016-17

| Sr. no. | Name          | Designation    |
|---------|---------------|----------------|
| 1       | Sahil Thakare | President      |
| 2       | Sayali Nerkar | Vice-President |
| 3       | Chetan Borade | Treasurer      |

Table 5.3.16 NSS committee of academic year 2016-17

| Sr. no | Name              | Designation            |
|--------|-------------------|------------------------|
| 1      | Omkar Panchpind   | Student representative |
| 2      | Madhuri Tajanpure | Student representative |

5.3.7 How does the institution network and collaborate with the Alumni and former faculty of the Institution. Any other relevant information regarding Student Support and Progression which the college would like to include.

#### Alumni meet

- Institute conducts alumni meet in annual social gathering.
- The motto of this alumni meet is as follows
  - I. Alumni visit to the entire campus
  - II. Discussion of alumni with principal
  - III. Alumni visit and discussion with HOD's and faculty's of respective department.
- Institute also take alumni feedback which for following purpose follows
  - a. The institute conducts the alumni feeback system for maintaining the relationship and attachment of student with institute which will be helpful for growth of institute.
  - b. The Alumni feedback includes various aspects such as their personal and professional details, evaluation of institute on basis of facilities provided and suggestion if any to cope up with any lacking requirement.
  - c. The Alumni feedback finds easier to contact the alumni so that interaction between industry and institute will be stronger.

#### Former faculty

• Institute has good relation with former faculty institute invites former faculty as examiner and as a judge in various events organized in institute.

#### **Annual social gathering**

• Institute conducts every academic year annual social gathering for enhancement of student in extra-curricular skill such as managerial skill, singing, dance, drama etc.

Sample copy of alumni feedback form is attached here

NASHIK DISTRICT MARATHA VIDYA PRASARAK SAMAJ'S

### KARMAVEER ADV. BABURAO GANPATRAO THAKARE COLLEGE OF ENGINEERING

NASHIK - 13

Udoji Maratha Boarding Campus, Pumping Station, Gangapur Road, Nashik-422013, Maharashtra, India Visit us at : www.kbtcoe.org

### Alumni Feedback ESSENTIAL DETAILS

Alumni Name:

| • Year of Passing out:   |             | Branch:                                  |            |                     |
|--|-------------|--|------------|---------------------|
| • Permanent Address:   |             |  |            |                     |
| • Contact No.:   | Mobile No.: |  |            |                     |
| • E-Mail ID:   |             |  |            |                     |
| • Present Organization:  |             |  |            |                     |
| <ul> <li>Designation:</li> <li>Kindly select the appropriate option as particle.</li> <li>A - Highly Efficient B - Efficient Satisfaction</li> <li>I. FEEDBACK ABOUT COLL</li> </ul> | ient (      | Present Local owing Crite C - Satisfacto | rion.      | - Below             |
| 1] Environment   | A           | В  | C          | D                   |
| 2] Infrastructure facilities   | A 🗆         | В  | С          | D 🗌                 |
| 3] Admission Procedure   | A           | В  | С          | $_{\rm D}\square$   |
| 4]Faculty  | A           | В  | $_{\rm C}$ | $D_{\square}$       |
| 5] Teaching  | A           | В  | С          | $_{\mathrm{D}}\Box$ |
| 6] Fee Structure   | A           | В  | С          | D                   |
| 7] Quality of support material   | A           | В  | $_{\rm C}$ | $D_{\square}$       |

| 8] Training and Placement   | A             | В            | С          | $D^{\square}$       |
|---|---------------|--------------|------------|---------------------|
| 9] Library  | A             | В            | $_{\rm C}$ | $_{\mathrm{D}}\Box$ |
| 10] Hostel  | A             | В            | $_{\rm C}$ | $_{\mathrm{D}}\Box$ |
| 11] Canteen   | A             | В            | $_{\rm C}$ | $_{\mathrm{D}}\Box$ |
| 12] Sports  | A             | В            | $_{\rm C}$ | $_{\mathrm{D}}\Box$ |
| 13] Transport   | A             | В            | С          | $D^{\square}$       |
| 14] Internet  | A             | В            | С          | $D^{\square}$       |
| 15] Rate the following academic initiative know- how of the student                               | s taken by th | e college to | improve t  | echnical            |
| Industry Oriented Projects  | A             | В            | С          | $D^{\square}$       |
| Seminars &Workshop  | A             | В            | С          | $D^{\square}$       |
| Online Examinations   | A             | В            | С          | $D^{\square}$       |
| Special Training Classes for<br>bridging Industry Academic gap                                    | A             | В            | С          | $D^{\square}$       |
| Guest Lectures  | A             | В            | С          | $D^{\square}$       |
| 16] Computer Facilities   | A             | В            | С          | $D^{\square}$       |
| 17] Co-curricular Activities/Extra-<br>curricular Activities                                      | A             | В            | С          | $D^{\square}$       |
| 18] Discipline in College   | A             | В            | С          | $D^{\square}$       |
| 19] How do you rate development activities organized by the College for your overall development? | A             | В            | С          | $_{\rm D}\square$   |

| 20] How do you rate learning experience in terms of their relevance to the real lift application?                                  |         | $_{\rm B}\Box$ | $_{\rm C}$      | $_{\mathrm{D}}\Box$ |
|--|---------|----------------|-----------------|---------------------|
| II. FEEDBACK ABOUT DEPA  | ARTMENT | & FACULT       | ΓΥ              |                     |
| 1] Were/are your grievances properly handled at the College  | A       | В              | $_{\mathrm{C}}$ | $_{\mathrm{D}}\Box$ |
| 2] Were the HOD's & Faculties cooperative?   | A       | В              | С               | $_{\mathrm{D}}\Box$ |
| 3]Cooperation from nonteaching Staff   | A       | В              | С               | $^{\mathrm{D}}$     |
| 4] Departmental Laboratories   | A       | В              | С               | $_{\mathrm{D}}\Box$ |
| 5] Project Guidance  | A       | В              | С               | $^{\mathrm{D}}$     |
| III. FEEDBACK ABOUT TRAINING   | & PLACE | MENT CEL       | L               |                     |
| 1] Has the T&P Cell provided ample On campus placement opportunities  A  B  C  D   |         |                |                 |                     |
| 2] If you are invited to deliver A Guest Lecture/ A Special Talk /A Motivational Session for your juniors, will you be interested? |         | В              | С               | D                   |
| 3] Have you availed Career counseling and guidance for higher studies from T&P Cell?   |         | В              | С               | $\square^{\square}$ |
| III. PLEASE COMMENT ON FOLLO   | OWING   |                |                 |                     |
| 1. Relevance of curriculum in your job:  |         |                |                 |                     |
| 2. Need any change in curriculum and syllabi:  |         |                |                 |                     |
| 3. Improvements in teaching and learning process:  |         |                |                 |                     |
| 4. Most Memorable Moment in the college:   |         |                |                 |                     |
| 5. Suggestions for improvements:   |         |                |                 |                     |
| • Department   |         |                |                 |                     |
| • College  |         |                |                 |                     |
| Signature  |         |                | Da              | nte                 |

#### CRITERION VI: GOVERNANCE, LEADERSHIP AND MANAGEMENT

#### 6.1 Institutional Vision and Leadership

6.1.1 State the vision and mission of the Institution and enumerate on how the mission statement defines the institution's distinctive characteristics in terms of addressing the needs of the society, the students it seeks to serve, institution's traditions and value orientations, vision for the future, etc.?

#### **Institutes Vision**

To be internationally accredited, Multidisciplinary, and Multi-collaborative institute working on technology enabled platform fostering innovations and patents through state-of-art academic system designed by highly qualified faculty for the development of common masses at large.

#### **Institutes Mission**

To educate and train common masses through undergraduate, post graduate, research programs by inculcating the values for discipline, quality, transparency and foster career and professional development for employment thereby contributing to the development of society.

#### Goals of the Institute

#### **Short Term Goals**

- Implement PBL (Project Based Learning)
- Application for National Board of Accreditation (NBA)
- Prime Minister Kaushal Vikas Yojana
- Setting smart classroom at Institute.
- Enhancing E learning facilities
- MoU's/Collaboration with industry and research Centre
- Preparing research funding proposal to university/AICTE/DST
- Attracting /Deputing teaching faculty for the higher education
- Training of Staff and faculty
- Developing quality manual /handbook for institute for staff, students.
- Fostering/Promoting research culture
- Establishing network with sistern institutes and industry
- Attracting research scholars to institute
- Organizing scientific events
- To develop interdisciplinary projects

#### **Long Term Goals**

- Learning content management system environment
- Portfolio development
- ISO 29990
- Virtual classroom
- Starting PhD Center
- Collaboration with foreign university/organizations
- International Accreditation
- Faculty enrichment programme
- Research enrichment programme

- Incubators
- Provision of admission to UG/PG/R&D for NRI Students

#### **Quality Policy**

- Undertaking programmes and projects for excellence in teaching, research and Administration.
- Promoting the use of technology.
- Continual development in line with the vision.
- Promoting research based programmes and events.
- Collaboration policy.

#### Values

• Discipline, Quality and Transparency

### 6.1.2 What is the role of top management, Principal and Faculty in design and implementation of its quality policy and plans?

#### Role of top management

- To spread technical education for common masses.
- To educate economically backward students for their upliftment.
- Focus on Mission and Vision of the institution.
- To Creat atmosphere to implement Discipline, Quality and Transparency

#### Role of Principal

- Setup rules and regulations of the institute for effective governance, transparent administration and participatory decision making.
- To implement modern teaching learning process.
- To conduct Motivational programmes for students and staffs.
- Ensures availability of infrastructure and facilities to fulfill academic and administrative requirements.

#### Role of Head of Department

- Conducting periodic meetings with teaching and nonteaching staff.
- To make MoU's with industries for promoting industry institute interaction.
- To propose the budget for purchase of lab equipment's, consumables, renovation work etc to the Principal.
- To communicate to the library for the requirement of books and periodicals.
- Supervise the conduct of lectures/ practical's daily, University Term work/ Practical/ Oral examination concerned with the department.
- Supervise the Term work assessment and approve test results, journals and project/seminar work
- Conduct departmental meeting from time to time (at least one meeting per 15 days) and to keep the record of Minutes of Meeting.

#### Role of Faculty

- Prepare course files of theory, practical and lab manuals and monitor at various levels.
- To carry out university result analysis and compare with previous results to find out shortcomings and take necessary actions.
- To get feedback from students on teaching learning for the further improvement.
- Conduct extra classes for the late admitted student's i.e. Second Year of engineering students who joins after completing their Diploma course
- To assure about the proper functioning of all equipments present in laboratories. Keeping records of maintenance/repaired of the instruments in the laboratory

#### 6.1.3 What is the involvement of the leadership in ensuring?

#### The policy statements and action plans for fulfillment of the stated Mission.

• The management supports designing the policy statement and implementing the action plan by approving the perspective plan, projects and finance.

### Formulation of action plans for all operations and incorporation of the same into the institutional strategic plan

• A strategic group has been appointed to prepare the strategic planning document and developing a perspective plan of the institution in line with the organizational objectives.

#### **Interaction with stakeholders**

• Support and facilitate for obtaining interactive /collaborative support from industry, academicians and parents.

### Proper support for policy and planning through need analysis, research inputs and consultations with the stake holders

• The management has obtained the expert professional input indivising the policy document/strategic plan document and the entire process has been done with the full participation by involving the top management as well as functional managers.

#### Reinforcing the culture of excellence

• The education officer has been appointed to facilitate and support excellence through collaborations, associations and intervention of accreditation system like national board of accreditation (NBA) and national assessment and accreditation council (NAAC).

#### **Champion Organizational change**

• The top leadership promotes and motivates the functional managers for bringing organizational change and also participates actively in the transformation of the culture of the institute.

# 6.1.4 What are the procedures adopted by the institution to monitor and evaluate policies and plans of the institution for effective implementation and improvement from time to time?

- The Local Managing Committee, which has representatives from both teaching and non-teaching staff, meets twice in a year. In order to have effective implementation of the policies and to monitor and evaluate the same, various committees have been formulated as shown in organization Chart
- Table 6.1.4 (A) shows member name of local managing committee along with their designation

Table 6.1.4 (A) Local Managing Committee

| Sr. No. | Name                               | Designation                  |
|---------|------------------------------------|------------------------------|
| 1       | Smt. Nilimatai Vasantrao Pawar     | President                    |
| 2       | Shri. Er. Satish Shankarrao Wagh   | Member                       |
| 3       | Shri. Prabhakar Sampat Shinde      | Member                       |
| 4       | Shri. Shankarrao Vishnu Rayate     | Member                       |
| 5       | Shri.Bhimraj Kashinath Patil       | Member                       |
| 6       | Shri. Vijay Ratanlal Kothari       | Member                       |
| 7       | Shri. Jagannath Mahipatrao Pawar   | Member                       |
| 8       | Shri. Jyotirao Ramkrishna Wagh     | Member                       |
| 9       | Shri. Ashokrao Kacharu Boraste     | Member                       |
| 10      | Shri. Dinesh Shahu Patil           | Member                       |
| 11      | Shri. Er. Kiran Eknath Patil       | Member                       |
| 12      | Shri. Ramesh Mahadu Pawar          | Member                       |
| 13      | Shri. Nivrutti Bajunath Daware     | Member                       |
| 14      | Shri. Pravin Nimba Pagar           | Member                       |
| 15      | Shri. Prakash Punjaram Gaikwad     | Member                       |
| 16      | Shri. Er. Madhukar Santu Lambe     | Member                       |
| 17      | Shri. Mahesh Dnyneshwar Gite       | Member                       |
| 18      | Shri. Jayant Vishnupant Bhadane    | Member                       |
| 19      | Shri. Pralhad Ukhaji Sonawane      | Member                       |
| 20      | Prof. Dr. Kailas Shankarrao Holkar | Member Secretary             |
| 21      | Mrs.Radhika Yogesh Khairnar        | Representative Teaching      |
| 22      | Prof. Vinod Chimanrao Shewale      | Representative Teaching      |
| 23      | Prof. Sopan Ashok Talekar          | Representative Teaching      |
| 24      | Mr. Nitin Vitthalrao Kadam         | Representative Non- Teaching |

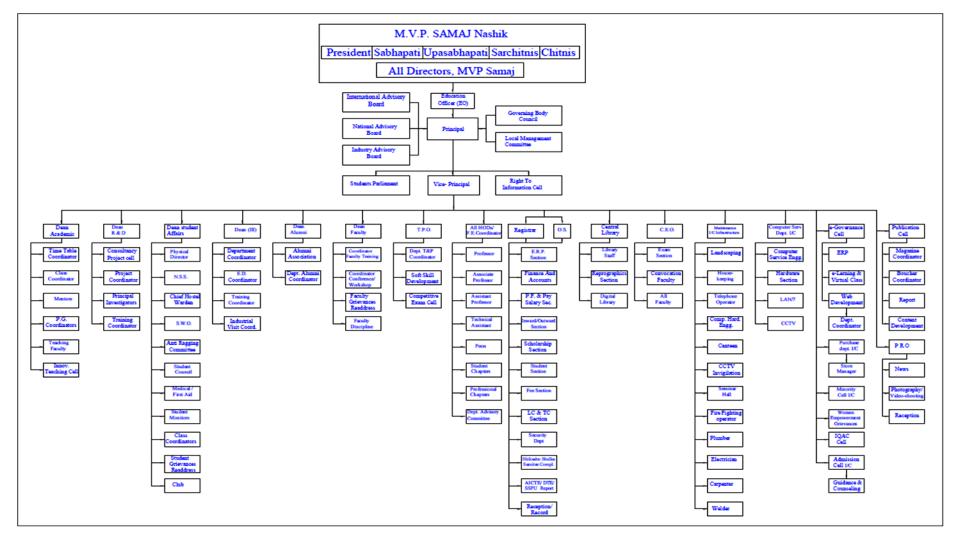


Fig. 6.1.4 Institute organization chart

• The Governing body council takes major decisions regarding the functioning of the college. The role of GBC is to decide vision and objectives of the institute based on which directions to LMC and head of the institute are given. The GBC approves the budget recommended by LMC. In an academic year, two GBC meeting is conducted.

Table 6.1.4 (B) Governing Body Council

| Sr.No. | Name                             | Designation                 |
|--------|----------------------------------|-----------------------------|
| 1      | Smt. Nilimatai Vasantrao Pawar   | President                   |
| 2      | Shri.Avinash Dhondu Shirode      | Member                      |
| 3      | Shri.Ramkrushna Ramchandra Hirey | Member                      |
| 4      | Shri.Vijay Ratanlal Kothari      | Member                      |
| 5      | Shri.Bhimraj Kashinath Patil     | Member                      |
| 6      | Shri. Ashokrao Kacharu Boraste   | Representative of Industry  |
| 7      | A.I.C.T.E. Nominee               | Nominee A.I.C.T.E           |
|        |                                  | Regional Office (Ex.Office) |
| 8      | University Nominee               | University of Pune          |
| 9      | D.T.E. Nominee                   | D.T.E. EX-Office,Mumbai     |
| 10     | State Govt. Nominee              | Member                      |
|        |                                  | Nominated by State Govt.    |
|        |                                  | Industrial/Technologist     |
| 11     | Dr.Kailas Shankarrao Holkar      | Principal                   |

### 6.1.5 Give details of the academic leadership provided to the faculty by the top management.

Academic Leadership provided to the Faculty as under:

 Top management has appointed Local Managing Committee and Governing body Council.

Table 6.1.5 (A) Local Managing Committee

| Sr. No. | Name                             | Designation |
|---------|----------------------------------|-------------|
| 1       | Smt. Nilimatai Vasantrao Pawar   | President   |
| 2       | Shri. Er. Satish Shankarrao Wagh | Member      |
| 3       | Shri. Prabhakar Sampat Shinde    | Member      |
| 4       | Shri. Shankarrao Vishnu Rayate   | Member      |
| 5       | Shri. Bhimraj Kashinath Patil    | Member      |
| 6       | Shri. Vijay Ratanlal Kothari     | Member      |

| 7  | Shri. Jagannath Mahipatrao Pawar   | Member                       |
|----|------------------------------------|------------------------------|
| 8  | Shri. Jyotirao Ramkrishna Wagh     | Member                       |
| 9  | Shri. Ashokrao Kacharu Boraste     | Member                       |
| 10 | Shri. Dinesh Shahu Patil           | Member                       |
| 11 | Shri. Er. Kiran Eknath Patil       | Member                       |
| 12 | Shri. Ramesh Mahadu Pawar          | Member                       |
| 13 | Shri. Nivrutti Bajunath Daware     | Member                       |
| 14 | Shri. Pravin Nimba Pagar           | Member                       |
| 15 | Shri. Prakash Punjaram Gaikwad     | Member                       |
| 16 | Shri. Er. Madhukar Santu Lambe     | Member                       |
| 17 | Shri. Mahesh Dnyneshwar Gite       | Member                       |
| 18 | Shri. Jayant Vishnupant Bhadane    | Member                       |
| 19 | Shri. Pralhad Ukhaji Sonawane      | Member                       |
| 20 | Prof. Dr. Kailas Shankarrao Holkar | Member Secretary             |
| 21 | Mrs.Radhika Yogesh Khairnar        | Representative Teaching      |
| 22 | Prof. Vinod Chimanrao Shewale      | Representative Teaching      |
| 23 | Prof. Sopan Ashok Talekar          | Representative Teaching      |
| 24 | Mr.Nitin Vitthalrao Kadam          | Representative Non- Teaching |

The Governing body takes major decisions regarding the functioning of the college. The following members are involved in the Governing body. Table 6.1.5(B) shows governing body.

Table 6.1.5 (B) Shows Governing Body Council

| Sr.<br>No | Name                                | Designation                                      |
|-----------|-------------------------------------|--|
| 1         | Smt. Nilimatai Vasantrao Pawar      | President  |
| 2         | Shri.Avinash Dhondu Shirode         | Member   |
| 3         | Shri.Ramkrushna Ramchandra<br>Hirey | Member   |
| 4         | Shri.Vijay Ratanlal Kothari         | Member   |
| 5         | Shri.Bhimrao Kashinath Patil        | Member   |
| 6         | Shri.Ashokrao Kacharu Boraste       | Representative of Industry                       |
| 7         | A.I.C.T.E. Nominee                  | Nominee A.I.C.T.E Regional<br>Office (Ex.Office) |
| 8         | University Nominee                  | University of Pune                               |
| 9         | D.T.E. Nominee                      | D.T.E. EX-Office,Mumbai                          |

| 10 | State Govt. Nominee         | Member Nominated by State Govt. Industrial/Technologist |
|----|-----------------------------|---|
| 11 | Dr.Kailas Shankarrao Holkar | Principal   |

#### 6.1.6 How does the college groom leadership at various levels?

• The systematic approach is followed in the management of academics and administrative for Grooming of Leadership at various levels

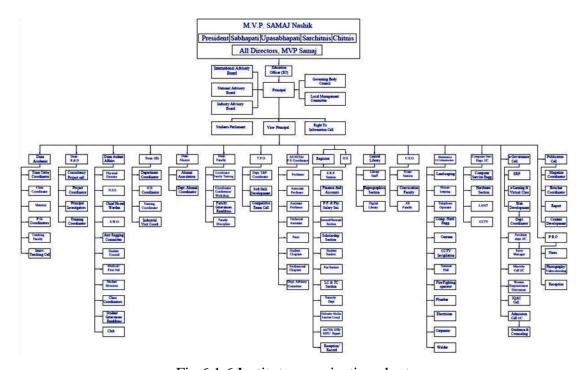


Fig.6.1.6 Institute organization chart

- The systematic approach is followed in the management of academics and administrative for Grooming of Leadership at various levels
- The Principal nominates the Head of Department capable to manage the Departmental activities.
- Assigning specific activity to faculty at college level.
- Some of the HODs and coordinators are given exposure to work on institutional level.
- HOD appoints class teachers to control and monitor the academic activities of class.
- The HOD appoints suitable faculty for the different activities like examination, Industrial visits, Training & Placement etc.
- The different activity coordinators for the cultural and extracurricular activities guide the students to make the events successful.
- The Institution encourages the faculty for the active participation of seminars, workshops, conferences (national and international), guest lecturers to other colleges and funds and duty leaves are sanctioned for the same
- All the faculties are involved in at least one of the activities thereby training them to accept various responsibilities.

Table 6.1.6 (A) Members of Academic Monitoring Committee

| Sr.No | Name of Staff Member | Designation         | Position    |
|-------|----------------------|---------------------|-------------|
| 1     | Dr.K.S.Holkar        | Principal           | Chairman    |
| 2     | Prof.V.C.Shewale     | Dean Academics      | Coordinator |
| 3     | Prof.S.B.Sonawane    | Dean R&D            | Member      |
| 4     | Prof.B.J.Pawar       | Dean Student        | Member      |
| 5     | Prof.M.P.Chougale    | Dean T&P            | Member      |
| 6     | Dr.S.P.Mogal         | HOD Mechanical      | Member      |
| 7     | Prof.V.M.Birari      | HOD E&TC            | Member      |
| 8     | Prof.H.V.Patil       | HOD IT              | Member      |
| 9     | Dr.M.P.Kadam         | HOD Civil           | Member      |
| 10    | Dr.V.S.Pawar         | HOD Computer        | Member      |
| 11    | Dr.B.B.Musmade       | HOD Instrumentation | Member      |
| 12    | Dr.D.T.Khairnar      | HOD MBA             | Member      |
| 13    | Prof.N.R.Kakad       | HOD MCA             | Member      |

Table 6.1.6 (B) Members of Research Committee

| Sr.No | Name of Staff Member | Designation                   | Position    |
|-------|----------------------|-------------------------------|-------------|
| 1     | Dr.K.S.Holkar        | Principal                     | Chairman    |
| 2     | Dr. S.B.Sonawane     | Dean R&D                      | Coordinator |
| 3     | Dr.S.P.Mogal         | HOD Mechanical                | Member      |
| 4     | Prof.V.M.Birari      | HOD E&TC                      | Member      |
| 5     | Prof.H.V.Patil       | HOD IT                        | Member      |
| 6     | Dr.M.P.Kadam         | HOD Civil                     | Member      |
| 7     | Dr.V.S.Pawar         | HOD Computer                  | Member      |
| 8     | Dr.B.B.Musmade       | HOD Instrumentation           | Member      |
| 9     | Dr.D.T.Khairnar      | HOD MBA                       | Member      |
| 10    | Prof.N.R.Kakad       | HOD MCA                       | Member      |
| 11    | Prof.V.C.Shewale     | One UG Faculty                | Member      |
| 12    | Prof. D.V.Kushare    | One PG Faculty                | Member      |
| 13    | Dr. O.G. Kulkarni    | Industry Person and Scientist | Member      |

Table 6.1.6 (C) Members of Library Advisory Committee

| Sr. No. | Faculty Name           | Committee<br>Designation             | Department                         |
|---------|------------------------|--------------------------------------|------------------------------------|
| 1       | Dr. S. B. Sonawane     | I/C Library                          | Mechanical Engineering             |
| 2       | Prof. P. V. Joshi      | Member                               | Instrumention and control          |
| 3       | Prof. S. J.Suryawanshi | Member                               | Mechanical Engineering             |
| 4       | Prof. R. R.Tajanpure   | Member                               | Computer Engineering               |
| 5       | Prof. S. B. Lukare     | Member                               | Instrumentation & Control Engg.    |
| 6       | Prof. A. R. Chaudhari  | Member                               | Electronics and Telecommunications |
| 7       | Prof. D. N. Nathe      | Member                               | Civil Engineering                  |
| 8       | Prof. U. S. Tambe      | Member                               | Information Technology             |
| 9       | Prof. S. M. Yawalkar   | Member                               | MCA                                |
| 10      | Prof. N .J. Salunke    | Member                               | MBA                                |
| 11      | Ms. V. D. Junnare      | Secretary/<br>Convenor of<br>Library | Library                            |

Table 6.1.6 (D) Members of Local Industry Advisory Board

| Sr.<br>No | Name of<br>Members     | Designation                                | Name Organisation                         | Representation         |
|-----------|------------------------|--|---|------------------------|
| 1         | Mr. Avinash<br>Pradhan | General<br>Manager,<br>Engineering<br>Dept | CEAT, Satpur, Nashik.                     | Mech. Engg.<br>Dept    |
| 2         | Mr. Vinod B.<br>Patil  | Proprietor,                                | Akash Industries,<br>Ambad, Nashik        |                        |
| 3         | Mr. Sujoy Gupta        | Chairman                                   | Samraat Group Nashik                      | Civil Engg.            |
| 4         | Mr. Avinash<br>Shirode | Leading<br>Consulting<br>Engineer          | Consulting Engineer,<br>Nashik.           | Dept                   |
| 5         | Mr. Dinesh S<br>Patil  | Director                                   | Integral Solutions Pvt<br>Ltd.Ambad       | E&TC Engg.<br>Dept     |
| 6         | Mr. Milind<br>Jagtap   | Vice-President                             | AlCON CAP, Satpur<br>,MIDC, Nashik        |                        |
| 7         | Dr. O. G.<br>Kulkarni. | Scientist                                  | Mentor, Adviser,<br>Technology Provider & | Instru & Control Engg. |

|    |                                    |                                       | Consulting Engineer in<br>Automation,<br>Instrumentation, Energy<br>Management, IPR, CDM<br>& Renewable Energy,<br>Nashik. | Dept                      |
|----|------------------------------------|---------------------------------------|--|---------------------------|
| 8  | Pralhad G.<br>Dhumal               | General Mgr -<br>Drives &<br>Services | FOX SOLUTIONS -<br>M9 - M.I.D.C. Ambad<br>Nashik.  |                           |
| 9  | Mr. Rajeev<br>Papneja              | EVP & COO                             | ESDS (Software<br>Solution Private<br>Limited), Nashik   | Comp. Engg<br>Dept        |
| 10 | Mr. Suchit<br>Ramchandra<br>Tiwari | CEO                                   | Cognifront Software<br>Private Limited, Nashik   |                           |
| 11 | Mr. Milind<br>Ghyar                | MD, TRIARQ<br>Health                  | Co-founder and MD,<br>GloStream, Nashik  | Information<br>Technology |
| 12 | Mr. Milind<br>Tanksale             | Director                              | Neumann Systems<br>Consultancy Private<br>Limited, Nashik  | Dept.                     |
| 13 | Mr. Shashank<br>Todwal             | CEO                                   | UMS Tech Labs,MIDC<br>Satpur Nashik.   | MCA Dept.                 |
| 14 | Mr. Sameer<br>Choudhari            | Asst Manager /<br>HR Chief            | Zabuza Labs, Mahatma<br>nagar, Nashik.   |                           |
| 15 | Dr. Kiran Patil                    | Sr. G.M.                              | Glennmark<br>Pharmaceuticals Ltd,<br>Nashik  | MBA Dept.                 |
| 16 | Mr. Rupesh H.<br>Khiste            | R & D Head                            | Sahyadri Farms, Nashik   |                           |

Table 6.1.6 (E) Members of Anti-Ragging Committee

| Sr.No | Name of Staff Member | Designation                              | Position |
|-------|----------------------|--|----------|
| 1     | Dr.K.S.Holkar        | Principal                                | Chairman |
| 2     | Prof.B.J.Pawar       | Dean Student                             | Member   |
| 3     | Mr. H.C. Patil       | Student                                  | Member   |
| 4     | Prof. A.K.Patil      | Asst. Prof. &Chief Warden (Girls Hostel) | Member   |
| 5     | Mrs. P.B. Sonawane   | Asst. Prof.                              | Member   |
| 6     | Mr. S.R. Patil       | Technical Assistant                      | Member   |
| 7     | Mrs. S. V. Khairnar  | Rector Girls Hostel                      | Member   |

| 8  | Mr. R.B. Patil         | Parent                   | Member |
|----|------------------------|--------------------------|--------|
| 9  | Ms. K.G.Gunjal         | Student F.E. (Civil)     | Member |
| 10 | Mr. M. S. Divikar      | Police Inspector, Nashik | Member |
| 11 | Mrs.Vanita Deshmukh    | Local Media              | Member |
| 12 | Mr.Arun Malani         | N.G.O.                   | Member |
| 13 | Mr. Ojhas Joshi        | Student F.E. (Comp)      | Member |
| 14 | Ms. Darshana Patil     | Student F.E. (I.T.)      | Member |
| 15 | Mr. Gaurav S. Khairnar | Student F.Y. (M. B. A.)  | Member |
| 16 | Mr. Divesh Patil       | Student B.E. (Civil)     | Member |
| 17 | Ms. Chaitali Rane      | Student S.Y. (M.C.A.)    | Member |

Table 6.1.6 (F) Anti-Ragging Squad Committee

| Sr. No. | Name                     | Designation                              | Position |
|---------|--------------------------|--|----------|
| 1.      | Prof. Dr. K.S. Holkar    | Principal                                | Chairman |
| 2.      | Prof. B.J. Pawar         | Asst. Prof. &Dean Student<br>Affairs     | Member   |
| 3.      | Prof. A.K. Patil         | Asst. Prof. &Chief Warden (Girls Hostel) | Member   |
| 4.      | Prof. J. J. Nerkar       | Asst. Prof.                              | Member   |
| 5.      | Prof. Dr. K.T. Patil     | Asst. Prof.                              | Member   |
| 6.      | Prof. Dr. S.R. Pachorkar | Asst. Prof.                              | Member   |
| 7.      | Prof. S.R. Bhamre        | Asst. Prof.                              | Member   |
| 8.      | Prof. S.P. Jadhav        | Asst. Prof.                              | Member   |
| 9.      | Prof. S.N. Palhe         | Asst. Prof.                              | Member   |
| 10.     | Prof. S.M. Yawalkar      | Asst. Prof.                              | Member   |

# 6.1.7 How does the college delegate authority and provide operational autonomy to the departments / units of the institution and work towards decentralized governance system?

The college is working towards the decentralization of Governance as under. College has appointed dean academics and dean students with following advice and device policy on.

#### **Dean Academics**

- To ensure adherence to the ordinances as approved by the S P Pune University.
- To Prepare the institute academic Calendar.
- To supervise various departmental time tables/work load distributions.

- To support HODs and Principal regarding the academic rules and regulations.
- To issue necessary directions for implementation of the ordinances and other decisions.
- Plan academic programmes as per requirement.
- To supervise the lectures of students and timely conduction of lectures.
- To support the admission process and enrollment process of students at institutional level.
- To supervise the declaration of results and award of medals and degrees.
- To maintain academic records as per the requirement
- Creation of centre of excellence.
- Academic upkeep and up-gradation of central library and supervision.
- To implement the academic decisions of SPPU and NDMVP Samaj Sanstha Nashik.

#### **Dean Students**

- To maintain a ragging free campus as per rules approved by the S P Pune University and Maharashtra state government.
- To act as a proctor of the institute.
- To ensure discipline amongst the students inside the institute/campus.
- Liaison with parents/guardians about the progress and problem of students in consultation with dean academics.
- To issue conduct certificate to students in consultation with dean academics.
- To help students to get scholarships from various agencies/ organizations/ trusts.
- To supervise hostel and mess problems of students.
- To implement the student related decisions of SPPU and NDMVP Samaj Sanstha Nashik.

### 6.1.8 Does the college promote a culture of participative management? If 'yes', indicate the levels of participative management

Yes, various committees have been formed consists of students, staff, industry persons.

Table 6.1.8 (A) Members of Academic Monitoring Committee

| Sr.No | Name of Staff Member | Designation    | Position    |
|-------|----------------------|----------------|-------------|
| 1     | Dr. K.S.Holkar       | Principal      | Chairman    |
| 2     | Prof. V.C.Shewale    | Dean Academics | Coordinator |
| 3     | Prof. S.B.Sonawane   | Dean R&D       | Member      |
| 4     | Prof. B.J.Pawar      | Dean Student   | Member      |
| 5     | Prof. M.P.chougale   | Dean T&P       | Member      |
| 6     | Dr. S.P.Mogal        | HOD Mechanical | Member      |
| 7     | Prof. V.M.Birari     | HOD E&TC       | Member      |
| 8     | Prof.H.V.Patil       | HOD IT         | Member      |
| 9     | Dr. M.P.Kadam        | HOD Civil      | Member      |

| 10 | Dr.V.S.Pawar     | HOD Computer        | Member |
|----|------------------|---------------------|--------|
| 11 | Dr. B.B.Musmade  | HOD Instrumentation | Member |
| 12 | Dr. D.T.Khairnar | HOD MBA             | Member |
| 13 | Prof. N.R.Kakad  | HOD MCA             | Member |

Table 6.1.8 (B) Members of Research Committee

| Sr.No | Name of Staff Member | Designation                   | Position    |
|-------|----------------------|-------------------------------|-------------|
| 1     | Dr. K.S.Holkar       | Principal                     | Chairman    |
| 2     | Dr. S.B.Sonawane     | Dean R&D                      | Coordinator |
| 3     | Dr. S.P.Mogal        | HOD Mechanical                | Member      |
| 4     | Prof. V.M.Birari     | HOD E&TC                      | Member      |
| 5     | Prof.H.V.Patil       | HOD IT                        | Member      |
| 6     | Dr. M.P.Kadam        | HOD Civil                     | Member      |
| 7     | Dr.V.S.Pawar         | HOD Computer                  | Member      |
| 8     | Dr. B.B.Musmade      | HOD Instrumentation           | Member      |
| 9     | Dr. D.T.Khairnar     | HOD MBA                       | Member      |
| 10    | Prof. N.R.Kakad      | HOD MCA                       | Member      |
| 11    | Prof. V.C.Shewale    | One UG Faculty                | Member      |
| 12    | Prof. D.V.Kushare    | One PG Faculty                | Member      |
| 13    | Dr. O. G. Kulkarni   | Industry Person and Scientist | Member      |

Table 6.1.8 (C) Members of Library Advisory Committee

| Sr. No. | Faculty Name            | Designation | Department                         |
|---------|-------------------------|-------------|------------------------------------|
| 1       | Dr. S. B. Sonawane      | I/C Library | Mechanical Engineering             |
| 2       | Prof. P. VJoshi         | Member      | Instrumentation & Control engg.    |
| 3       | Prof. S. J. Suryawanshi | Member      | Mechanical Engineering             |
| 4       | Prof. R. R. Tajanpure   | Member      | Computer Engineering               |
| 5       | Prof. S. B. Lukare      | Member      | Instrumentation & Control engg.    |
| 6       | Prof. A. R. Chaudhari   | Member      | Electronics and Telecommunications |
| 7       | Prof. D. N. Nathe       | Member      | Civil Engineering                  |
| 8       | Prof. U. S. Tambe       | Member      | Information Technology             |
| 9       | Prof. S. M. Yawalkar    | Member      | MCA                                |

| 10 | Prof. N. J. Salunke | Member                               | MBA     |
|----|---------------------|--------------------------------------|---------|
| 11 | Ms. V. D. Junnare   | Secretary/<br>Convenor of<br>Library | Library |

Table 6.1.8 (D) Members of Anti Ragging Committee

| Sr.<br>No. | Name                        | Designation                                      | Position                        | Contact<br>No. |
|------------|-----------------------------|--|---------------------------------|----------------|
| 1          | Dr. Kailas S.<br>Holkar     | Principal  | Chairman                        | 9822379056     |
| 2          | Mr. Hansraj C.<br>Patil     | Tahasildar                                       | Member Civil<br>Administration  | 9421177673     |
| 3          | Mr. M. S.<br>Divekar        | Police Inspector,<br>Nashik                      | Member Police<br>Administration | 8975566100     |
| 4          | Mr. Arun Malani             | Journalist Dainik<br>Sakal, Nashik               | Member Local<br>Media           | 9175185333     |
| 5          | Mrs. Vanita<br>Deshamukh    | Yashodha Samajik<br>Vikas Sanstha,<br>Nashik     | Member Non Govt. Organisation   | 9923369363     |
| 6          | Mr. Ravindra B.<br>Patil    | Parent   | Member 98500                    |                |
| 7          | Prof. Balasaheb<br>J. Pawar | Asst. Prof. & Dean<br>Student Affairs            | Member                          | 7588012633     |
| 8          | Prof. Ashwini K.<br>Patil   | Asst. Prof. & Chief<br>Warden (Girl's<br>Hostel) | Member                          | 9403709298     |
| 9          | Mrs. Poonam B. Sonawane     | Asst. Prof.                                      | Member                          | 9604540206     |
| 10         | Mrs. Sunita<br>V.Khairnar   | Rector Girls Hostel                              | Member                          | 9403515534     |
| 11         | Mr. Sandip R.<br>Patil      | Technical Assistant                              | Member                          | 9850974189     |
| 12         | Ms. Chaitali Y<br>Rane      | Student S.Y                                      | Member                          | 9421742207     |
| 13         | Mr. Devendra<br>Suryawanshi | Student F. Y.                                    | Member                          | 9881331054     |
| 14         | Ms. Pranjal<br>Darekar      | Student T E                                      | Member                          | 7875191385     |
| 15         | Mr.Akash<br>Rathod          | Student S.E                                      | Member                          | 8390468696     |
| 16         | Mr. Ojas. Joshi             | Student F.E.                                     | Member                          | 8237315958     |

Table 6.1.8 (E) Members of Anti-Ragging Squad Committee

| Sr. | Name                | Designation                               | Position |
|-----|---------------------|---|----------|
| No. |                     |   |          |
| 1.  | Dr. K.S. Holkar     | Principal                                 | Chairman |
| 2.  | Prof. B.J. Pawar    | Asst. Prof. & Dean Student Affairs        | Member   |
| 3.  | Prof. A.K. Patil    | Asst. Prof. & Chief Warden (Girls Hostel) | Member   |
| 4.  | Prof. J.J. Nerkar   | Asst. Prof.                               | Member   |
| 5.  | Dr. K.T. Patil      | Asst. Prof.                               | Member   |
| 6.  | Dr. S.R. Pachorkar  | Asst. Prof.                               | Member   |
| 7.  | Prof. S.R. Bhamre   | Asst. Prof.                               | Member   |
| 8.  | Prof. S. P. Jadhav  | Asst. Prof.                               | Member   |
| 9.  | Prof. S. N. Palhe   | Asst. Prof.                               | Member   |
| 10. | Prof. S.M. Yawalkar | Asst. Prof.                               | Member   |

Table 6.1.8 (F) Members of Industry Institute Interaction Cell

| Sr.<br>No. | Department                      | Name of member          | Staff/Class |
|------------|---------------------------------|-------------------------|-------------|
|            |                                 | Prof. S Y Pawar         | Asst. Prof. |
|            |                                 | Mr. Abhishekh Chaudhar  | SE          |
|            |                                 | Mr. Tushar Toche        | SE          |
| 1          | Mechanical Engineering          | Mr. Pankaj Pawar        | TE          |
|            |                                 | Ms. Komal Aher          | TE          |
|            |                                 | Mr. Vaibhav Mahajan     | BE          |
|            |                                 | Mr. Tanmay Vispute      | BE          |
|            | Civil Engineering               | Prof. R P Kajale        | Asst. Prof. |
|            |                                 | Mr. Sanket Sanap        | SE          |
|            |                                 | Mr. Mayur Pawar         | SE          |
| 2          |                                 | Mr. Abhishek Laddha     | TE          |
|            |                                 | Mr. Jeevan Hake         | TE          |
|            |                                 | Mr. Mohit Chavan        | BE          |
|            |                                 | Mr. Rahul Deore         | BE          |
|            |                                 | Prof. V. P. Gawai       | Asst. Prof. |
|            |                                 | Mr. Shubham Kawale      | BE          |
| 3          | Electronics & Telecommunication | Ms. Yashodhana Kulkarni | BE          |
|            | Engineering                     | Ms. Aishwarya R. Loknar | TE          |
|            |                                 | Mr. Sumedh Dixit        | TE          |
|            |                                 | Ms. Shraddha Gangurde   | SE          |

|   |   | Mr. Avdhut Kailas Aher  | SE          |
|---|---|-------------------------|-------------|
|   |   | Prof.R.S. Derle         | Asst. Prof. |
|   |   | Mr. Shubham Totala      | BE          |
|   |   | Ms. Shalini Saha        | BE          |
| 4 | Computer Engineering                    | Mr. Akshay S. Dixit     | TE          |
|   |   | Ms. Anuja Tamboli       | TE          |
|   |   | Mr. Husain Dehnuwala    | SE          |
|   |   | Ms. Nivya Nair          | SE          |
|   |   | Prof. N.S. Ujgare       | Asst. Prof  |
|   |   | Ms. Noopur Lokwani      | BE          |
|   |   | Ms. Aishwarya Sapkale   | BE          |
| 5 | Information Technology                  | Mr. Sameer Patil        | TE          |
|   |   | Ms. Pranjal Darekar     | TE          |
|   |   | Ms. Krutika Chakor      | SE          |
|   |   | Ms. Yashika Varma       | SE          |
|   | La decembra de la Companione            | Prof. S. H. Jadhav      | Asso Prof.  |
|   |   | Prof. A. R. Kulkarni    |             |
|   |   | Mr. Vishal B. Naik      | BE          |
| 6 |   | Ms. Pallavi S. Joshi    | BE          |
| 0 | Instrumentation Engineering             | Ms. Sayali R. Maniyar   | TE          |
|   |   | Mr.Harshal Y. Chaudhari | TE          |
|   |   | Ms. Sisira S. Kottaka   | SE          |
|   |   | Mr. Aniket Likhar       | SE          |
|   | Martanaf Davinson                       | Prof. N. J. Salunke     | Asst. Prof. |
| 7 | Master of Business Administration       | Mr. Prasad Dusane       | MBA         |
|   | 110111111111111111111111111111111111111 | Mr. Ajinkya Kaloge      | MBA         |
|   |   | Prof. S. M. Yawalkar    | Asst.Prof.  |
| 8 | Master of Computer Application          | Ms.Chaitrali Rane       | SY          |
|   |   |                         | ~           |
|   |   | Ms.Puja Kapadne         | SY          |

Table 6.1.8 (G) Members of Student Council

| Name               | Designation                |  |  |  |  |
|--------------------|----------------------------|--|--|--|--|
| Dr. K. S. Holkar   | Principal                  |  |  |  |  |
| Dr. R.S. Kare      | Physical Director          |  |  |  |  |
| Prof. A.S. Talekar | NSS Coordinator            |  |  |  |  |
| Mr. Shubham Kunde  | General Secretary          |  |  |  |  |
| Ms. Megah Shaha    | Cultural Student Secretary |  |  |  |  |

| Mr. Sushant Gaudhani | Sports Student Secretary |
|----------------------|--------------------------|
| Ms. Sayali Bhadke    | NSS Secretary            |
| Ms. Prachi Nikam     | Ladies Representatives   |
| Ms. Noopur Lokwani   |                          |

#### **6.2 Strategy Development and Deployment**

### 6.2.1 Does the Institution have a formally stated quality policy? How is it developed, driven, deployed and reviewed?

Yes, the Institute has a formally stated quality policy. It has been formed after discussions with the top management, Principal, HODs in order to achieve the vision and mission of the Institute. The Institute undertakes various activities to fulfill the quality policies. Quality Policy is aimed at achieving excellence in Technical Education which includes:

- Undertaking programmes and projects for excellence in teaching, research and Administration.
- Promoting the use of technology.
- Continual development in line with the vision.
- Promoting research based programmes and events.
- Collaboration policy.

### 6.2.2 Does the Institute have a perspective plan for development? If so, give the aspects considered for inclusion in the plan.

Yes, the Institute has a perspective plan for development. The institution takes effort in finding the key performance indicators for performance assessment and development. It addresses the issues from the internal and external stakeholder's perspective and takes steps to fulfill their requirements. Institute promotes research and consultancy activities in all departments.

Table 6.2.2(A) College Growth Plan 2015-2025

| Activity | Name of Activity  | 2015-<br>16 | 2016-<br>17 | 2017-<br>18 | 2018-<br>19 | 2019-<br>20 | 2020-<br>21 | 2021-<br>22 | 2022-<br>23 | 2023-<br>24 | 2024-<br>25 |
|----------|---|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| A        | Implement PBL (Project Based Learning)                                    | A           | A           | A           | A           | A           | -           | -           | -           | -           | -           |
| В        | Application for NBA   | -           | -           | В           | В           | В           | -           | -           | -           | -           | -           |
| С        | Start up of Prime Minister Kaushal<br>Vikas Yojana                        | С           | С           | С           | С           | С           | -           | -           | -           | -           | -           |
| D        | Setting smart classroom at Institute.                                     | -           | D           | D           | D           | -           | -           | -           | -           | -           | -           |
| Е        | Enhancing E learning facilities   | -           | -           | Е           | Е           | Е           | Е           | Е           | Е           | Е           | Е           |
| F        | MoU/Collabration with industry and research centre                        | F           | F           | F           | F           | F           | F           | F           | F           | F           | F           |
| G        | Preparing research funding proposal to university/AICTE/DST               | G           | G           | G           | G           | G           | G           | G           | G           | G           | G           |
| Н        | Attracting /Deputing teaching faculty for the higher education            | Н           | Н           | Н           | Н           | Н           | Н           | Н           | Н           | Н           | Н           |
| I        | Training of Staff and faculty   | I           | I           | I           | I           | I           | I           | I           | I           | I           | I           |
| J        | Developing quality manual /handbook for institute for staff and students. | -           | -           | J           | J           | J           | -           | -           | -           | -           | -           |
| K        | Fostering/Promoting research culture                                      | K           | K           | K           | K           | K           | K           | K           | K           | K           | K           |
| L        | Establishing network with sistern institutes and industry                 | -           | -           | L           | L           | L           | -           | -           | -           | -           | -           |
| M        | Attracting research scholars to institute                                 | M           | M           | M           | M           | M           | M           | M           | M           | M           | M           |
| N        | Organizing scientific events  | N           | N           | N           | N           | N           | N           | N           | N           | N           | N           |

| Activity | Name of Activity                                     | 2015-<br>16 | 2016-<br>17 | 2017-<br>18 | 2018-<br>19 | 2019-<br>20 | 2020-<br>21 | 2021-<br>22 | 2022-<br>23 | 2023-<br>24 | 2024-<br>25 |
|----------|--|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| О        | To develop interdisciplinary projects                | -           | -           | -           | О           | О           | О           | О           | О           | О           | О           |
| P        | Learning content management system environment       | -           | -           | -           | P           | P           | P           | Р           | P           | P           | P           |
| Q        | Portfolio development                                | -           | -           | -           | Q           | Q           | Q           | Q           | Q           | Q           | Q           |
| R        | ISO 29990  | -           | -           | R           | R           | R           | -           | -           | -           | -           | -           |
| S        | Virtual classroom                                    | -           | -           | S           | S           | S           | S           | S           | S           | S           | S           |
| T        | Starting PhD Centre                                  | -           | -           | T           | T           | T           | -           | -           | -           | -           | -           |
| U        | Collaboration with foreign university/organizations  | -           | -           | -           | U           | U           | U           | U           | U           | U           | U           |
| V        | International Accreditation                          | -           | -           | -           | -           | -           | V           | V           | V           | V           | V           |
| W        | Faculty enrichment programme                         | W           | W           | W           | W           | W           | W           | W           | W           | W           | W           |
| X        | Research enrichment programme                        | X           | X           | X           | X           | X           | X           | X           | X           | X           | X           |
| Y        | Incubators   | -           | -           | -           | -           | Y           | Y           | Y           | Y           | Y           | Y           |
| Z        | Provision of admission to UG/PG/R&D for NRI Students | -           | -           | -           | -           | Z           | Z           | Z           | Z           | Z           | Z           |

Table 6.2.2 (B) Shows Intervening Projects & Programmes and financial Projections of Ten years (2015-25)

|                   | Headings                          | Rs in Lakhs |
|-------------------|-----------------------------------|-------------|
|                   | Presentation/Video Film (Story)   | 5.00        |
|                   | Seminar                           | 10.00       |
|                   | Conference                        | 30.00       |
|                   | Workshops                         | 30.00       |
| <b>Programmes</b> | Foreign Visits                    | 30.00       |
|                   | Industrial Meet                   | 10.00       |
|                   | Alumni Meet                       | 5.00        |
|                   | Competitions                      | 25.0        |
|                   | Training                          | 30.00       |
|                   | Showcase Conference               | 10.00       |
|                   | Quality Handbook                  | 5.00        |
|                   | Industry Liason/Extension         | 2.00        |
|                   | Collaborative Research            | 10.00       |
|                   | ISO 29990                         | 5.00        |
|                   | Foreign University Collaborations | 20.00       |
|                   | E –Learning                       | 20.00       |
| <b>Projects</b>   | Virtual Classroom                 | 30.00       |
|                   | Content Development               | 10.00       |
|                   | Students/Faculty Exchange         | 20.00       |
|                   | International Accreditation       | 5.00        |
|                   | Research and development Centre   | 5.00        |
|                   | Incubation                        | 5.00        |
|                   | Laboratory Development            | 10.00       |

### 6.2.3 Describe the internal organizational structure and decision making Processes.

Organization structure is shown below

• List of all staff members ,who are coordinators of various committees is enlisted below

Table 6.2.3(A) Names of various Committee Coordinators

| Sr.<br>No | Head                      | Name of Staff      |
|-----------|---------------------------|--------------------|
| 01        | Education Officer (EO)    | Dr.N.S. Patil      |
| 02        | Principal                 | Dr. K.S.Holkar     |
| 03        | Vice- Principal           | Dr.N.S. Patil      |
| 04        | Right To Information Cell | Mrs. R.Y. Khairnar |

| 05 | Dean Academic  | Prof. V.C. Shewale  |
|----|--|---|
| 06 | Dean R & D   | Dr. S.B.Sonawane  |
| 07 | Dean student Affairs   | Prof. B. J. Pawar   |
| 08 | Physical Director  | Dr.R.S.Kare   |
| 09 | N.S.S.   | Prof.S.A.Talekar  |
| 10 | Chief Hostel Warden  | Prof.A.K.Patil  |
| 11 | Anti Ragging Committee &Student Council & Student Grievances Readdress | Pro.B.J.Pawar   |
| 12 | Sports Club  | Dr. R.S. Kare   |
| 13 | Nature Club  | Prof. P.V. Joshi  |
| 14 | Cultural Club  | Prof. A. A. Kapse   |
| 15 | Literacy Club  | Mrs. V.D. Junnare   |
| 16 | Dean (III)   | Prof.M.P.Chaugale   |
| 17 | Dean Alumni  | Prof. J. J. Nerkar  |
| 18 | Dean Faculty   | Dr. S J Kokate  |
| 19 | T.P.O.   | Prof.P.V.Pund   |
| 20 | Registrar  | Ms.R.Y.Khairnar   |
| 21 | OS   | Mr.R.D.Aher   |
| 22 | E.R.P. Section   | Mr.Mahesh Chaudhari<br>Mr.Chandan Mogal                           |
| 23 | Finance And Accounts & P.F. & Pay Salary Sec.                          | Mr.M.N.Thete, Mr.C.K.Chavan                                       |
| 24 | Inward/Outward Section   | Smt.S.W.Medhane   |
| 25 | Scholarship Section  | Mr.S.T.Nikam  |
| 26 | Student Section  | Mr.S.S.Suryawanshi  |
| 27 | Fee Section  | Mr.S.U.Salunke  |
| 28 | LC & TC Section  | Mr.J.S.Gawale   |
| 29 | Shiksahn Shulka Samitee Compl.   | Mr.R.D.Aher   |
| 30 | Central Library  | Mrs.V.D.Junnare   |
| 31 | Library Staff  | Mrs.A.B.Nalawade,Mr.S.S.Shinde<br>Mr. A. B.Mahale, Mr. P. S.Patil |
| 32 | Reprographics Section  | Mr.S. S Lawand  |
| 33 | C.E.O.   | Prof.B. N. Shinde.  |
| 34 | Exam Section   | Mr. J. P. Dokphode  |
| 35 | Maintenance I/C Infrastructure   | Mr.P.S.Sangamnere   |
| 36 | Landscaping  | Mr.S.P.Chavan   |
| 37 | Housekeeping   | Mr.Prashant Kadlag  |
| 38 | Telephone Operator   | Mr.R.S.Khairnar   |
| 39 | Plumber  | Mr.D.B.Purkar   |

| 40 | Electrician                  | Mr.S.B.Jadhav       |
|----|------------------------------|---------------------|
| 41 | Carpenter                    | Mr.R.R.Khairnar     |
| 42 | Welder                       | Mr.A.M.Sangamnere   |
| 43 | Computer Service Engg.       | Mr.V.G.Nimbalkar    |
| 44 | LAN                          | Mr.A.B.Sable        |
| 45 | CCTV                         | Mr.H.N.Ugale        |
| 46 | ERP                          | Mr.Mahesh Chaudhari |
|    |                              | Mr.Chandan Mogal    |
| 47 | e-Learning & Virtual Class   | Prof.V.K.Kharote    |
|    |                              | Prof.V.S.Tidke      |
| 48 | Purchase dept. I/C           | Prof. P.C. Shete    |
| 49 | Store Manager                | Mr.S.B.Ghorpade     |
| 50 | Women Empowerment Grievances | Prof.V.S.Tidke      |
| 51 | IQAC Cell                    | Dr.S.R.Pachorkar    |

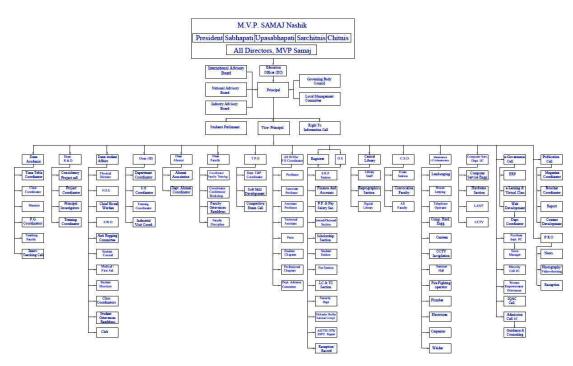


Fig.6.2.3 Internal Organizational Structure

### 6.2.4 Give a broad description of the quality improvement strategies of the institution for each of the following

#### **Teaching & Learning**

Academic Monitoring Committee (AMC)

• This cell is chaired by Principal of the Institute. All Dean of Institute and HOD's of all departments are member of this committee. AMC used to monitor all the Academics, Student Feedback and overall teaching learning

process to achieve maximum academic performance of the students. Guidance of advisors in term of teaching & load distribution, new faculty recruitment, procurement of new equipment's & library books is always helping the individual department to improve their performance. Faculty & staff appraisal are also looked after by AMC where it not only monitors the performance of individual faculty but also guide them to achieve their own objectives.

- AMC checks course files, theory and practical attendance sheets, Lab manuals, staff feedback etc. in every semester. Also this committee consists of mentors, class coordinators, Dean Academics, which monitors the classes and interact with students and faculty regularly and on need basis suggests remedial measures and motivates teachers to use latest technological aids.
- Monthly tutor meeting are conducted to counsel the students and to discuss issues related to academics, hostel, mess and overall facilities. AMC inform all the issues raised by mentors & coordinators to principal. Based on the issues raised by the above mentioned committees, the Principal takes corrective measures to improve teaching learning process.

Table 6.2.4 Members of Research & Development Committee

| Sr.No | Name of Staff Member | Designation                   | Position    |
|-------|----------------------|-------------------------------|-------------|
| 1     | Dr.K.S.Holkar        | Principal                     | Chairman    |
| 2     | Dr. S.B.Sonawane     | Dean R&D                      | Coordinator |
| 3     | Dr.S.P.Mogal         | HOD Mechanical                | Member      |
| 4     | Prof.V.M.Birari      | HOD E&TC                      | Member      |
| 5     | Prof.H.V.Patil       | HOD IT                        | Member      |
| 6     | Dr.M.P.Kadam         | HOD Civil                     | Member      |
| 7     | Dr.V.S.Pawar         | HOD Computer                  | Member      |
| 8     | Dr.B.B.Musmade       | HOD Instrumentation           | Member      |
| 9     | Dr.D.T.Khairnar      | HOD MBA                       | Member      |
| 10    | Prof.N.R.Kakad       | HOD MCA                       | Member      |
| 11    | Prof.V.C.Shewale     | One UG Faculty                | Member      |
| 12    | Prof. D.V.Kushare    | One PG Faculty                | Member      |
| 13    | Dr. O.G.Kulkarni     | Industry Person and Scientist | Member      |

#### **Research & Development**

- Institute creates a conducive environment for promotion of Research & Innovation activities.
- Institute promotes the staff to process the proposal submissions for availing the funding from different funding agencies.
- Institute promotes to strengthen industry institute interaction by consultancy, testing and need based research & innovation activities.
- The key goal of the Institute is to provide a creative atmosphere in which higher studies and research thrive amongst the faculty and students.
- The major role of institute is in administrating research projects sponsored by various Government and non-Government, research funding agencies

such as DST, AICTE, SPPU (BCUD) etc., and promotion of collaborative research partnerships for undertaking creative and advanced research.

#### **Community engagement**

- NSS activities
- Blood donation camps
- Tree Plantation
- Swachh Godavari Abhiyan

#### **Human resource management**

- Effective selection process
- Training and Placement
- Support for academic advancement
- Systematic performance appraisal system and guidance to concerned faculty
- Systematic promotion policies
- Career Enhancement Scheme
- Well defined Recruitment Policy
- Effective administration participative management

#### **Industry interaction**

- Institute signs MoU's with different industries for industrial visit, consultancy, campus recruitment, student/faculty training, industry based project under industry institute interactions cell.
- Industrial visits.
- Guest lectures by Industrial experts.

## 6.2.5. How does the Head of the institution ensure that adequate information (from feedback and personal contacts etc.) is available for the top management and the stakeholders, to review the activities of the institution?

Local managing committees meetings were conducted twice in a year.

The higher body of management is a vital body under the constitution of the NDMVPS'Sanstha. It meets periodically to take a review of the developments in the Sanstha's institutions. During the Body meetings, information is shared from directors & principals regarding developments in their own institutions. Thus, information regarding developments in the Sanstha's institutions finally reaches to the top management. Once the top management approves of the information, it is circulated among other stakeholders, if necessary. The Principal imparts necessary information to the Heads of the departments in periodic meetings

Regarding various activities completed detailed report is send to university as shown below

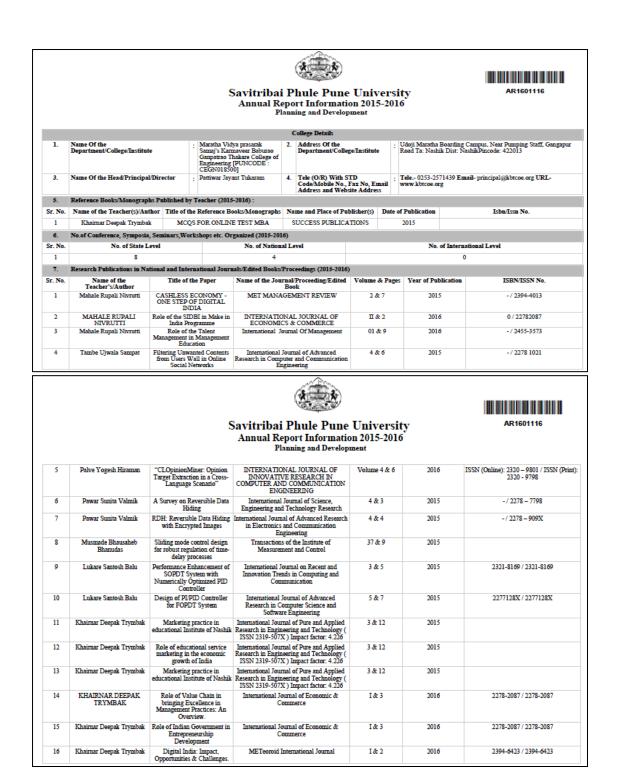


Fig. 6.2.5. Annual Report Submitted to SPPUniversity (2015-2016)

## 6.2.6 How does the management encourage and support involvement of the staff in improving the effectiveness and efficiency of the institutional processes?

The management always encourages faculty to involve themselves in ongoing institutional processes. Staff is appointed as a incharge or members of Admission Committee, research committee etc. Faculties are the Heads of various committees at college level.

- For smooth conduction of Academics management appointed Dean Academics, Dean Students.
- Appointed Dean Research and Development, Consultancy.
- Appointed Dean Industry Institute Interaction.
- Institute has started SAP center under this various courses are started viz.
  - 1) Procurement, 2) Sales and Distribution 3) financial Accounting 4) ABAP and 5) HRM.
- Institute has established Remote center NMEICT (IIT Mumbai) [National Mission on Education through ICT (MHRD, Govt. of India). Various programs conducted under remote center in association with IIT Mumbai.
- Institute has established the design and innovation center-spoke center in collaboration with SPPU-Pune and MHRD New Delhi under this three module courses are started Skill Development Center institute has received the center of Pradhan Mantri Kaushal Vikas Yojana, Govt.of India in collaboration three courses started a) Construction- Assistant Electrician b) Electronics & Hardware Test & Repair Technician c) Iron & steel fitter and maintenance water cooler and Plumbing (Plumber after sales service)
- Dr. Vasantro Pawar young engineer's lab is established at Horizon Academy School, under which Robotics and Automation center is established.
- The Institute is an authorized Facilitation Center (FC) for the centralized admission process of government of Maharashtra state.

### 6.2.7 Enumerate the resolutions made by the Management Council in the last year And the status of implementation of such resolutions.

Agenda and minutes of Governing Body Council meeting

The Governing Body council meets twice in a year and contains external members. The Last year's meeting of the General Body Council of KB Thakare College of Engineering, Nashik was held on 18/01/2016.

Following resolutions were made in this meeting

- Discussed the issue of admission of academic year 2015-16.
- Compared to other institute, our institute's Admission were satisfactory, instruction regarding admission of all vacant seats of first year of MCA and Instrumentation & Control were given.
- The result of First, second & Third year engineering for May\June 2015 was discussed.
- It is observed that all branches result is being continuously improving from the last year.
- It is decided to concentrate on quality improvement of students.
- Discussed regarding installation of solar power plant to reduced electricity bills of engineering college & girls hostel.
- Different workshop \seminar should be conducted on solar energy.

## 6.2.8 Does the affiliating university make a provision for according the status of autonomy to an affiliated institution? If yes, what are the efforts made by the institution in obtaining autonomy?

Yes, there is a provision. Every year institute has continuation of affiliation to SPP University. The institution has no immediate plans for obtaining autonomy.

# 6.2.9 How does the Institution ensure that grievances / complaints are promptly attended to and resolved effectively? Is there a mechanism to analyze the nature of grievances for promoting better stakeholder relationship?

The Institute has following committees for hearing grievances/complaints from students, teaching and non-teaching staff.

- Reservation Committee
- Anti-ragging Committee
- Anti-Ragging Squad
- Women's Grievance Cell
- Student Council
- Student Grievance Redressal Cell
- Suggestions through suggestion box.

Everybody in the institution is made aware of the existence of these committees. As and when the committee receives a complaint, they meet immediately, review and resolve the problems. They also ensure that necessary actions are taken. The complaint details are filed separately and kept confidential.

## 6.2.10 During the last four years, had there been any instances of court cases filed by and against the Institute? Provide details on the issues and decisions of the courts on these?

• No court case has feen filed against the Institute.

## 6.2.11 Does the Institution have a mechanism for analyzing student feedback on institutional performance? If yes, what was the outcome and response of the institution to such an effort?

Yes, institution has mechanism for analyzing student feedback on institutional performance and Academic Performance

- Alumni Feedback Form
- Mentor Feedback Form
- Feedback is collected from Exit Feedback form from students.
- Academic feedback of teaching and nonteaching staff.
- Library Feedback
- Parents Feedback
- From Suggestion Box

NASHIK DISTRICT MARATHA VIDYA PRASARAK SAMAJ'S

### KARMAVEER ADV. BABURAO GANPATRAO THAKARE COLLEGE OF ENGINEERING

NASHIK - 13

Udoji Maratha Boarding Campus, Pumping Station, Gangapur Road,
Nashik-422013, Maharashtra, India
Visit us at : www.khtcoe.org

#### **Exit Feedback form**

| • | Student Name:      |             |
|---|--------------------|-------------|
| • | Branch:            |             |
| • | Permanent Address: |             |
| • | Contact No.:       | Mobile No.: |
| • | E-Mail ID:         |             |

Kindly select the appropriate option as per the following Criterion.

A - Highly Efficient B - Efficient C - Satisfactory D - Below Satisfaction

#### III. FEEDBACK ABOUT COLLEGE

| 1] Environment                 | A B         |   | C | D _          |
|--------------------------------|-------------|---|---|--------------|
| 2] Infrastructure facilities   | $A\square$  | в | С | D            |
| 3] Admission Procedure         | $A\square$  | в | С | D            |
| 4]Faculty                      | $A\square$  | В | С | $D  \square$ |
| 5] Teaching                    | $A\square$  | В | С | $D \square$  |
| 6] Fee Structure               | А           | в | С | D            |
| 7] Quality of support material | $A \square$ | в | С | D            |
| 8] Training and Placement      | А           | в | С | D            |
| 9] Library                     | А           | в | С | D            |
| 10] Hostel                     | $A\square$  | в | С | D            |
| 11] Canteen                    | А           | в | С | D            |
| 12] Sports                     | $A\square$  | в | С | D            |

| 101 m  | 1  |                   |                  |                       |
|--|--|-------------------|------------------|-----------------------|
| 13] Transport  | $A \square$                                  | В                 | C 🗆              | $\mathbf{D}  \square$ |
| 14] Internet   |  | в                 | $C \square$      | D                     |
| 15]Rate the following academic initial                           | tives taken                                  |                   | rollege to       | imnrove               |
| technical know- how of the student                               | HVC5 tanci                                   | by the            | conege to        | mprove                |
| Industry Oriented Projects                                       | <u> </u>                                     |                   |                  |                       |
|  | А  | В                 | C                | D                     |
| <ul> <li>Seminars &amp;Workshop</li> </ul>                       | $A \square$                                  | В                 | С 🗆              | $\mathbf{D}  \square$ |
| Online Examinations  | <u>,                                    </u> | ъ [               |                  |                       |
| C 'IT ' ' Classe for   | A  | ВШ                | СШ               | $D \square$           |
| Special Training Classes for      bridging Industry Academic con | \ <u></u>                                    | $_{\rm B}\square$ | $C \square$      | D                     |
| bridging Industry Academic gap                                   | АШ   | БШ                | СШ               | $\nu$                 |
| Guest Lectures   |  |                   |                  |                       |
|  | АШ   | ВШ                | С                | D                     |
| 16] Computer Facilities  | $A \square$                                  | в                 | С                | $\mathbf{D}  \square$ |
| 17] Co curricular Activities/Extra                               |  |                   |                  |                       |
| curricular Activities  | АШ   | ВШ                | С                | D                     |
| 18] Discipline in College  | $A \square$                                  | в                 | С                | $\mathbf{D} \square$  |
| 19] How do you rate development                                  |  |                   |                  |                       |
| activities organized by the College for                          |  | ВШ                | СШ               | $D \bigsqcup$         |
| your overall development?  |  |                   |                  |                       |
| 20] How do you rate learning experience                          |  | r                 | $\sim$           | <b>₽</b> □            |
| in terms of their relevance to the real life application?        | АШ   | ВШ                | СШ               | υш                    |
| аррисацоп:   |  |                   |                  |                       |
|  |  |                   |                  |                       |
|  |  |                   |                  |                       |
| II. FEEDBACK ABOUT DEPARTMEN                                     | T & FACU                                     | LTY               |                  |                       |
| 1] Were/are your grievances properly                             |  |                   |                  |                       |
| handled at the College   | A  | B L               | С                | D                     |
|  | A  | D                 | C                | <u> </u>              |
| 2] Were the HOD's & Faculties                                    |  |                   |                  |                       |
| cooperative?   | A  | В                 | C                |                       |
| 3]Cooperation from nonteaching Staff                             |  |                   |                  |                       |
| Jeooperation from homeaching com-                                |  | ~ ☐               | $\sim$ $\square$ | ~                     |
|  | A  | В                 | С                | D                     |
| 4] Departmental Laboratories                                     |  |                   |                  |                       |
|  | $A \longrightarrow A$                        | В                 | С                | D                     |
| 51 Project Cuidones  |  |                   |                  |                       |
| 5] Project Guidance  |  |                   |                  |                       |
|  | A  | В                 | C                | D                     |

#### III. PLEASE COMMENT ON FOLLOWING

- 6. Improvements in teaching and learning process:
- 7. Most Memorable Moment in the college:
- 8. Suggestions for improvements:
- Department
- College

**Signature** Date

Fig.6.2.11 Sampal Exit Feedback form

#### **6.3 Faculty Empowerment Strategies**

### 6.3.1 What are the efforts made by the institution to enhance the professional development of its teaching and non-teaching staff?

- The institute is taking continuous efforts to enhance the professional development of its teaching and non-teaching staff.
- Institute provides financial support for higher education to the teaching and nonteaching staff.
- Enabling staff to make use of latest equipment's through awareness programmes and technical trainings.
- Institute Provides duty leaves to faculty and staff for attending workshops, seminars and national and international conferences.
- Institute Provides access to Internet, audio-visual aids, software packages for upgrading knowledge and skills.
- Institute Provides well equipped library and learning resources for effective lectures delivery.
- Institute Provides NPTEL video lectures.
- Motivating faculty to take membership of known technical and professional bodies like ISTE, IEEE, IETE, IEI etc.
- Institute organizing various faculty development Programs e.g. STTP, FDP, Workshops.
- The non-teaching faculties are promoted as teaching faculty after acquiring necessary qualification.

Table 6.3.1 Details of Conference/Workshop/Seminar /Training/FDP Attended by Staff

| Title   | 2016-17 | 2015-<br>16 | 2014-<br>15 | 2013-<br>14 |
|---|---------|-------------|-------------|-------------|
| Invited as resource persons in workshops /Seminars / Conferences organized by external professional agencies. | 6       | 4           | 4           | 8           |

| Participated in external Workshops /<br>Seminars/ Conferences recognized by<br>national/international professional Bodies | 27 | 47 | 56 | 60  |
|---|----|----|----|-----|
| Presented papers in Workshops / Seminars/ Conferences conducted or recognized by professional agencies                    | 14 | 28 | 31 | 43  |
| Total   | 47 | 79 | 91 | 111 |

## 6.3.2 What are the strategies adopted by Institute for faculty Empowerment through Training, retaining and motivating the employees for the role they perform?

- Institute is always striving to motivate and empower the faculty to create sense of direction and positive awareness to all the departments in the teaching learning processes by sponsoring them to attend various Programmes like National / International conferences, workshops, STTPs and FDPs carried out at different levels.
- Creating a sense of belongingness amongst faculty members by involving them in various committees.
- Deserving faculties are promoted.
- Government norms are followed for DA, pay scale and HRA.
- Faculties are encouraged for higher studies with paid leave.
- Faculties are trained for soft skill development.

Table 6.3.3 Details of Conference/Workshop/Seminar /Training/FDP Attended by Staff

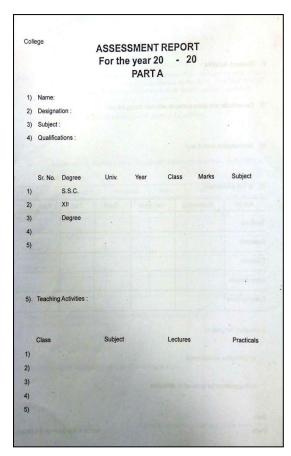
| Title  | 2016- | 2015- | 2014- | 2013- |
|--|-------|-------|-------|-------|
|  | 17    | 16    | 15    | 14    |
| Invited as resource persons in workshops /     | 6     | 4     | 4     | 8     |
| Seminars / Conferences organized by external   |       |       |       |       |
| professional agencies.                         |       |       |       |       |
| Participated in external Workshops / Seminars/ | 27    | 47    | 56    | 60    |
| Conferences recognized by                      |       |       |       |       |
| national/international professional Bodies     |       |       |       |       |
| Presented papers in Workshops / Seminars /     | 14    | 28    | 31    | 43    |
| Conferences conducted or recognized by         |       |       |       |       |
| professional agencies                          |       |       |       |       |
| Total  | 47    | 79    | 91    | 111   |

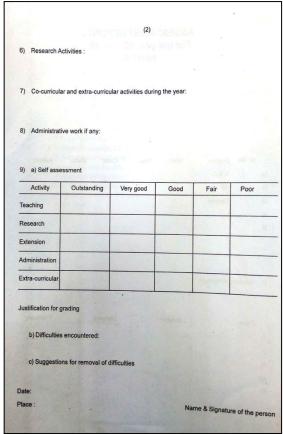
## 6.3.3 Provide details of performance appraisal system of the staff to evaluate and ensure that information on multiple activities is appropriately captured and considered for better appraisal?

Performance appraisal system exists for teaching and nonteaching staff. Sample forms are given below

Self performance appraisal form is distributed to every teaching and non teaching staff members before end of academic year. All staff members filled this form and

submit to the respective department head. Department head assess form of all staff members and make a comment on the report of activities and cross verify of the work done under each head of the activity like given below and make a remark in case of compliance





Following acitivites are considered for teaching Staff members

- Teaching learning process evaluation Specific duties / tasks assigned. Student performance for internal and phase examinations is reviewed along with attendance and practical skills. Workshop, Seminar, Conferences attended by Staff for improving skills and update of recent technology
- Awards/ Rewards obtained by the faculty and staff.
- Results of subjects taught
- Contribution in Institutional and departmental activity
- Contribution towards extracurricular and co-curricular activities.
- Research contribution of staff in terms of research projects, publications, guidance provided to students for involvement in research.

Following acitivites are considered for non teaching Staff members

• Tenure period of work, Work assigned by HOD/ Incharges and its completion, Last year work allotment audit, Special good work done.

|  |               |              | (3)  |                         |             |   |
|--|---------------|--------------|--|-------------------------|-------------|---|
|  |               |              | PART   | В                       |             |   |
| (Note :-                               |               |              | vell as remarks of<br>ce of the person<br>o making improve |                         |             | ling work should<br>ne Department /<br>concerned) |
| <ol> <li>Remark</li> <li>a)</li> </ol> |               |              | epartment on the   |                         |             | er each head of                                   |
|  | activity.     |              |  | And Selection           | The Market  | 2   |
| Activity                               | Out           | standing     | Very good  | Good                    | Fair        | Poor  |
| Teaching                               |               |              |  | Coloque<br>(MattPrincip | the spenies | 18  |
| Research                               |               |              | 3000   |                         |             |   |
| Extension                              |               |              |  |                         |             |   |
| Administrat                            | ion           |              |  |                         |             | 1,000   |
| Extra-curric                           | ular          |              |  |                         |             |   |
| Head of                                | f the Departn | nent, if any | e assessment by  |                         | nd by the   |   |
|  |               |              |  |                         |             |   |

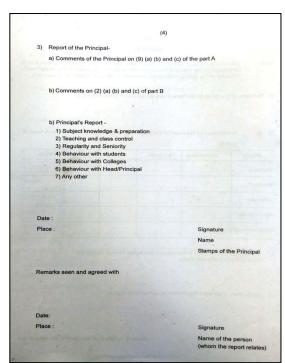
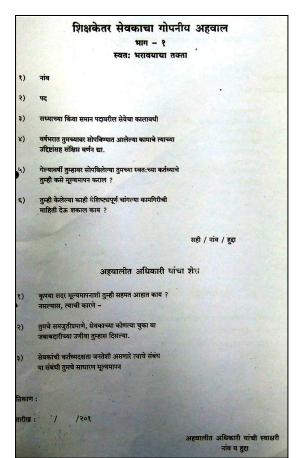


Fig.6.3.3 (A) Sample form of Self Performance Appraisal of teaching Staff



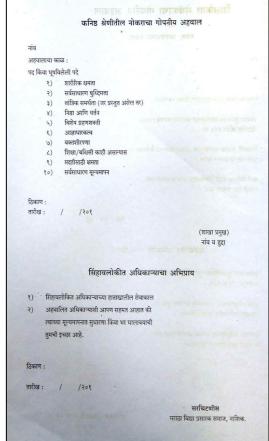


Fig.6.3.3 (B) Sample form of Self Performance Appraisal of non teaching Staff

## 6.3.4 What is outcome of the review of the performance appraisal reports by the management and the major decisions taken? How are they communicated to the appropriate stakeholders?

The management reviews the performance appraisal for suitable suggestions and remedial actions like regularizing the staff after probation period, deciding the regular increments and deciding promotions.

#### Communication to stakeholders

- Appraisal forms of faculties with remarks of HOD, Principal are forwarded to management.
- Counseling is done for faculties if required.

## 6.3.5 What are the welfare schemes available for teaching and nonteaching staff? What Percentage of staff has avail benefit of such scheme in the last four years?

- GIS (Group Insurance Scheme) is provided to staff 30%
- Gratuity is provided to staff -100%
- PF facilities are available to all staff members.
- Uniforms are provided to all class IV Staff.
- Medical leave facilities to all staff.
- Maternity leave is provided for ladies staff.
- Loan is provided to teaching and non-teaching Staff members through teachers society -100%
- Medi- claim insurance is provided to all staff at cheaper rate-100%
- Medical help is provided to staff through Sevak welfare funds-100%

Table 6.3.5 (A) List of Loans Provided to Teaching Staff by NDMVPS's Teachers Co-operative Society.

| Sr<br>No | Academic Year | Name of Staff      | Designation | Amount |
|----------|---------------|--------------------|-------------|--------|
|          |               |                    |             |        |
| 1        | 2016-2017     | Prof. B.N.Rajole   | Assi. Prof  | 62468  |
| 2        | 2016-2017     | Prof.N.K.Kharate   | Assi.Prof.  | 628000 |
| 3        | 2016-2017     | Prof.J.J.Nerkar    | Assi.Prof.  | 22242  |
| 4        | 2016-2017     | Prof.A.B.Kakade    | Asso.Prof.  | 541295 |
| 5        | 2016-2017     | Prof.R.R.Tajanpure | Assi.Prof.  | 108812 |
| 6        | 2016-2017     | Prof.A.A.Kapse     | Asso.Prof.  | 310459 |
| 7        | 2016-2017     | Prof.B.J.Pawar     | Assi.Prof.  | 293750 |
| 8        | 2016-2017     | Prof.D.T.Khairnar  | Prof.       | 629000 |
| 9        | 2016-2017     | Prof.S.H.Jadhav    | Asso.Prof.  | 547000 |
| 10       | 2016-2017     | Prof.V.C.Shewale   | Asso.Prof.  | 136545 |
| 11       | 2016-2017     | Prof.S.A.Dhumane   | Assi.Prof.  | 274225 |

| 12 | 2016-2017 | Prof.S.P.Mogal       | Asso.Prof. | 540532 |
|----|-----------|----------------------|------------|--------|
| 13 | 2016-2017 | Prof.N.S.Patil       | Prof.      | 587867 |
| 14 | 2016-2017 | Prof.K.T.Patil       | Assi.Prof  | 546250 |
| 15 | 2016-2017 | Prof.S.D.Nikam       | Assi.Prof  | 606000 |
| 16 | 2016-2017 | Prof.S.P.Jadhav      | Assi.Prof  | 209920 |
| 17 | 2016-2017 | Prof.H.Y.Patil       | Assi.Prof  | 81825  |
| 18 | 2016-2017 | Prof.S.Y.Pawar       | Assi.Prof  | 299011 |
| 19 | 2016-2017 | Prof.Y.B.Chaudhari   | Asso.Prof  | 428100 |
| 20 | 2016-2017 | Prof.R.V.Devalkar    | Assi.Prof  | 474650 |
| 21 | 2016-2017 | Prof.P.V.Pund        | Assi.Prof  | 476000 |
| 22 | 2016-2017 | Prof.S.J.Suryawanshi | Assi.Prof  | 195705 |
| 23 | 2016-2017 | Prof.S.M.Wayasal     | Assi.Prof  | 500000 |
| 24 | 2016-2017 | Prof.V.P.Gawai       | Assi. Prof | 195837 |
| 25 | 2016-2017 | Prof.A.R.Chaudhari   | Assi.Prof  | 136358 |
| 26 | 2016-2017 | Prof.Y.P.Patil       | Assi.Prof  | 495500 |
| 27 | 2016-2017 | Prof.D.V.Kushare     | Assi.Prof  | 623500 |
| 28 | 2016-2017 | Prof.S.N.Palhe       | Assi.Prof  | 650000 |
| 29 | 2016-2017 | Prof.L.C.Sonttake    | Assi.Prof  | 127462 |
| 30 | 2016-2017 | Prof.N.J.Salunke     | Assi.Prof  | 163843 |
| 31 | 2016-2017 | Prof. T. S. Deshmukh | Assi.Prof  | 330000 |
| 32 | 2016-2017 | Prof.J.R.Suryawanshi | Assi.Prof  | 175000 |

Table 6.3.5(B) List of Loans Provided to Non-Teaching Staff by NDMVPS Teachers Co-operative Society

| Sr<br>No | Academic<br>Year | Name of Staff    | Designation | Amount |
|----------|------------------|------------------|-------------|--------|
| 1        | 2016-2017        | Mr D. D. Dabhade | Tech.Asst.  | 208912 |
| 2        | 2016-2017        | Mr. D. B. Purkar | Plumber     | 28115  |
| 3        | 2016-2017        | Mr R.S.Khairnar  | Peon        | 120551 |
| 4        | 2016-2017        | Mr S.U.Salunke   | Jr.Clerk    | 248700 |
| 5        | 2016-2017        | Mr N.S.Gangurde  | Peon        | 152000 |
| 6        | 2016-2017        | Mr S.L.Pawar     | Peon        | 107000 |
| 7        | 2016-2017        | Mr B.S.Bhavar    | Peon        | 138000 |
| 8        | 2016-2017        | Mr M.N.Chine     | Tech.Asst.  | 51336  |

| 9  | 2016-2017 | Mr A.R.Gaikwad     | Peon               | 146775 |
|----|-----------|--------------------|--------------------|--------|
| 10 | 2016-2017 | Mr A.S.Mogal       | Tech.Asst.         | 369104 |
| 11 | 2016-2017 | Mr M.B.Jadhav      | Tech.Asst.         | 278302 |
| 12 | 2016-2017 | Mr R.D.Aher        | O.S                | 128181 |
| 13 | 2016-2017 | Mr R.R.Khainar     | Work/S.Asst.       | 118614 |
| 14 | 2016-2017 | Mr P.K. Wagh       | Peon               | 81152  |
| 15 | 2016-2017 | Mr V.G.Nimbalkar   | Service Eng        | 269832 |
| 16 | 2016-2017 | Mrs S.S.Gade       | Tech.Asst.         | 117267 |
| 17 | 2016-2017 | Mr N.V.Kadam       | Tech.Asst.         | 116011 |
| 18 | 2016-2017 | Mr K.G.Somase      | Work/S.Asst.       | 48000  |
| 19 | 2016-2017 | Mr J.P.Lasure      | Peon               | 42000  |
| 20 | 2016-2017 | Mr S.V.Nawale      | Peon               | 19034  |
| 21 | 2016-2017 | Mr S.D.Musale      | Peon               | 93336  |
| 22 | 2016-2017 | Mr S.V.Shinde      | Driver             | 40012  |
| 23 | 2016-2017 | Mr S.S.Suryawanshi | Jr.Clerk           | 228851 |
| 24 | 2016-2017 | Mr A.B.Shinde      | Jr. Clerk          | 192000 |
| 25 | 2016-2017 | Mr P.A.Kadlag      | Lab Attendant      | 196180 |
| 26 | 2016-2017 | Mr S.P.Chavan      | Peon               | 82366  |
| 27 | 2016-2017 | Mr S.P.Gangve      | Workshop Attendant | 37000  |
| 28 | 2016-2017 | Mr S.C.Derle       | Peon               | 35040  |
| 29 | 2016-2017 | Mr A.B.Sabale      | Network Admin      | 210000 |

### 6.3.6 What are the measures taken by the Institute for attracting and retaining eminent faculty?

Strategies adopted by the Institute for attracting and retention of eminent faculty members are as follows:

- Provide yearly increments & promotions based on experience & qualification.
- Implementing various welfare schemes for faculty like group gratuity, group insurance, medi-claim insurance policy, credit cooperative society, sevak welfare fund etc.
- Assigning roles and responsibilities challenging their capabilities and making them strive further.
- Providing necessary infrastructure and facilities for promoting the culture of research
- Nearly 10% of total budget is allocated for research and development with respect to total budget.
- Institute considers the leave of employee for the research work and also adjusts their work load at department level.

- Deputing faculty for industrial training, for completion of Ph.D. at industries/ Institute of repute.
- Duty leave is sanctioned to teachers to undertake field work, presentation, attending national international seminars and conferences

The details of faculty pursuing higher studies & completed higher studies are given below.

| Qualification | No. of staff |
|---------------|--------------|
| Ph.D          | 13           |
| Ph.D Pursuing | 35           |
| PG            | 74           |

- Institute provides adequate internet facility, Wi-Fi facility and library resources such as e-journal, e-book, reference books etc.
- Encouraging faculties to talks and interaction with eminent personalities from industries, research and development organization, from many reputed national and international institute.
- Attending the state conference/National conference /International conference the encouragement amount will be given rupees one thousand for state level conference.
- Encouragement amount rupees two thousand for international conference in within the state and rupees four thousand outside the state.
- Encouragement amount rupees ten thousand international conferences outside of India and rupees one thousand for best paper award at international conference.

Table 6.3.6 (A) Shows Various Developments Programmes Attained by Staff

| Academic Staff Development                     | No. of staff Attended |         |         |         |  |
|--|-----------------------|---------|---------|---------|--|
| Programmes                                     | 2016-17               | 2015-16 | 2014-15 | 2013-14 |  |
| Refresher courses                              | 3                     | 5       | 10      | 6       |  |
| HRD programmes                                 | 5                     | 7       | 6       | 6       |  |
| Orientation programmes                         | 3                     | 9       | 12      | 10      |  |
| Staff Training Conducted by college            | 2                     | 16      | 7       | 11      |  |
| Staff training conducted by other institutions | 4                     | 14      | 5       | 7       |  |
| Summer/ winter schools, workshops, etc.        | 6                     | 28      | 28      | 45      |  |

The management reviews the performance appraisal for suitable suggestions and remedial actions like regularizing the staff after probation period, deciding the regular increments and deciding promotions.

Table 6.3.6 (B) Staff Promotion Details

| Sr.  | Name of | Department | Year of   | Post      | Post after |
|------|---------|------------|-----------|-----------|------------|
| No.  | faculty |            | promotion | before    | promotion  |
| 110. |         |            |           | promotion |            |

| 01 | Dr. B.B.<br>Musmade | Instrumentation & Control | 2013 | Associate<br>Professor | Professor      |
|----|---------------------|---------------------------|------|------------------------|----------------|
| 02 | Dr. N.S.Patil       | Instrumentation           | 2015 | Associate              | Professor      |
| 02 | D1. 14.5.1 util     | & Control                 | 2013 | Professor              | TTOTESSOT      |
| 03 | Dr. N.S.Patil       | Instrumentation & Control | 2016 | Professor              | Vice Principal |
| 04 | Dr. S.P.Mogal       | Mechanical                | 2014 | Assistant              | Associate      |
|    |                     |                           |      | Professor              | Professor      |
| 05 | Prof A.A.Kapse      | Mechanical                | 2014 | Assistant              | Associate      |
|    |                     |                           |      | Professor              | Professor      |
| 06 | Prof                | Mechanical                | 2014 | Assistant              | Associate      |
|    | V.C.Shewale         |                           |      | Professor              | Professor      |
| 07 | Prof. N. K.         | Mechanical                | 2014 | Assistant              | Associate      |
|    | Kharate             |                           |      | Professor              | Professor      |
| 08 | Prof H.V.Patil      | E&TC                      | 2013 | Assistant              | Associate      |
|    |                     |                           |      | Professor              | Professor      |
| 09 | Dr A. B.Saner       | Civil                     | 2015 | Associate              | Professor      |
|    |                     |                           |      | Professor              |                |
| 10 | Prof V.S.Tidake     | Computer                  | 2013 | Assistant              | Associate      |
|    |                     |                           |      | Professor              | Professor      |
| 11 | Prof. M. P          | Civil                     | 2014 | Assistant              | Associate      |
|    | Chougale            |                           |      | Professor              | Professor      |
| 12 | Mr. R.D.Aher        | Office                    | 2016 | Jr. Clerk              | Office         |
|    |                     |                           |      |                        | Superintendent |

#### **6.4 Financial Management and Resource Mobilization**

### 6.4.1. What is the institutional mechanism to monitor effective and efficient use of available financial resources?

- The Institute has a well-defined procedure to monitor effective and efficient utilization of available financial resources.
- Yearly planning of budget under different heads is carried out in advance of the academic year. Budget required for all departmental expenditure is generated. This Budget is approved by Local Management Committee and forwarded to NDMVP Samaj Sanstha for the approval.
- Departmental requirements such as apparatus, equipment, instruments, consumables and semi-consumables items are listed as per requirement by Head of Department. The details are given to Principal. Quotations are called from the at least three different vendors/suppliers. A comparative statement is prepared which is approved from the Principal. After negotiations purchase orders are placed to the vendors.
- After receipt of the material entry is made in the Stores Dead Stock registers, then the entry is made in departmental central dead stock register, after testing

- installation and demonstration it is entered in the central departmental dead stock register and bills are forwarded to the account section for audit and after audit payment may be released. Servicing, maintenance and repairs of instruments and equipment is carried out regularly.
- Inter-departmental verification of dead stock and records is regularly maintained. Reports are regularly submitted to the principal. External audit is conducted every year.

### 6.4.2 What are the institutional mechanisms for internal and external audit? When was the last audit done and what are the major audit objections?

- The auditors are appointed by the NDMVP Samaj Sanstha. The institution is having qualified practicing Charted Accountant as an auditor who audits the accounts annually. After the audit, the report is sent to the management for review.
- No major audit objections were raised in the previous four years reports

Table 6.4.2 (A) Details of External Audit.

| Internal/External Audit           | Last Audit date              | <b>Details of Compliance</b> |
|-----------------------------------|------------------------------|------------------------------|
| Auditors R. S. Baste &<br>Company | 2016-2017 Date :- 13/06/2016 | 27/06/2016                   |

Table 6.4.2 (B) Objections of External Audit and compliance

| Sr.<br>No. | Period of<br>Audit Report | Particulars of Objection in brief                               | Compliance by the Institute                |
|------------|---------------------------|---|--|
| 1          |                           | Paid bill to LIC committee No<br>Permission from Central Office | Permission is taken from<br>Central office |
| 2          | 2015-16                   | Paid to Mr. Kumar Karanjkar no fee receipt                      | Receipt Found                              |
| 3          | 2013 10                   | Honrioum to Professor No<br>Permission from Central Office      | Permission is taken from<br>Central office |
| 4          |                           | Paid to V.N.Jalgaokar.No<br>Permission from Central Office      | Permission is taken from<br>Central office |
| 5          |                           | Paid bill to Synchroniks Receipt not found                      | Receipt Found                              |
| 6          | 2014-15                   | Original Bill Not Found   | Bill Found                                 |
| 7          | 2014-13                   | No Signature on Voucher   | Signature is taken                         |
| 8          |                           | Paid to IIT Mumbai Receipt not found                            | Receipt Found                              |
| 9          | 2013-14                   | Paid bill to S. & S Receipt not found                           | Receipt Found                              |
| 10         | 2013 11                   | No Permission from Central<br>Office                            | Permission is taken from<br>Central office |

# 6.4.3 What is the major source of institutional receipts/funding and how is the deficit managed? Provide audited income and expenditure statement of academic and administrative activities of the previous four years and the reserve fund/corpus available with Institutions, if any.

- The major source of institutional funding is from the tuition fees
- Development fees received from students
- Government grants
- Building rent received from external Agencies.
- UGC and other grants.
- Audited income and expenditure statement of academic and administrative activities of the previous last four years are available and listed below

Table 6.4.3 Audited Statement of Income & Expenditure

| Sr.<br>No | Particulars             | 2016-<br>17 | 2015-16      | 2014-15      | 2013-14      |
|-----------|-------------------------|-------------|--------------|--------------|--------------|
| 1         | Total Income (Rs.)      | -           | 158403639.10 | 155032018.00 | 138896430.00 |
| 2         | Total Expenditure (Rs.) | -           | 141644700.90 | 129330416.27 | 116572189.00 |
| 3         | Balance amount (Rs.)    | -           | 16758938.20  | 25701601.53  | 22324240.00  |

### 6.4.4 Give details on the efforts made by the institution in securing additional funding and the utilization of the same (if any).

• The Institute is taking efforts for getting additional funds from various agencies like AICTE, DTE& SPPU (BCUD).

Table 6.4.4 Funds received and utilization during last four years

| Sr. | Particulars                       | 2016-2017      | 2015-2016  | 2014-2015      | 2013-2014 |  |
|-----|-----------------------------------|----------------|------------|----------------|-----------|--|
| No  |                                   | ( <b>Rs.</b> ) | (Rs.)      | ( <b>Rs.</b> ) | (Rs.)     |  |
|     | Grants income                     |                |            |                |           |  |
| 1   | BCUD                              | 420000.00      | 630504.00  | 145256.00      | 110000.00 |  |
| 2   | IIT/MHRD                          | 734000.00      | 457843.00  | 679888.00      | 117083.00 |  |
| 3   | Student Welfare<br>Activity (NSS) | 44550.00       | 75750.00   | 75750.00       | 75750.00  |  |
|     | Total Income                      | 1198550.00     | 1164097.00 | 900894.00      | 302833.00 |  |
|     |                                   | Expend         | diture     |                |           |  |
| 1   | BCUD                              | -              | 630504.00  | 145256.00      | 110000.00 |  |
| 2   | IIT/MHRD                          | -              | 457843.00  | 679888.00      | 117083.00 |  |
| 3   | Student<br>WelfareActivity(NSS)   | -              | 75750.00   | 75750.00       | 75750.00  |  |
|     | Total Expenditure                 | -              | 1164097.00 | 900894.00      | 302833.00 |  |

- **6.5 Internal Quality Assurance System**
- **6.5.1 Internal Quality Assurance Cell (IQAC)** 
  - a. Has the institution established an Internal Quality Assurance Cell (IQAC)? If 'yes' What is the institutional policy with regards to quality assurance and how has it contributed in institutionalizing the quality assurance processes?
    - Yes, the IQAC has been proposed from post Accreditation. Currently teaching and learning process is monitored by Academic Monitoring Committee, which will become integral part of proposed IQAC. This cell is chaired by Principal of the Institute. All Dean of Institute and HOD's of all departments are member of this committee. AMC used to monitor all the Academics, Student Feedback and overall teaching learning process to achieve maximum academic performance of the students. Guidance of advisors in term of teaching & load distribution, new faculty recruitment, procurement of new equipment's & library books is always helping the individual department to improve their performance. Faculty & staff appraisal are also looked after by AMC where it not only monitors the performance of individual faculty but also guide them to achieve their own objectives.
    - AMC checks course files, theory and practical attendance sheets, Lab manuals, staff feedback etc. in every semester. Also this committee consists of mentors, class coordinators, Dean Academics, which monitors the classes and interact with students and faculty regularly and on need basis suggests remedial measures and motivates teachers to use latest technological aids.
    - Monthly mentor meeting are conducted to counsel the students and to discuss issues related to academics and overall facilities. AMC inform all the issues raised by mentors & coordinators to Principal. Based on the issues raised by the above mentioned committees, the Principal takes corrective measures to improve teaching learning process
- b. How many decisions of the IQAC have been approved by the management/authorities for implementation and how many of them were actually implemented?
  - Not applicable
- c. Does the IQAC have external members on its committee? If so, mention any Significant contribution made by them.
  - Not applicable
- d. How do students and alumni contribute to the effective functioning of the IOAC?
  - Presently this functioning has done by Academic Monitoring Committee (AMC). Feedback is taken from alumni and students through suggestion box
  - Feedback is also received essentially from alumni regarding emerging trends in the industry, efforts to enhance employability, initiatives to

- promote research components and encouraging students for entrepreneurship.
- These feedbacks and suggestions will be used to improve the propose functioning of IQAC which is in under development..

### e. How does the IQAC communicate and engage staff from different constituents of the institution?

• Presently this communication has been done by Academic Monitoring Committee (AMC). This cell is chaired by Principal of the Institute. Progress of the institute and various departments is monitored and assessed. Suggestions are given for discrepancies.

## 6.5.2 Does the institution have an integrated framework for Quality assurance of the academic and administrative activities? If 'yes', give details on its operationalization.

• Yes, the Institution has integrated frame work for quality assurance in academic & administrative activities.

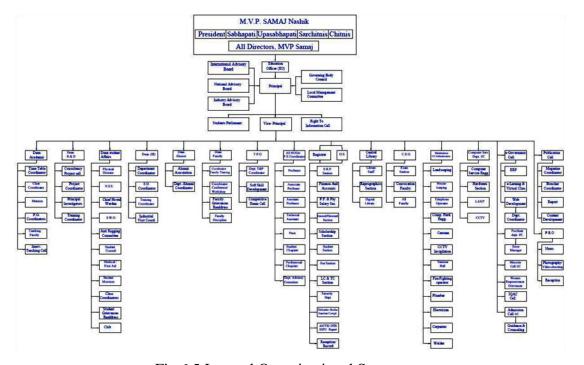


Fig. 6.5 Internal Organizational Structure

- Academic and administrative activities are achieved through periodical visits of AMC.
- There are predefined framework of AMC to ensure quality in academics and administration.

### 6.5.3 Does the institution provide training to its staff for effective implementation of the Quality assurance procedures? If 'yes', give details enumerating its impact

- Yes, the institution provides training to its staff for effective implementation of the quality assurance procedure.
- Institute promotes faculty for training, seminar, workshops, conference etc.

- Staffs training programs are conducted regularly for quality improvement.
- The faculties are oriented towards maintenance of quality through guest lectures, workshops and during the meetings of principal and HOD and informed through ERP system.
- Counseling by AMC to all the staff members on quality program and practices.
- Staffs are given specific directions for quality improvement. Time to time monitoring is carried out & corrective actions are taken.
- Impact of such practices resulted in improving academic performance.

Table 6.5.3 Various Developments Programmes Attained by Staff

| Academic Staff Development                     | No. of staff Attended |         |         |         |  |
|--|-----------------------|---------|---------|---------|--|
| Programmes                                     | 2016-17               | 2015-16 | 2014-15 | 2013-14 |  |
| Refresher courses                              | 3                     | 5       | 10      | 6       |  |
| HRD programmes                                 | 5                     | 7       | 6       | 6       |  |
| Orientation programmes                         | 3                     | 9       | 12      | 10      |  |
| Staff Training Conducted by college            | 2                     | 16      | 7       | 11      |  |
| Staff training conducted by other institutions | 4                     | 14      | 5       | 7       |  |
| Summer/ winter schools, workshops, etc.        | 6                     | 28      | 28      | 45      |  |

## 6.5.4 Does the institute undertake Academic Audit or other external review of the academic provisions? If 'Yes', how are the outcomes used to improve the institutional activities?

Yes, the institution undertakes an academic audit and external review of the academic provisions.

- Regular meetings are conducted by Pricipal, HOD with all teaching faculty and staff for taking reviews and feedbacks regarding academic activities.
- Academic review of the department is carried out at the end of semester in academic year by HOD.
- College takes the review of academic audit through reports from the departments and result analysis at the end of semester and remedial measures are taken for improvement.
- Practices like self-appraisal reports and its review by HOD, Principal and management helps for continuous assessment of faculty, staff and resulted in significant improvement of the institute.
- Also Academic Monitoring Committee reviews the academic audit.
- The analysis and suggestions by AMC will benefit the institutional progress in quality education and research. It will also make sure about keeping the transparency in faculty, staff and management with respect to objectives towards attainment of mission and vision of the Institute.

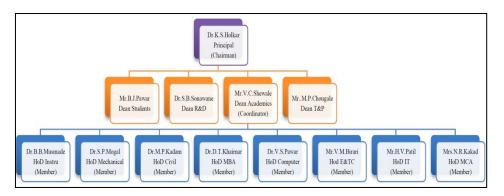


Fig. 6.5.4 Members of Academic Monitoring Committee (AMC)

## 6.5.5 How is the internal quality assurance mechanisms aligned with the requirements of the relevant external quality assurance agencies/regulatory authorities?

- The institution follows guidelines given by AICTE, DTE and SPPU in association with AMC. All the academic activities and processes are as per the instructions given by above authorities from time to time.
- Curriculum and its implementation, evaluation is as per the University guidelines.
- The infrastructure & staff is as per the norms laid down by AICTE, DTE.
- The admission to the program is governed by the directives given by DTE, Maharashtra state.
- The institute is monitored by SPPU & AICTE committees for compliance.
- AMC is always keen in observing and achieving performance of the institute by attainment towards mission and vision of the institute.
- Feedback is taken from eminent persons visiting to the institute.

Table 6.5.5 Members of Academic Monitoring Committee (AMC)

| Sr. No | Name of Staff Member | Designation         | Position    |
|--------|----------------------|---------------------|-------------|
| 1      | Dr. K.S.Holkar       | Principal           | Chairman    |
| 2      | Prof. V.C.Shewale    | Dean Academics      | Coordinator |
| 3      | Prof. S.B.Sonawane   | Dean R&D            | Member      |
| 4      | Prof. B.J.Pawar      | Dean Student        | Member      |
| 5      | Prof. M.P.Chougale   | Dean T&P            | Member      |
| 6      | Dr. S.P.Mogal        | HOD Mechanical      | Member      |
| 7      | Prof. V.M.Birari     | HOD E&TC            | Member      |
| 8      | Prof.H.V.Patil       | HOD IT              | Member      |
| 9      | Dr. M.P.Kadam        | HOD Civil           | Member      |
| 10     | Dr. V.S.Pawar        | HOD Computer        | Member      |
| 11     | Dr. B.B.Musmade      | HOD Instrumentation | Member      |
| 12     | Dr. D.T.Khairnar     | HOD MBA             | Member      |

| 13 | Prof. N.R.Kakad | HOD MCA | Member |
|----|-----------------|---------|--------|
|    |                 |         |        |

## 6.5.6 What institutional mechanisms are in place to continuously review the teaching learning process? Give details of its structure, methodologies of operations and outcome?

The Institute has the following process to plan and organize the teaching and learning as well as evaluation schedules:

#### **Teaching and learning process:**

- SPPU provides an academic calendar before the commencement of semester wherein the number of days for teaching and evaluation are available which gives a guideline to frame an Institute level academic calendar.
- Institute level academic calendar is prepared and provided to all departments before the commencement of semester.
- Principal conducts meeting with all HoD's and gives necessary guidelines on the basis of previous feedback.
- Choice based preferences are asked for next semester before the staff members proceed for vacation and load distributions is done by considering these choices.
- HoD's also assigns the responsibilities to the faculties for the activities to be conducted throughout the semester.
- The teaching plan is prepared by every subject teacher prior to the starting of the semester which includes lecture number, topics planned, date, topics covered, etc. This is monitored periodically by the HoDs.
- The subject teachers are ask to prepare/update course file which contains academic calendar, syllabus, teaching plan, subject notes, question bank on each unit, university question papers with model solution etc.
- Monthly meeting of faculties is conducted by HoD to discuss the problems if any and to take updates of the conduction of academics.

#### **Evaluation:**

The formative evaluation of students is done by following ways.

- Institute has developed internal evaluation process.
- All the information related to Exams are scheduled in advanced and displayed through academic calendar.
- Institute conducts Mock test, internal test for the students.
- Institute Evaluate the students based on Students attendance, assignments, performance in internal/Online test, students overall performance which supports the choice based credit system.
- Institute monitors the academics through Daily monitoring Reports of ERP.
- The academic progress of the Students is monitored by the Mentors and respective subject teacher.

The Summative evaluation of students is done by following ways.

- Theory Insemester, End Semester examinations
- Online examinations.
- Oral /Practical examinations.
- The details of these examinations are announced well in advance by the SPPU.

• Institute has developed continuous Improvement process to facilitate the achievement of intended learning outcomes.

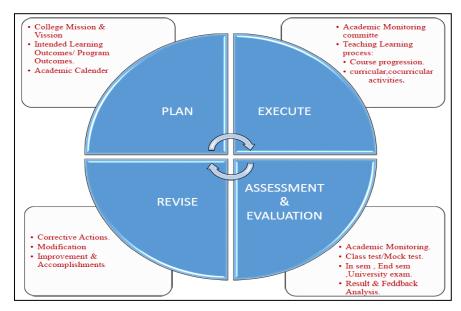


Fig.6.5.6(B)Continous Improvement process

### 6.5.7 How does the institution communicate its quality assurance policies, mechanisms and outcomes to the various internal and external stakeholders?

The quality policies are communicated to internals

- Through institute website www.kbtcoe.org.
- Every year college publishes a prospectus
- Broachers by displaying on notice boards at different prominent places like Principal office, department floors, classrooms, laboratories, college website, Hostel, Library, etc.
- Time to time conversation with parents through induction programs.

The quality policies are communicated to External stakeholders

- Talks of HOD / Senior staff members in Parent-Teacher meet
- Alumni meet
- Industry institute meet
- Time to time conversation with eminent researchers and industrialist through Co-curricular and Extra Co-curricular activities.

#### CRITERION VII: INNOVATIONS AND BEST PRACTICES

#### 7.1 Environment Consciousness

The management of our institute is well conscious about environmental issues. The institute contributed in the activity of "Swachh Godavari Abhiyan" for controlling river pollution, cleaning and public awareness. The institute is much sensitive for making the eco-friendly campus by adopting certain measures and practices. The college has been appreciated and awarded for "green building" initiative. All the academic building laboratories are cleaned by appointed peons where as porch and campus areas are cleaned by daily-basis housekeeping staff. The institute has already considered energy conservation practices during buildings planning phase. Periodical tree plantation and gardening practices are making the campus clean and green.

#### 7.1.1 Does the institute conduct a Green Audit of its campus and facilities?

Yes, the institute conducts green audit of the campus. The major observations are given below:

- The building performs fairly well on the criterion studied through this report. The microclimate solves various heat gain issues which are otherwise a possibility in sites which are located in urban areas.
- The site doesn't pose connectivity issues and is equally connected by bus and road networks.
- There have been measures undertaken by the designers and authorities to add on the existing plantation of the site, and to conserve top soil by landscaping. This has also reduced the heat island effect of the building thereby contributing towards the microclimate.
- The segregation of waste is a factor where it needs to work positively, as the organic waste generated at the site if be treated there itself by composting, will be beneficial and the waste will be treated at source itself.
- Rain water harvesting measures are adopted and are appreciable as it generates fairly enough water for the site functions, and increases the ground water table.
- The building is very well oriented to fetch maximum day light in major functional areas such as classrooms and labs. This saves considerably on artificial lighting requirements.
- The provision of impervious floors in the outdoor areas can further be increased by which ground water table of water will benefit, as of now it is only 40%, which should be increased to 60%, by employing perforated pavers, grass joints etc.
- The building must also harness solar energy as it has large uninterrupted facades on southern and western sides from where solar energy can be captured.
- The building however shows unutilized power sockets, and at certain places provision of power switches more than the current need, which must be kept to optimum.
- Students and staff members are totally aware of pollution that are caused by
  use of vehicles. Still a carbon consumption awareness programme must be
  undertaken to check and improve the carbon emissions at individual as well

- as social level so that it avoids Air and Noise pollution in the campus due to vehicles or any other activity in it.
- The institute must also adopt suitable measures to check and dispose the Ewaste generated.
- Solar lighting can be provided in the campus majorly to light up the common areas.
- The paper waste generated is being reused and sent to the recycling agencies instead of being burnt, thus it helping and maintaining the green environment.

### 7.1.2 What are the initiatives taken by the college to make the college eco-friendly?

#### 1. Energy Conservation:

- The institute has taken due care for less energy consumptions including electronic ballast tube lights, electronic regulators for fans, and minimum use of Air Conditioners.
- All the older CRT based Computers are replaced by LCD monitor based Computers.
- Minimum requirement of tube lights and fans because of sufficient natural lights in class rooms, laboratories and staff cabins.
- Students and staff are motivated to use good practices such as to switch off electronic instruments, fans and tubes whenever not in use during practical hours.
- Regular replacement of UPS batteries through buy-back schemes.

#### 2. Use of renewable energy:

- Institute has installed solar water heating system with 200 LPD capacity in the Girls hostel.
- Five solar street lights of 74 watt are installed at staff parking areas.
- One solar PV surface water pump system (1 HP) is installed for gardening purpose.
- Solar LED TV, solar educational kit, single solar parabolic cooker, seven solar SPV lanterns kept in campus for awareness purpose.
- To create awareness for the uses of renewable energy sources is through student's projects and activities for students and faculties.

•



**Solar Street Light:** 

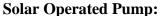


**Solar PV Panel:** 





**Solar Water Heater:** 







**Solar Lantern:** 

**Solar Box Cooker:** 

Fig. 7.1.2 (A): Photos of solar based instruments

#### 3. Water harvesting:

- The institute has implemented rain-water harvesting, which significantly contributed to increase ground water levels and reduce water expenses. This system is also useful for well/borewell recharging.
- The lawn, plants and flowers are watered by drips/sprinklers.
- The water taps, leakages are regularly supervised to avoid wastage of water.
- Reuse of waste water for gardening by waste water treatment plant.
- The institute contributed in the mission of "Swachh Godavari Abhiyan" for controlling river pollution, cleaning and public awareness.





Fig. 7.1.2 (B): Water harvesting at academic building-C.

#### 4. Check dam construction:

• Not Applicable to our campus.

#### 5. Efforts for Carbon neutrality:

- The institute adopts distributed parking areas for staff, students and visitors.
- Arranges PUC camps and motivated staff and students for periodical PUC check-up of their individual vehicles.
- Regular tree plantation by staffs, NSS students and by guests.
- 'No vehicle day' is implemented by the institute.
- Waste papers are properly managed to avoid CO<sub>2</sub> emission.
- Newspaper articles are displayed on library notice boards for creating awareness and seriousness about pollution issues among staff and students.
- Organic waste generated from gardens and trees is collected and used for composting
- Institute follows regular practice for the felicitation of invited guest by presenting saplings and books instead of bouquet.

#### 6. Plantation:

- Tree plantation an important responsibility is handled with due care by planting good number of trees by Staff members and NSS students every year in the campus.
- The institute has adopted tree plantation policy named as "One Student, One Tree".
- Staffs are deputed for taking care of trees and gardens.

The details of plantation are listed below:

Table 7.1.2 (A): Plantation figure.

| Sr. No. | Type of Plantation | Total Number |
|---------|--------------------|--------------|
| 1       | Trees              | 675          |

#### 7. Hazardous waste management:

• There is NO hazardous waste generated by institute.

#### 8. E-waste management:

- Unrepaired electronic instruments, burned electronic components, battery cells and broken wires are kept in enclosed boxes.
- The entire institute computers are connected with LAN
- Intranet is implemented effectively
- Biomedical lab instruments and UPS batteries are exchanged by buy-back schemes.
- Old Computers and few old CRO's are donated to rural schools, colleges and ITI's for utilisation purpose.

#### 7.2 Innovations

### 7.2.1 Give details of innovations introduced during the last four years which have created a positive impact on the functioning of the college

#### **Industry Advisory Board:**

Industry Advisory Board established by institute for each discipline having members from local industries. In IAB meetings inputs are getting from members to enhance the quality of education with current technological trends in the industries. They also give important suggestions for industry base projects, placements, visits and collaborative activities.

#### **E-learning:**

Institute provides better platform to the students and faculties for e-learning. This improves technical knowledge of students by utilising facility of e-books, NPTEL video lectures, university question papers as well as academic software's. E-learning platform is embedded with institute ERP website.

#### **Library Practices:**

- OPAC search facility is available for students and faculties for searching books, e-books, bound journals, project-seminar reports and their location in the library.
- The appreciation awards are given by institute for maximum utilization of different library facilities by students and faculties yearly.
- To get the maximum benefit of library facilities by the students, it is kept open for extended hours i.e. 8.30am to midnight 12.00pm.

#### **Online Mock-Test:**

Institute conducts online exam mock-test for students who are in first and second year engineering for practice purpose and analysing themselves for university exams. Objective questions set by faculties are based on cognitive levels such as to increase analytical and problem solving skills. This provides guidelines to the faculty members for better practices to improve student's performance.

#### Skills, Knowledge and Research Encouragements:

- Appreciation of students during annual function for remarkable achievements in curricular and extra-curricular activities.
- Certification courses are conducted for skills improvements.
- Arranges and motivates students for industrial trainings and industrial projects.
- Seminar topics are given such as to increase knowledge and imagination beyond university curriculum.
- The best projects from final year class are awarded by institute to encourage other students. The project groups are also participated in university state level project competition "Avishkar" every year.
- Institute recently established "Design Innovation Centre" (DIC) in some departments like one in instrumentation and control engineering department for "design and development of signal conditioning and sensor technologies", other two in civil and mechanical engineering department with title of "advanced techniques for environment watershed management" and "PG diploma in computer aided product design" respectively. DIC centres are sponsored by SPPU, Pune and MHRD, New Delhi and in association with MVP Samaj Sanstha, Nashik.
- Institute established "Dr. Vasantrao Pawar Young Engineers Lab" at "Horizon Academy Nashik" and under this activity Robotics and Automation facilities are provided. This lab develop research culture and knowledge temper in school students.
- The faculties with publications in reputed journals and participation in international conferences are recognised by presenting appreciation certificates and token of momento during teacher's/engineer's day.
- Consultancy services and collaborative works by faculties are appreciated by institute by giving incentives.

#### **E-governance in academics and Administration:**

- The intranet web portal is available in the campus for smooth functioning of academic and administrative functions.
- E-governance with educational ERP software facilitates automation of various activities such as Student section, Fee collection, Financial Accounts, Academic Monitoring, Exam Section, Attendance, Library, Events Managements, Meetings, Students-parents communication, Digital clearance, Online students Attendance, Teaching plan etc.
- Letters and messages to the Parent are generated with details of internal test marks, university exam marks and attendance record of their ward, periodically.

#### **Hobby Club:**

The institute encourages the students and staff to bring out their potential through extra-curricular activities for their all-round development. For this, institute established various clubs which take care of different activities under them.

#### • Nature club:

Activities like trekking, nature walk, photography and nature quiz competitions are arranged time to time. Bird watching visits are also organised under this club. This club is actively creating environment consciousness

among students and public through tree plantation, cleaning activities outside campus.

#### • Cultural club:

The appreciation of each others culture and varieties are the motto of this club. Institute takes this responsibility positively to appreciate and transmit our best culture to younger generation. Club organises various events in a cultural fest called as "Fusion" every year and also time to time participated in various activities such as music, drama, dance, stage shows, singing, and orchestra competitions outside institute.

#### • Literary club:

Institute promotes reading and writing hobbies through this club and to develop better understanding about different facts of life. Institute provides library with literature of different languages and for different age groups.

#### • Sports club:

The major objective of the club is to develop fitness level of students by inspiring them for various morning exercises and field games. The institute provides well infrastructure like GYM, volleyball, basketball court and cricket and football ground. Club has experienced physical director, who give personal attention to each student. To develop professional touch in games, coaches for different outdoor and indoor games.

#### **SAE INDIA:**

The society of automotive engineers is body looks after the latest development worldwide. Under this SAE India, organises various activities for students. The major competition is SAE SUPRA. The institute intra-department students participated in this activity every year. It is a formula one racing competition in which students are given certain specifications according to which they design, manufacture the formula one car. This develops design and innovation culture among students.

#### **Bridge Making Competition:**

The institute provides platform for students to apply skills to enhance bridge strength, capacity, cost in practical applications, students applied their skills and knowledge for innovations of bridge making that created research culture amongst students.

#### **Idea Sparks:**

The Institutes MBA department provide platform for students to call their innovative ideas in different areas. The students present and share their ideas to all participants with the platform of idea sparks activity.

#### Institute cell for collaborative projects and consultancy:

The objectives of the this cell is to promotes research and industry oriented collaborative projects, to provide consultancy services to industries and govt. institute, to cultivate innovation and entrepreneurship, to facilitate as an incubation centre for graduate students in providing them with hands-on experience. This cell provides various services such as research and analysis, networking, software engineering, data mining and decision support system, imaging processing, testing services, web application development, software development, technology consultancy and android app development.

#### **Student's Parliament**

The institute is taken due care of student's queries, doubts, problems, difficulties by establishing student's parliament concept. Every month there is students meeting with principal sir and students are free to ask questions on different issues and resolve their problems.

#### 7.3.1 Best Practice:1

#### 1. Title of the Practice

"Industry Practices"

#### 2. Goal

- To reduce the gap between academic curriculum and industry expectations.
- To enhance skill in-line with recent industrial practices.
- To cover on and above laboratory practices to enhance practical knowledge and applications.
- To encourage the students to improve practical knowledge by handling industry-based projects and providing its solution effectively.
- To improve intra-personal skills like analysis, decision, leadership, confidence, communication, and discipline.
- To improve the faculty interaction with industry for multiple benefits such as invitation at institute, Consultancy services, industry-base projects, employability enhancement, trainings, visits and suggestions for betterments in curriculum.

#### 3. The Context

- The institution UG and PG programmes are affiliated to Savitibai Phule Pune University and follows its syllabus for various disciplines.
- The institute industry interaction is powerful activity to enhance the practical learning experience of staff and students beyond academic curriculum.
- The overall development of the students who are technically sound, professional with the improved level of employability skills is the prime requirement in engineering and technology.
- The students have to be motivated and prepared to be innovative practices and industry ready by participation in industrial visits and actively involved in industry based projects during their graduation.
- The best practices in the industry will have to be exposesed to the students and faculty, so that the outcome of the education is employability with professional competence.
- Efforts should be made to bring out the best in the students and make them to feel up to date and comfortable at work place.
- With this as the goal, an extensive industry institute interaction is planned and executed at the institution positively.

#### 4. The Practice

- Established industry advisory board and members from the industry are in the advisory board of every department.
- Industry professionals are part of the final year practical and project evaluation process of every department and also in the Academic development of the institution.
- The student's projects from the industry are jointly guided by the faculty and the members from the industry
- The faculty members timely visit the industries, arrange industrial visits regularly, and also are being trained in the industry.
- The industry professionals contribute as experts, evaluation process, members in the advisory board to get valuable suggestions for improvement process of institute.
- The evaluation of the project work is carried out in every month as a project review by guide and stating the comments on the ongoing development process.
- Industry experts visited to institute for conducting sessions and/or interaction with faculties/students is listed below:

Table 7.3.1 (A): Industry person visited to institute.

| Sr. | Industrial Person Visited to Campus Company Name |                               |  |  |  |
|-----|--|-------------------------------|--|--|--|
| No. | industrial reison visited to Campus              | Company Name                  |  |  |  |
| 1   | Dr.R.S. Jha, Manager, Innovation                 | Thermax Ltd, Pune.            |  |  |  |
| 2   | Dr. Parag Sonawane, Director, (R&D)              | AIMID Ltd,Shenzen,China       |  |  |  |
| 3   | Shri. Rajendra Kumar Das, Vice President         | CeatTyres Ltd, Nashik.        |  |  |  |
| 4   | Dr. Omprakash Kulkarni                           | Sharda Inventions, Nashik     |  |  |  |
| 5   | Mr. Sunil Jadhav, Project Manager                | Emerson, UAE                  |  |  |  |
| 6   | Mr. Nitin Lokhande, Director                     | ETA, Pune                     |  |  |  |
| 7   | Mr. Deepak Jain                                  | SMEC Automation, Mumbai       |  |  |  |
| 8   | Mr. Vinay Raju                                   | Yokogawa, Bangalore           |  |  |  |
| 9   | Mrs. Punam Borah                                 | Yokogawa, Bangalore           |  |  |  |
| 10  | Mr. A.K. Das, Director                           | Monorail Mumbai               |  |  |  |
| 11  | Mr. Rajesh Bhave                                 | Emerson Process Management,   |  |  |  |
|     | Trajesh Bhave                                    | Pune                          |  |  |  |
| 12  | Mr. Henry Hans                                   | Emerson Process Management,   |  |  |  |
|     | ,  | Pune                          |  |  |  |
| 13  | Mr. Shirish Chaphekar                            | Emerson Process Management,   |  |  |  |
|     | -  | Pune                          |  |  |  |
| 14  | Mr. Samir Patil, Manager Business                | Clyde Bergemann Power         |  |  |  |
|     | Development & Control Product                    | Group, Atlanta, USA           |  |  |  |
|     | Development                                      | _                             |  |  |  |
| 15  | Mr. Aniruddha Sanvastare                         | Shriharsh Electronics, Nashik |  |  |  |
| 16  | Mr. Pralhad Dhumal                               | Fox Control Pvt. Ltd., Nashik |  |  |  |
| 17  | Dr. Vikas Shinde, Manager, R&D                   | Excel Industries Ltd, Mumbai  |  |  |  |
| 18  | Mr. Sudhir Panditrao                             | SAN Techno Mentors Pvt. Ltd.  |  |  |  |
|     |  | Pune                          |  |  |  |
| 19  | Mr. Milind Chaugar                               | NIYO Automation, Pune         |  |  |  |
| 20  | Mr. Milind Bhavsar                               | Visionary Technologies Pvt.   |  |  |  |
|     |  | Ltd., Nashik                  |  |  |  |
| 21  | Mr. Subhash T. Anokar, Asst. Engineer            | NTPS, Nashik                  |  |  |  |

| 22       | Ms. Sucheta Sonawane, Sr Proposal                   | Honeywell Automation India                |  |  |
|----------|---|---|--|--|
|          | Engineer  | Ltd., Pune                                |  |  |
| 23       | Mr. Kunal Jadhav, Manager                           | Mahindra & Mahindra, Nashik               |  |  |
| 24       | Mr. Kapil Surve, Lead Engineer                      | Honeywell Automation India                |  |  |
| - '      | Will Ruph Bullye, Dead Engineer                     | Ltd., Pune                                |  |  |
| 25       | Ms Sujata Tidme, Sr. Engineer                       | Multiquadrant Pvt. Ltd.                   |  |  |
| 26       | Mr. Bipin Deore, Manager                            | GlaxoSmithKline Pvt. Ltd.                 |  |  |
| 27       | Mr. Adarsh Jain, Director                           | Syncthreads Computing,                    |  |  |
|          | Time Tidation valid, Effection                      | Mumbai                                    |  |  |
| 28       | Mr. Vijay Shintrye, Engineer Visionary Technologies |   |  |  |
|          |   | Ltd., Nashik                              |  |  |
| 29       | Mr. Tushar Shirsat, Sr. Manager                     | TATA Motors, Pune                         |  |  |
| 30       | Mr. Jay Thakur, Sr. Engineer                        | Nashik Thermal Power Project,             |  |  |
|          |   | Indiabulls, Sinnar                        |  |  |
| 31       | Ms. Vijayata Bhatt                                  | Winjit Technology                         |  |  |
| 32       | Mr. Pankaj Singh                                    | Aptron Solution Pvt. Ltd.                 |  |  |
| 33       | Ms. Heena Jain                                      | Akshay Study Abroad                       |  |  |
|          |   | Consultants                               |  |  |
| 34       | Mr. Jai Prakash                                     | Zensar                                    |  |  |
| 35       | Mr. Akash Thakur                                    | Zensar                                    |  |  |
| 36       | Dr. Uday Wad, Director                              | Cell Beans Healthcare                     |  |  |
|          |   | Informatics Pvt. Ltd. Pune.               |  |  |
| 37       | Mr. Tanveer Ahmed Shaikh                            | Zensar                                    |  |  |
| 38       | Mr. Nadeem Shaikh                                   | Zensar                                    |  |  |
| 39       | Mr. Rohit Agrawal                                   | SEED Infotech Ltd. Pune.                  |  |  |
| 40       | Mr. Deepak Jain                                     | SMECT automation ,Nashik                  |  |  |
| 41       | Mr. Rohit Parmar                                    | Ardino Procesor, Latex, PCB               |  |  |
|          |   | Design, Pune.                             |  |  |
| 42       | Mr. Parag Salvekar                                  | Jai Gajanan DIGI Trains                   |  |  |
|          |   | Nashik                                    |  |  |
| 43       | Mr. Bachhav Prashant                                | Arya Technology, Nashik.                  |  |  |
| 44       | Mrs. Archana Wadnere                                | Seed Infotech Ltd. ,Nashik                |  |  |
| 45       | Mr. Shrikant Aatkarne                               | NI2 DESIGN, Pune                          |  |  |
| 46       | Mr. A.B. Patil                                      | Prolific Systems, Pune                    |  |  |
| 47       | Mr. Gordon Noronha, Corporate Trainer               | Freelancer                                |  |  |
| 48       | Mrs. Arya Hycinth, Corporate Trainer                | Freelancer                                |  |  |
| 49       | Mr. Hanumant Rao, CEO                               | TCS                                       |  |  |
| 50       | Mr. Mansukhbhai Prajapati, Founder                  | Mitticool                                 |  |  |
| 51       | Mr.Daniel Goodman & Mr.Mohammad,                    | Freelancer                                |  |  |
| 52       | Corporate Trainer  Mr. Tycher Logton, CA            | Nachile                                   |  |  |
| 52       | Mr. Tushar Jagtap, CA                               | Nashik                                    |  |  |
| 53<br>54 | Mr. Sanjivan Tambulvadikar, CA                      | Nashik<br>Nashik                          |  |  |
|          | Mr. Vishal Poddar, CA                               | Nashik Mathkoot Pastourants               |  |  |
| 55       | Mr. Kiran Bhide, Founder                            | Methkoot Restaurants                      |  |  |
| 56       | Mr. Amol Kadam, CEO & Co-Founder                    | Lionking Media  Rev Consultancy Put. Ltd. |  |  |
| 57       | Mrs. Nandita Ray, Founder                           | Ray Consultancy Pvt. Ltd.                 |  |  |
| 58       | Mrs. Nita Nigam, Corporate Trainer                  | Freelancer                                |  |  |
| 59       | Mrs. Shubhangi Kundalkar, Corporate                 | Freelancer                                |  |  |
|          | Trainer   |   |  |  |

| 60 | Ms. Shinde, PSI        | Cyber Cell, Nashik Police. |
|----|------------------------|----------------------------|
| 61 | Mr. Ravindran, Manager | SIDBI                      |

#### 5. Evidence of Success

- Industry suggestions are taken care in addition to university curriculum in all the discipline such as organizing various value added practices, training programs and skill development programs.
- Industrial trainings are organises for the students time-to-time.
- Faculties are motivated for training/participation in the industry as well as in other institutes.
- Technical value added programs conducted by industry persons time to time.
- Students summer/winter training and project work in industries
- Guest lectures, seminars are delivered by industrial experts
- Industrial persons are invited for student/staff workshops organized by the institute.
- Consultancy and testing services provided to the industries
- Enhancement in students, campus recruitments of all the programmes
- The effort taken by staff and students are reflected in their success.
- Figures of various activities such as seminars, expert talks, trainings and workshops organized by institute for students are summarized in following table.

Table 7.3.1(B): Seminars, expert talks, trainings and workshops organized by institute

| A.Y.    | Expert Talks/Seminars | Trainings/Workshops |
|---------|-----------------------|---------------------|
| 2016-17 | 23                    | 28                  |
| 2015-16 | 25                    | 17                  |
| 2014-15 | 15                    | 18                  |
| 2013-14 | 23                    | 12                  |

• Details of student/faculty trainings/workshops conducted in and out of institute is listed below:

Table 7.3.1(C): Student/faculty trainings/workshops conducted.

| Sr. | Training/workshop | Conducted by           | Department    | Date /year    |
|-----|-------------------|------------------------|---------------|---------------|
| No. | details           |                        |               |               |
| 1   | Training program  | FOX Control Pvt. Ltd., | Instru. &     | 29/12/2016 to |
|     | on DCS and PLC    | Nashik                 | Control Dept. | 30/12/2016    |
|     | for faculty and   |                        |               |               |
|     | students          |                        |               |               |
| 2   | Training program  | FOX Control Pvt. Ltd., | Instru. &     | 16/12/2016 to |
|     | on DCS and PLC    | Nashik                 | Control Dept. | 17/12/2016    |
|     | for faculty and   |                        |               |               |
|     | students          |                        |               |               |
| 3   | Winter Training   | Rashtriya Chemicals    | Instru. &     | 05/12/2016 to |
|     | Program for       | and Fertilizers Ltd.   | Control Dept. | 15/12/2016    |
|     | Instrumentation   | Chembur, Mumbai        |               |               |

|    | Engineering<br>Students   |                             |                           |                             |
|----|---|-----------------------------|---------------------------|-----------------------------|
| 4  | Training program<br>on "Automation<br>Technology Covers<br>PLC & SCADA" | Prolific System, Pune.      | E&TC Dept                 | 21/06/2016 to<br>24/09/2016 |
| 5  | Workshop on "Electronics Products"                                      | NDMVPS's KBTCOE,<br>Nashik  | E&TC Dept                 | 08/09/2016                  |
| 6  | Workshop on " C<br>Programming"   | NDMVPS's KBTCOE,<br>Nashik  | E&TC Dept                 | 28/06/2016 to 30/06/2016    |
| 7  | Embedded System   | NDMVPS's KBTCOE,<br>Nashik  | E&TC Dept                 | 21/07/2016                  |
| 8  | VLSI Workshop   | NDMVPS's KBTCOE,<br>Nashik  | E&TC Dept                 | 15/07/2016 to<br>16/07/2016 |
| 9  | Workshop on "PCB Design"  | NDMVPS's KBTCOE,<br>Nashik  | E&TC Dept                 | 05/02/2016 to 06/02/2016    |
| 10 | Entrepreneurship<br>Training Program                                    | NDMVPS's KBTCOE,<br>Nashik  | E&TC Dept                 | 14/07/2016 to<br>16/07/2016 |
| 11 | Workshop on " C<br>Programming"   | NDMVPS's KBTCOE,<br>Nashik  | E&TC Dept                 | 23/07/2016 to 24/07/2016    |
| 12 | Vocational training program on Study of PLC and Instrumentation         | TAACT, MIDC ,<br>Nashik.    | Instru. &<br>Control Dept | 5/2016                      |
| 13 | STTP on<br>Introduction to<br>Structural<br>Engineering.                | NDMVPS's KBTCOE,<br>Nashik  | Civil Dept                | 4/1/2016                    |
| 14 | PLC Training Program.   | NDMVPS's KBTCOE,<br>Nashik  | Instru. & Control Dept    | 19/9/2016 to 20/9/2016      |
| 15 | One week training on Delta VDCS   | NDMVPS's KBTCOE,<br>Nashik  | Instru. & Control Dept    | 15/06/2015 to 19/06/2015    |
| 16 | Six Days STTP on "C" Programming  | NDMVPS's KBTCOE,<br>Nashik  | Instru. &<br>Control Dept | 29/92016 to<br>8/10/2016    |
| 17 | Inbound Training Program on Personality Development                     | Arya Hycinth –Pune          | MBA Dept.                 | 27/9/2016                   |
| 18 | Training program on VLSI  | NDMVPS's KBTCOE,<br>Nashik  | E & TC Dept               | 15/7/2016                   |
| 19 | Training program on "PCB Design" Conducted                              | Arya Technology,<br>Nashik. | E & TC Dept               | 5/2/2016                    |
| 20 | Java Training   | Zensar technology,<br>Pune  | IT Dept                   | 2015-2016                   |
| 21 | Hibernate and   | NDMVPS's KBTCOE,            | MCA Dept.                 | 8/10/2016                   |

|    | spring MVC             | Nashik             |             |               |
|----|------------------------|--------------------|-------------|---------------|
|    | workshop               | Tushik             |             |               |
| 22 | UI Designing           | NDMVPS's KBTCOE,   | MCA Dept.   | 13/8/2016     |
|    | Sessions               | Nashik             | Wich Bept.  | 13/ 0/ 2010   |
| 23 | Software testing       | NDMVPS's KBTCOE,   | Computer    | 9/ 2016       |
|    | Sessions               | Nashik             | Dept        |               |
| 24 | Android App            | NDMVPS's KBTCOE,   | Computer    | 17/9/2016 to  |
|    | Development            | Nashik             | Dept        | 1/10/2016     |
| 25 | Applied CS with        | NDMVPS's KBTCOE,   | Computer    | 24/10/2016 to |
|    | Android workshop       | Nashik             | Dept        | 26/10/2010    |
| 26 | Android App            | NDMVPS's KBTCOE,   | Computer    | 17/09/2016 &  |
|    | development            | Nashik             | Dept        | 19/09/2016    |
|    | Workshop               |                    |             |               |
| 27 | One day workshop       | NDMVPS's KBTCOE,   | Computer    | 08/02/2016    |
|    | on Python              | Nashik             | Dept        |               |
| 28 | One Day-Outbound       | Gordon Noronha     | MBA Dept    | 02/02/2016    |
|    | Training               |                    |             |               |
| •  | Programme              |                    | 255 / 5     | 27/22/22/1    |
| 29 | Inbound Training       | Arya Hycinth, Pune | MBA Dept    | 27/09/2016    |
| 20 | Program                | ND WDG WDTGGE      | III. D.     | 1.4/02/2017   |
| 30 | Bigdata- Hadoop        | NDMVPS's KBTCOE,   | IT Dept     | 14/02/2015    |
| 21 | workshop               | Nashik             | MDAD        | 14/02/2015    |
| 31 | Entrepreneurship       | NDMVPS's KBTCOE,   | MBA Dept    | 14/02/2015    |
|    | Training Programme     | Nashik             |             |               |
| 32 | Embedded System        | NDMVPS's KBTCOE,   | E&TC Dept   | 03/08/2015    |
| 32 | Embedded System        | Nashik             | Example 1   | 03/06/2013    |
| 33 | Workshop on            | NDMVPS's KBTCOE,   | E&TC Dept   | 13/02/2015 to |
|    | "Ardino Processor      | Nashik             | Eare Bept   | 14/02/2015    |
|    | ,Latex ,PCB            | T (WOTHER          |             | 1 ., 02, 2010 |
|    | Design"                |                    |             |               |
| 34 | Virtual Reality        | NDMVPS's KBTCOE,   | MCA Dept    | 29/7/2015     |
|    | Sessions               | Nashik             |             |               |
| 35 | One Day-Outbound       | By Shubhangi       | MBA Dept    | 04/10/2015    |
|    | Training               | Kundalkar & Gordon |             |               |
|    | Programme              | Noronha            |             |               |
| 36 | Inbound Training       | Arya Hycinth, Pune | MBA Dept    | 08/10/2015    |
|    | Program                |                    |             |               |
| 37 | ERP Software           | NDMVPS's KBTCOE,   | Civil Dept  | 2015          |
|    | Training               | Nashik             |             |               |
| 38 | Auto-CAD               | NDMVPS's KBTCOE,   | Civil Dept  | 2015          |
|    | Software Training      | Nashik             |             | 10/00:5       |
| 39 | Water Audit Course     | NDMVPS's KBTCOE,   | Civil Dept  | 12/2015       |
| 40 | C ATT                  | Nashik             | N. f. 1 1 1 | 2014.15       |
| 40 | Summer/Winter          | BOSCH Ltd, MIDC,   | Mechanical  | 2014-15       |
| 11 | Training               | Satpur, Nashik.    | Dept.       | 2014 15       |
| 41 | Summer/Winter          | HAL, Ozar Nashik   | Mechanical  | 2014-15       |
| 42 | Training Summer/Winter | Mohindro P-        | Dept        | 2012 14       |
| 42 | Summer/Winter          | Mahindra &         | Mechanical  | 2013-14       |

|    | Training           | Mahindra Ltd.    | Dept          |               |
|----|--------------------|------------------|---------------|---------------|
| 43 | Google Apps        | NDMVPS's KBTCOE, | Computer      | 21/10/2013    |
|    | Workshop           | Nashik           | Dept          |               |
| 44 | ERP Software       | NDMVPS's KBTCOE, | Civil Dept    | 2013          |
|    | Training           | Nashik           |               |               |
| 45 | Training program   | Yokogawa Ltd,    | Instru. &     | 21 07/2014 to |
|    | on DCS             | Banglore.        | Control Dept. | 25/07/2014    |
| 46 | Four days Training | NDMVPS's KBTCOE, | Instru. &     | 02/09/2015 to |
|    | on Automation      | Nashik           | Control Dept. | 05/09/2015    |
|    | using PLC, SCADA   |                  |               |               |
|    | for students       |                  |               |               |

• Faculty members industry interactions, industry-based projects of students and industrial visits organized by institute is given below:

Table 7.3.1 (D): Industry interactions, industry-based projects of students and industrial visits organized by institute

| A.Y.    | Faculty interactions /visits with industry | Industry based projects by students | Industrial Visits<br>Organized |
|---------|--|-------------------------------------|--------------------------------|
| 2016-17 | 44   | 47                                  | 33                             |
| 2015-16 | 28   | 40                                  | 25                             |
| 2014-15 | 15   | 26                                  | 19                             |
| 2013-14 | 24   | 20                                  | 25                             |

• The interaction of industrial persons with institute is built through MoU's by different departments. List of MoU's with industries is given below:

Table 7.3.1(E): MoU's with industries

| Sr.<br>No. | Name of Organization<br>Signing MoU | Purpose of MoUs/ Activity           | Name of the<br>Beneficiary |
|------------|-------------------------------------|-------------------------------------|----------------------------|
|            |                                     |                                     | department                 |
| 1          | Systems, Application and            | Train the students in SAP           | MBA, MCA,                  |
|            | product in data Processing          | modules HCM (Human                  | Computer,                  |
|            | (SAP), Banglore                     | Capital management), SD             | Mechanical,                |
|            |                                     | (sales and Distribution),           | Е&Тс,                      |
|            |                                     | ABAP (Advanced Business             | IT, Civil                  |
|            |                                     | Application Programing, FI          | and                        |
|            |                                     | (Financial Accounting) and          | Instrumentation            |
|            |                                     | MM (material Mangment) to           | and Cotrol                 |
|            |                                     | understand the busness              | Engineering                |
|            |                                     | activites of the organization       |                            |
| 2          | Zensar Technologies, Pune.          | To train the students in            | Computer                   |
|            |                                     | employability skills, JAVA          | Engineering                |
|            |                                     | and Advanced JAVA course and Inform |                            |
|            |                                     |                                     | Technology                 |
| 3          | Fox Solutions Nashik                | Industrial Training, Industrial     | Instrumentation            |
|            |                                     | Visit, Projects, Placements,        | and Control                |
|            |                                     | Expert Talks                        | Engineering                |

|     |   | T   |                 |
|-----|---|---|-----------------|
| 4   | Microtech System Services                         | Iicrotech System Services Knowledge sharing, In plant |                 |
|     | Nashik Training, Industrial Visit,                |   |                 |
|     |   | Campus Placement                                      |                 |
| 5   | Boost Electronics, Ambad,                         | Industrial Training, Industrial                       |                 |
|     | Nashik  | Visit, Projects, Placements.                          |                 |
| 6   | Visionary Technologies,                           | Knowledge sharing, In plant                           | Instrumentation |
|     | Nashik.   | Training, Industrial Visit,                           | and Control     |
|     | Nasilik.  | Campus Placement                                      | Engineering     |
|     | T 1 42 1 C  | 1   | Engineering     |
| 7   | Teknocrat's academy of                            | Industrial Training, Industrial                       |                 |
|     | Automation & Control                              | Visit, Projects, Placements.                          |                 |
|     | Technologies Nashik                               |   | _               |
| 8   | Copper Track Industries,                          | Industrial Training, Industrial                       |                 |
|     | Nashik  | Visit, Projects, Placements.                          |                 |
| 9   | Shriharsh Electronics,                            | Industrial Training, Industrial                       |                 |
|     | Nashik  | Visit, Projects, Placements.                          |                 |
| 10  | Cyberedge Web Solutions                           | Knowledge sharing, Industrial                         |                 |
| 10  | Pvt. Ltd. Nashik                                  | Visit, Campus Placement,                              |                 |
|     | 1 vt. Ltd. Ivasilik                               | Internship  |                 |
| 1.1 | Emancina Tacha alacias                            | 1   | -               |
| 11  | Emerging Technologies                             | Knowledge sharing, Industrial                         |                 |
|     | Nashik  | Visit, Campus Placement,                              |                 |
|     |   | Internship  | _               |
| 12  | UMS Tech Labs Nashik                              | Knowledge sharing, Industrial                         | MCA             |
|     |   | Visit, Campus Placement,                              | IVICA           |
|     |   | Internship  |                 |
| 13  | Internauts ,A Web Design                          | Knowledge sharing, Industrial                         |                 |
|     | Agency, Nashik                                    | Visit, Campus Placement,                              |                 |
|     | 8,  | Internship  |                 |
| 14  | Zabuza Labs, Nashik Knowledge sharing, Industrial |   | -               |
| 1 . | Zuouzu Euos, Tusiiik                              | Visit, Campus Placement,                              |                 |
|     |   | Internship  |                 |
| 1.5 | Common Domboo Von duo                             | <u> </u>  |                 |
| 15  | Sampoorna Bamboo Kendra                           | Knowledge Sharing                                     |                 |
|     | Address: Lavada, Melghat,                         |   |                 |
|     | Amravati.   |   |                 |
| 16  | Sunrise Candles                                   | Knowledge sharing, Industrial                         |                 |
|     | Moreshwar,  | Visit, Campus Placement                               |                 |
|     | Mahabaleshwar, Satara                             |   | MBA             |
| 17  | Sahyadri Agro Farms                               | Knowledge sharing, In plant                           | 1.227.1         |
|     | Nashik  | Training, Industrial Visit,                           |                 |
|     |   | Campus Placement                                      |                 |
| 18  | Startup Farms Nashik                              | Knowledge sharing, Campus                             | 1               |
|     | ~ mrop I millo I mollik                           | Placement   |                 |
| 19  | Swati Investment Nashik                           | Knowledge sharing, Campus                             | -               |
| 19  | Swatt Hivestilletit Ivasilik                      | Placement   |                 |
| 20  |   |   |                 |
| 20  | Astiwz Infotech, Nashik.                          | Knowledge sharing, In Plant                           |                 |
|     | ·   | Training  |                 |
| 21  | Avasthi's IT Training and                         | Knowledge sharing, In Plant                           | Computer        |
|     | Solution(AITS), Nashik.                           | Training  |                 |
| 22  | Advent Engineer's, Nashik                         | Knowledge sharing, In Plant                           |                 |
|     |   | Training  |                 |
| •   | •   |   |                 |

| 23 | Spectra Innovation, Nashik | Knowledge sharing, In plant              |            |
|----|----------------------------|--|------------|
|    |                            | Training, Industrial Visit,              |            |
|    |                            | Campus Placement                         |            |
| 24 | Quantaflux Technology      | Knowledge sharing, In plant              |            |
|    | Solution Pvt. Ltd Pune     | Training, Industrial Visit,              |            |
|    |                            | Campus Placement                         |            |
| 25 | Yashika Energy Systems     | Knowledge sharing, In plant              |            |
|    | Pvt. Ltd, Ashok Shambh,    | Training, Industrial Visit,              | E & TC     |
|    | Nashik                     | Campus Placement                         |            |
| 26 | Celestial Plastic Hub,     | Knowledge sharing, In plant              |            |
|    | MIDC Ambad, Nashik         | Training, Industrial Visit,              |            |
|    |                            | Campus Placement                         |            |
| 27 | Digilog Systems, Nashik    | Knowledge sharing, In plant              |            |
|    |                            | Training, Industrial Visit,              |            |
|    |                            | Campus Placement                         |            |
| 28 | Anubhooti Infractructures  | Site Visit,Knowledge                     |            |
|    | Pvt. Ltd. Nashik           | Shearing, On -Site training              |            |
| 29 | Niwara Builders and        | Site Visit, Knowledge Sharing,           | G: 11      |
|    | Developers Nashik          | On -Site training                        | Civil      |
| 30 | Jalchintan Engineering     | Site Visit, Knowledge Sharing,           |            |
|    | Trust Nashik               | On -Site training                        |            |
| 31 | Akash Industries Nashik    | Industrial Visit, Project work           |            |
| 32 | Deol Industries Nashik     | Industrial Visit knowledge               |            |
|    |                            | sharing                                  | Mechanical |
| 33 | Bhagyashree Engineering    | ee Engineering Industrial Visit. Project |            |
|    | Pvt. Ltd Nashik            | knowledge sharing                        |            |
| 34 | Winjit Technology, Nashik  | Training, Projects, Visits               |            |
| 35 | Glostream Technology,      | Training, Projects, Visits               |            |
|    | Nashik                     |  | IT         |
| 36 | Neumann Systems            | Training, Projects, Visits               | 11         |
|    | Consultancy Pvt. Ltd,      |  |            |
|    | Nashik                     |  |            |

Table 7.3.1(F): Figure of placement is given below:

| Academic Year | Placement |
|---------------|-----------|
| 2016-17       | 19        |
| 2015-16       | 86        |
| 2014-15       | 71        |
| 2013-14       | 49        |

## 6. Problems Encountered and Resources Required

- Focus of the faculty members from regular teaching.
- Establishing practical approach amongst the faculty to bridge industry expectations.
- Time management of curriculum and industrial interactions.
- Review of student's project during the development phase and testing phase i.e. faculty members with the area of specialisation.

• Institute highly motivated and adopts skill developments activities in the campus through different external bodies.

#### 7. Contact Details

| Name of the  | Dr. Kailas S. Holkar |               |                       |  |
|--------------|----------------------|---------------|-----------------------|--|
| Principal:   |                      |               |                       |  |
| Name of the  | N.D.M.V.P.S's Karm   | naveer Advoca | ate Baburao Ganpatrao |  |
| Institution: | Thakare College of E | ingineering.  |                       |  |
| City:        | Nashik               |               |                       |  |
| Pin Code:    | 422 013              |               |                       |  |
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#### 7.3.2 Best Practice:2

#### 1. Title of the Practice

"Collaborative counselling and mentoring"

#### 2. Goal

- To develop effective mentoring relationship that is characterized by mutual respect, trust, understanding and empathy.
- To make an effort to know, accept and respect the goals and interests of students.
- To help a student to optimize an educational experience.
- To assist the student's socialization into a disciplinary culture.
- Help the student to find suitable employment by making the right suggestions.
- To develop strategies for addressing students development needs such as advising, counselling, coaching and mentoring.
- To guide common science student in taking right decision for their future technical career.

#### 3. The Context

- In academics mentor is faculty adviser. The difference between mentoring and advising is need to reduced.
- Mentoring is a personal, as well as professional relationship.
- A mentoring relationship develops over an extended period, during which a student's needs and nature of relationship tends to change.
- A mentor will try to be aware of these changes and vary the degree and type of attention, help, advice, information, and encouragement that he or she provides.
- Several strategies and efforts have been deployed to address student's development needs, including advising, counselling, coaching and mentoring.

- The mentoring sessions not only focuses on students learning and educational experiences, but seeks to connect students' academic interest and skills with their personal and career ambitions.
- The mentoring supports create a safe enivironment in which students can learn by joy and developing personally and professionally.
- Rural students need to guide and counselling properly at the time of career selection and up to career developments with considering their economic and educational backgrounds.

#### 4. The Practice

To enhancing student learning, maximize positive students outcome and for the effectiveness of mentoring program below mentioned combined practices are followed by institute with external professional counsellor.

- **Faculty Mentoring Practices:** The key steps followed such as careful listening, keeping in touch, building relations and handling issues.
  - Each faculty of the institute acts as a counsellor cum mentor in the counselling and mentoring process.
  - Each counsellor is responsible for guiding approximately 20 students of a class.
  - The faculty listen to their problems both academic and personal which hinder their learning abilities.
  - In the counselling cum mentoring sessions, student raise their difficulties and problems regarding academics, general facilities, hostel facilities with their respective counsellors.
  - The counselling/mentoring coordinator examines their problems and discusses with authorities to find a better solution for their grievances.
  - By adopting three basic steps in this process are: mentoring-advising, mentoring-counselling, and mentoring-coaching.
  - The counselling is not only restricted to institute students but also for science students at various rural and urban areas for their career guidance.
  - Established training and innovation centres for students in institute.
  - Organising and involvement in different programs for students such as career experience sharing knowledge, emotional and moral encouragements, soft skills development, technical knowledge enrichment, industrial visits, social awareness and sources of information in obtaining opportunities.

### Professional counselling and guiding Practices:

- Institute organizes counselling programs in the campus for students over all development.
- Providing self-assessments tools.
- Goal-setting exercises, time management, asking thought-provoking key questions and study skills.
- Learning experiences outside the classroom by visits at various organisations/ sites.
- Role playing such as practicing interviews, preparing how to talk to employers, learn how to address uncomfortable.
- Providing training or orientation to the students.

- Provide objective feedback and guidance.
- Fostering critical thinking
- The soft skills/expert talk organized by institute for students motivation and overall personality developments

The below table shows total figures of personality and knowledge enrichment programmes organized by institute.

Table 7.3.2 (A): Soft skills/expert talk organized by institute:

| Department      | Soft skill and Expert Talks |         |         |         |
|-----------------|-----------------------------|---------|---------|---------|
|                 | 2016-17                     | 2015-16 | 2014-15 | 2013-14 |
| Mechanical      | 06                          | 01      | 01      | 03      |
| Instrumentation | 05                          | 07      | 04      | 08      |
| E &TC           | 04                          | 02      | 02      | 08      |
| Computer        | 04                          | 00      | 00      | 00      |
| IT              | 02                          | 01      | 00      | 00      |
| Civil           | 05                          | 07      | 04      | 04      |
| MBA             | 06                          | 07      | 12      | 00      |
| MCA             | 04                          | 03      | 02      | 01      |

• The below table shows various motivating/guiding activities organized for students:

Table 7.3.2(B): Motivating/guiding activities organized by institute:

| Sr.<br>No. | Title of Programme   | Date of Event | No. of beneficiaries |
|------------|--|---------------|----------------------|
| 1          | Higher Education in foreign universities                               | 24/01/2014    | 60                   |
| 2          | Higher Education in foreign universities                               | 16/01/2015    | 60                   |
| 3          | Higher Education in Germany  | 31/07/2015    | 100                  |
| 4          | Higher Education in Germany  | 01/08/2014    | 114                  |
| 5          | Traffic Awareness Training Program at Children Traffic Education Park, | 17/09/2016    | 78                   |
| 6          | Soft Skill Program.  | 08/07/2016    | 157                  |
| 7          | Soft Skill Program.  | 01/07/2016    | 134                  |
| 8          | Soft Skill Program.  | 08/01/2016    | 138                  |
| 9          | Gender Equality.   | 06/08/2015    | 42                   |
| 10         | Workshop on" Personality Development"                                  | 16/02/2015    | 59                   |
| 11         | Workshop on "Personality Development"                                  | 05/09/2014    | 30                   |
| 12         | Workshop on "Personal Power"   | 22/02/2014    | 74                   |
| 13         | Campus to Corporate  | 14/09/2013    | 129                  |
| 14         | How to face GATE   | 27/07/2013    | 66                   |
| 15         | How to crack GATE & CAT  | 25/7/2013     | 67                   |

|    | T   |                             |     |
|----|---|-----------------------------|-----|
| 16 | Personality Development   | 6/7/2013                    | 80  |
| 17 | Soft Skill Development By Nandita Ray   | 10/09/2013                  | 60  |
| 18 | Soft Skill Development By Neeta Nigam   | 01/09/2014                  | 60  |
| 19 | Soft Skill Development By Gordon Sir  | 05/03/2015                  | 60  |
| 20 | Soft Skill Development By Gordon Sir  | 22/08/2016                  | 56  |
| 21 | New Technological Developments & Career<br>Opportunities in Japan                                 | 5/01/2016                   | 30  |
| 22 | Scope of Engineer in Astronomy  | 31/12/2013                  | 40  |
| 23 | Automation A Booming Field  | 7/3/2014                    | 40  |
| 24 | Outbound Training Programme on Personality<br>Development By-Arya Hycinth -Pune                   | 27/09/2016                  | 40  |
| 25 | Outbound Training Programme on Personality<br>Development By-Arya Hycinth -Pune                   | 8/10/2015                   | 40  |
| 26 | Outbound Training Programme on Personality<br>Development By-Arya Hycinth -At Pachgani            | 25/02/2015 to<br>27/02/2015 | 45  |
| 27 | Outbound Training Programme on Personality<br>Development By-Arya Hycinth -Pune                   | 27/09/2016                  | 42  |
| 28 | Entrepreneurship Development By Er. Avinash Shisode   | 16/09/2016                  | 200 |
| 29 | View towards the life By Dr. Sunil Kute   | 12/01/2016                  | 200 |
| 30 | Entrepreneurship Awareness Camp   | 24/10/2016 to               | 15  |
|    |   | 26/10/2016                  |     |
| 31 | Traffic Awareness Training Program at Children<br>Traffic Education Park                          | 17/09/2016                  | 78  |
| 32 | Dharampur Science Center, Garden Road,<br>Dharampur, Gujrat.                                      | 29/07/2016                  | 70  |
| 33 | Entrepreneurship Training Program   | 14/07/2016                  | 15  |
|    |   | То                          |     |
|    |   | 16/07/2016                  |     |
| 34 | AICTE–BSNL Employability Enhancement<br>Program   | 11/08/2014                  | 30  |
| 35 | Emotional Freedom Technique EFT   | 31/01/2014                  | 118 |
| 36 | Atticates & Manners   | 5/9/2013                    | 130 |
| 37 | Inbound Training Program by Arya Hycinth  | 10/09/2014                  | 60  |
| 38 | Three-Days Outbound Training Program by<br>Arya Hycinth   | 25/02/2015 to<br>27/02/2015 | 20  |
| 39 | Interactive soft skill workshop for faculty under "SANKALP" By Dr. Vinod Parekh                   | 16/09/2016                  | 12  |
| 40 | Youth Development Program (YDP) (Mock Interview) for students under "SANKALP" By Dr. Vinod Parekh | 27/09/2016                  | 88  |

| 41 | UPSC and MPSC Exam Preparation By Mr<br>Ravindra Khatale   | 29/07/2016                  | 111 |
|----|--|-----------------------------|-----|
| 42 | Education In Germany By Mr Ramlingam   | 01/08/2016                  | 114 |
| 43 | Higher Education Study Guidance (GRE & TOFEL) By Mohit Baste   | 01/09/2016 to<br>02/09/2016 | 194 |
| 44 | How to prepare for Interview, Youth<br>Development Program (YDP) for students under<br>"SANKALP" By Dr. Vinod Parekh | 29/09/2016                  | 91  |
| 45 | Aptitude test for SAP Training program   | 28/01/2016                  | 130 |
| 46 | Skill Development Training program By<br>Barkley's NSDC  | 30/01/2016                  | 189 |
| 47 | Youth Development Program (YDP) (Aptitude Test) for students under "SANKALP" By Dr. Vinod Parekh                     | 06/10/2016 to<br>08/10/2016 | 15  |
| 48 | Youth Development Program (YDP) (Aptitude Test) for students under "SANKALP" By Dr. Vinod Parekh                     | 13/10/2016 to<br>15/10/2016 | 15  |

• To guide and develop students in all aspects institute faculties are actively participated in various enrichment programs.

Table 7.3.2(C): Various skill enrichment programs:

| Academic Year. | Trainings/STTP/FDP | Workshops/Seminar/<br>conferences |
|----------------|--------------------|-----------------------------------|
| 2016-17        | 12                 | 13                                |
| 2015-16        | 40                 | 41                                |
| 2014-15        | 24                 | 44                                |
| 2013-14        | 22                 | 85                                |

• The following research and design innovation centers are established in institute for skills development:

Table 7.3.2(D): Research and Design Innovation Centres

| Sr. No. | Name of the innovation centre and training        | Place               |
|---------|---|---------------------|
|         | program   |                     |
| 1       | Design and development of signal conditioning and | Instrumentation and |
|         | sensor technologies                               | Control Engineering |
| 2       | Advanced techniques for environment watershed     | Civil Engineering   |
|         | management  |                     |
| 3       | Post graduate diploma in computer-aided product   | Mechanical          |
|         | design  | Engineering         |
| 4       | Remote Centre and Aakash Centre, IIT, Bombay and  | Institute Level     |
|         | IIT Kharagpur, National Mission on Education      |                     |
|         | through ICT. (MHRD, Govt. of India)               |                     |

• The approximate number of student per mentor faculty is given below:

Table 7.3.2(E): Number of student per mentor

| Academic Year   | No of students per mentor |         |         |         |  |  |
|-----------------|---------------------------|---------|---------|---------|--|--|
|                 | 2016-17                   | 2015-16 | 2014-15 | 2013-14 |  |  |
| Mechanical      | 24                        | 24      | 24      | 24      |  |  |
| Instrumentation | 13                        | 13      | 13      | 13      |  |  |
| Civil           | 26                        | 26      | 26      | 26      |  |  |
| Computer        | 25                        | 25      | 25      | 25      |  |  |
| IT              | 17                        | 17      | 17      | 17      |  |  |
| E&TC            | 19                        | 19      | 19      | 19      |  |  |
| MBA             | 19                        | 18      | 19      | 18      |  |  |
| MCA             | 17                        | 12      | 17      | 17      |  |  |

• Details of career guidance visits for science students at variousr Institutes:

Table 7.3.2(F): Career Guidance

| Sr. | Date       | Name of the college visited | Name of Counsellor   | No of    |
|-----|------------|-----------------------------|----------------------|----------|
| No. |            |                             |                      | students |
| 1   | 04/08/2015 | Arts, Science & Commerce    | Prof. Y.P.Patil &    | 60       |
|     |            | College, Nandgaon           | Prof. S.B.Lukare     |          |
| 2   | 06/08/2015 | Karm. KKW                   | Prof. V.A.Ahirrao    | 50       |
|     |            | College,Pimpalgaon          |                      |          |
| 3   | 06/08/2015 | Karm. Wavare College,       | Prof. S.H.Jadhav     | 60       |
|     |            | Cidco, Nashik               |                      |          |
| 4   | 06/08/2015 | Arts, Science & Commerce    | Prof. D.B.Ghodke     | 55       |
|     |            | College, Dindori            |                      |          |
| 5   | 06/08/2015 | Arts, Science & Commerce    | Prof. D.B. Ghodke    | 50       |
|     |            | College, Vani               |                      |          |
| 6   | 06/08/2015 | Arts, Science and Commerce  | Prof. V.A.Ahirrao    | 60       |
|     |            | College, Satana             |                      |          |
| 7   | 06/08/2015 | Arts, Science and Commerce  | Prof. S.H.Jadhav &   | 60       |
|     |            | College, Igatpuri           | Prof. B. N. Shinde.  |          |
| 8   | 7/8/2015   | Arts, Science and Commerce  | Prof. Y.P.Patil &    | 60       |
|     |            | College, Niphad             | Prof. A.R. Choudhri  |          |
| 9   | 7/8/2015   | KTHM College, Nashik        | Prof. S.H.Jadhav     | 52       |
| 10  | 7/8/2015   | Arts, Science and Commerce  | Prof. A.K.Patil      | 60       |
|     |            | College, Devlali Camp       |                      |          |
| 11  | 7/8/2015   | Arts, Science and Commerce  | Dr. B.B.Musmade      | 60       |
|     |            | College, Sinnar             | and Prof. V. M.      |          |
|     |            |                             | Birari               |          |
| 12  | 7/8/2015   | Arts, Science and Commerce  | Prof. Y.P.Patil      | 50       |
|     |            | College, Saikheda           |                      |          |
| 13  | 7/8/2015   | Arts, Science and Commerce  | Prof. S.R.Pandit and | 55       |
|     |            | College, Tribakeshwar       | Prof. V. P. Gawai    |          |
| 14  | 8/8/2015   | CMCS College, Nashik        | Dr. B.B. Musmade     | 57       |

#### 5. Evidence of Success

• It has been proven to increase academic success rates among students.

Table 7.3.2(G): Final Year Result in Percentage

| Sr.No. | Branch   | Final Year Result in Percentage |             |             |             |
|--------|--|---------------------------------|-------------|-------------|-------------|
|        |  | 2016-<br>17                     | 2015-<br>16 | 2014-<br>15 | 2013-<br>14 |
| 1      | Civil Engineering                                | NA                              | 91.20       | 97.18       | 98.38       |
| 2      | Computer Engineering                             | NA                              | 92.30       | 98.67       | 92.42       |
| 3      | Information technology                           | NA                              | 94.59       | 98.63       | 98.41       |
| 4      | Electronics and telecommunication<br>Engineering | NA                              | 94.66       | 97.36       | 85.71       |
| 5      | Instrumentation and control Engineering          | NA                              | 71.42       | 93.03       | 89.83       |
| 6      | Mechanical Engineering                           | NA                              | 68.84       | 95.12       | 88.20       |
| 7      | Master in business administration                | NA                              | 94.44       | 91.23       | 85.71       |
| 8      | Master in Computer Application                   | NA                              | 98.59       | 96.05       | 92.59       |

• The outcome of counselling is reflected in admission process as given below:

Table 7.3.2(H): Admission Details

| A.Y.    | Number of<br>Sanctioned Seats | Number of<br>Admissions | Percentage<br>Admissions |
|---------|-------------------------------|-------------------------|--------------------------|
| 2016-17 | 568                           | 447                     | 78.69                    |
| 2015-16 | 568                           | 528                     | 92.95                    |
| 2014-15 | 568                           | 499                     | 87.85                    |
| 2013-14 | 568                           | 510                     | 89.78                    |

• The faculty counselling effort results into good entry-level marks/score is reflected below:

Table 7.3.2(I): Entry-level marks/score

| Discipline      | Entry level marks/score of admitted students |         |         |         |  |  |
|-----------------|--|---------|---------|---------|--|--|
|                 | 2016-17                                      | 2015-16 | 2014-15 | 2013-14 |  |  |
| Mechanical      | 105  | 92.59   | 91.5    | 122     |  |  |
| Civil           | 99   | 82.27   | 82.71   | 122     |  |  |
| Computer        | 106  | 82.75   | 90.14   | 114     |  |  |
| IT              | 97   | 73.76   | 64.04   | 85      |  |  |
| E & TC          | 94   | 79.02   | 77.75   | 114     |  |  |
| Instrumentation | 82   | 76      | 70      | 64      |  |  |
| MBA             | 92.07  | 76.01   | 81.6    | 178     |  |  |
| MCA             | NA   | 82      |         |         |  |  |

• Students are encouraged to prepare for various competitive exam by faculty mentors:

Table 7.3.2(J): Various competitive exam performance

| Sr. No | Year      | GATE | CAT/ | GMAT / | MPSC | ZP/ BMC | Total |
|--------|-----------|------|------|--------|------|---------|-------|
|        |           |      | GRE  | TOFEL  |      |         |       |
| 1      | 2016-2017 | NA   | NA   | NA     | NA   | NA      | NA    |
| 2      | 2015-2016 | 06   | 02   | 05     | NIL  | NIL     | 13    |
| 3      | 2014-2015 | 05   | 07   | 06     | 04   | 02      | 24    |
| 4      | 2013-2014 | 10   | 03   | 04     | 02   | NIL     | 19    |

• The percentage of students progressing to higher education

Table . 7.3.2(K): Students progressing to higher education

| Student     | Branch                            | Student progression (%) |         |         |         |  |
|-------------|-----------------------------------|-------------------------|---------|---------|---------|--|
| Progression |                                   | 2016-17                 | 2015-16 | 2014-15 | 2013-14 |  |
| UG to PG    | Mechanical                        | NA                      | 1.58    | 13.70   | 9.77    |  |
|             | Civil                             | NA                      | 25      | 31.66   | 16.67   |  |
|             | Computer                          | NA                      | 1.81    | 9.41    | 10      |  |
|             | Information<br>Technology         | NA                      | Nil     | 13.69   | 9.52    |  |
|             | Electronics and Telecommunication | NA                      | 5.32    | 10.63   | 8.69    |  |
|             | Instrumentation and Control       | NA                      | 00      | 13.20   | 1.72    |  |

• To develop overall personality students are guided for involvements in sports activities outside institute:

Table 7.3.2(L): Sports participation by students

| Name of Sport                       | 2016-17 | 2015-16 | 2014-15 | 2013-14 |
|-------------------------------------|---------|---------|---------|---------|
| Table Tennis (Men)                  | 05      | 05      | 05      |         |
| Table Tennis (Women)                | 03      |         |         |         |
| Lawn Tennis (Women)                 | 01      |         |         |         |
| Archery (Women)                     | 01      | 01      |         |         |
| Coning (Women)                      | 01      |         |         |         |
| Swimming, Diving & Water Polo (Men) | 08      | 10      | 11      | 02      |
| Swimming (Women)                    |         | 01      |         |         |
| Badminton (Men)                     | 05      | 05      | 05      | 04      |

| Badminton (Women)      |    | 05 |    |    |
|------------------------|----|----|----|----|
| Chess (Men& Women)     | 05 |    |    | 03 |
| Volleyball (Men)       |    | 10 |    | 09 |
| Football (Men)         |    | 15 | 15 | 15 |
| Kabaddi (Men& Women)   | 12 | 11 | 11 |    |
| Kho-Kho (Women)        | 03 |    |    |    |
| Boxing (Men)           | 04 | 02 |    |    |
| Cricket (Men)          | 16 | 16 | 03 |    |
| Baseball (Men)         | 14 |    |    |    |
| Kho-Kho (Men)          | 01 |    |    |    |
| Judo (Men)             | 01 |    |    |    |
| Yoga Sana (Women)      | 03 |    |    |    |
| Athletics (Men& Women) | 01 | 04 |    | 05 |
| Squash Racket(Men)     |    |    | 01 |    |
| Cycling (Men & Women)  |    |    | 02 |    |
| Cross Country (men)    |    |    | 03 |    |
| Basketball (Men)       |    |    |    | 08 |

• Industrial and institutional trainings attended by the faculties is listed below:

Table 7.3.2(M): Industrial/institutional trainings

| Academic | Number of Training Programs | Workshops/Seminar/ |
|----------|-----------------------------|--------------------|
| Year     | Attended by Faculties       | Conferences        |
| 2016-17  | 02                          | 71                 |
| 2015-16  | 14                          | 60                 |
| 2014-15  | 10                          | 52                 |
| 2013-14  | 10                          | 27                 |

• Students involvement in social activities which promotes citizenship role:

Table 7.3.2(N): Involvement in social activities

| Sr.<br>No. | Name of social activity          | Date       | No. of<br>Students |
|------------|----------------------------------|------------|--------------------|
| 1          | Tree plantation on MVP Samaj Din | 19/08/2013 | 20                 |
| 2          | Tree plantation on MVP Samaj Din | 19/08/2014 | 20                 |
| 3          | Tree plantation on MVP Samaj Din | 19/08/2015 | 20                 |
| 4          | Tree plantation on MVP Samaj Din | 19/08/2016 | 20                 |
| 5          | Blood Donation Camp              | 04/03/2014 | 121                |

| 6  | Blood Donation Camp   | 25/09/2014               | 103 |
|----|---|--------------------------|-----|
| 7  | Blood Donation Camp   | 29/09/2015               | 85  |
| 8  | Blood Donation Camp   | 2016-17                  | 102 |
| 9  | Road safety Abhiyan in association with RTO, Nashik                               | 20/01/2015               | 45  |
| 10 | Road safety Abhiyan in association with RTO, Nashik                               | 06/10/2015               | 45  |
| 11 | Annual YIN (Young Insperation Network) camp for holistic development              | 31/05/2015               | 01  |
| 12 | Dr. Babasaheb Ambedkar District level intercollegiate Mock Parliament competition | 25/01/2016               | 01  |
| 13 | Intercollegiate Clean Nashik Competition in Association with JCI                  | 2013-14                  | 60  |
| 14 | Mission Clean Godavari  | 2014-15                  | 60  |
| 15 | Project Divyang   | 2014-15                  | 60  |
| 16 | Project Bandhan   | 2015-16                  | 60  |
| 17 | Village Adoption Program (Rajewadi)   | 2015-16                  | 60  |
| 18 | NSS Camp (2013-14)  | 23/12/13 to<br>30/12/13  | 75  |
| 19 | NSS Camp (2014-15)  | 15/12/14 to<br>21/12/14  | 75  |
| 20 | NSS Camp (2015-16)  | 21/12/15 to<br>27 /12/15 | 75  |
| 21 | NSS Camp (2016-17)  | 19/12/16 to<br>25/12/16  | 75  |

### 6. Problems Encountered and Resources Required

- Mental-health and career counselling are the most common development areas need to be address.
- Career related counselling faces problems by constantly changing students need due to the fluctuating economy, innovations in technology, communications and new hiring trends.
- The work of mentor is not only confined to one particular set of questions or goals.
- The selection of academic program and courses is based on merit basis.
- The development of life and career goals of each student.
- Challenges related with struggle with anxiety, depression and other life and relationship stresses.

#### 7. Contact Details

| Name of the | Dr. Kailas S. Holkar                                       |
|-------------|--|
| Principal:  |  |
| Name of the | N.D.M.V.P.S's Karmaveer Advocate Baburao Ganpatrao Thakare |

| Institution:       | College of Engineering. |        |                      |
|--------------------|-------------------------|--------|----------------------|
| City:              | Nashik                  |        |                      |
| Pin Code:          | 422 013                 |        |                      |
| Accredited Status: | Not Accredited          |        |                      |
| Work Phone:        | 0253-2571439/2582891    |        |                      |
| Website:           | www.kbtcoe.org          | Fax:   | 0253-2317016         |
| Mobile:            | 9822379056              | Email: | principal@kbtcoe.org |

#### 7.3.3 Best Practice:3

#### 1. Title of the Practice

"Research based Practices"

#### 2. Goal

- To identify the state-of-art research areas
- To motivate the faculty and student to conduct research activities.
- To organize conference, workshop, seminar and departmental technical events to create awareness among faculty and students about emerging trend in engineering and technology.
- To frame institute policies for improvement of research based practices.
- To create the awareness about various funding scheme and to motivate the faculty to write good research proposals.
- To organize the visits to research centres and industries.
- To motivate the staff to pursue higher studies specially Ph.D.
- To create the awareness about patent/innovating intellectual rights.
- To encourage for the consultancy services in related areas.
- To motivate the faculty to present/publish the research paper at reputed conference/journals.
- To develop research culture in institute and lifelong learning skills among students.
- To established innovation centre, research centre in the institute.

### 3. The Context

- Creating engineering manpower of global standards will require involving participation of faculty and students in the planning, decision making and implementation process.
- Encouraging faculty to do research will improve the reasoning skill of students in classrooms and awareness among the students about recent technological development in society, which in turn will make the students one of the best entrepreneurs.
- By cultivating research culture among faculty and students, teaching-learning process can be implemented innovatively.
- There is better conceptual understanding of the subject among the students.

• The research and industry based practices helps to develop practical exposure to the students.

#### 4. The Practice

- It is necessary to inculcate research culture among faculty and student so as to develop a high quality engineers of global standards, however still below mentioned practices are followed by institute:
- Eminent speakers from related area guide the faculty and students for developing good research culture and activities.
- Institute sponsors and deputes the faculty for attending FDP, STTP, QIP workshops, symposium, national/international conference etc.
- Institute organizes industry and research centres visits and motivated for sponsored or industry based projects.
- Institute organises various activities to enhance the soft skills of the faculty and student.
- The experts from research organization like IIT, NIT, Universities, Industry Research centres, industries and Autonomous institutes have visited the institute and interacted with the faculty and students and made them aware about the various possibilities available to do good research work.
- Eminent professors from IITs, NITs, COEP, VIT, SPPU, SRTMU and other universities have visited and contributed to organize conferences, seminar & workshop at our institute.
- Institute organizes departmental symposium and providing platform for students to enrich their talents through various activities such as paper presentation, project, mathematical quiz, poster competition, gamming and robotics competitions etc.
- Institute also organizes entrepreneurship development programs and awareness towards patent.
- Institute faculties are motivated and doing Ph.D. at various universities so developing research culture, this improves contribution in research by publications.
- Institute developed PG research lab with equipment and softwares according to the requirement of research work and student can use various equipments available in laboratories.
- Students are also motivated to participate in university, zonal and state level technical competition like "Avishkar" every year.
- Departmental symposium organised for students every year, the details are given below:

Table 7.3.3(A): Departmental symposium

| Sr. No. | Department             | Event             | No of<br>Participants<br>(2015-16) |
|---------|------------------------|-------------------|------------------------------------|
| 1       | Mechanical Engineering | MECHANZAA         | 322                                |
| 2       | Mechanical Engineering | SAE SUPRA         | 23                                 |
| 3       | Civil Engineering      | NIRMAN            | 190                                |
| 4       | Computer Engineering   | C-WAR AND KSHITIJ | 193                                |
|         | and Information        |                   |                                    |
|         | Technology Engineering |                   |                                    |

| 5 | Electronics and     | ELICIT       | 380 |
|---|---------------------|--------------|-----|
|   | Telecommunication   |              |     |
|   | Engineering         |              |     |
| 6 | Instrumentation and | INSTRUBOTICS | 64  |
|   | Control Engineering |              |     |
| 7 | Master of Business  | IDEA SPARK   | 50  |
|   | Administration      |              |     |

## • Number of Faculty received grants/funds:

Table 7.3.3(B): Funded Projects

| Nature of the Project      | Year    | Name of PI                            | Name of the funding agency                     |
|----------------------------|---------|---------------------------------------|--|
| Minor projects             | 2011-13 | Dr. B.B. Musmade                      | BCUD, SPPU, Pune                               |
| Minor projects             | 2012-14 | Dr.P.G. Gaikwad                       | BCUD, SPPU, Pune                               |
| Minor projects             | 2012-14 | Mr.Y.B. Chaudhary                     | BCUD, SPPU, Pune                               |
| Minor projects             | 2014-16 | Mr.S.Y.Pawar                          | BCUD,SPPU, Pune                                |
| Minor projects             | 2014-16 | Dr. A. B Saner                        | BCUD, SPPU, Pune                               |
| Minor projects             | 2016-18 | Mr. V. C. Shewale                     | BCUD, SPPU, Pune                               |
| Minor projects             | 2016-18 | Mrs.S.H. Jadhav                       | BCUD, SPPU, Pune                               |
| Minor projects             | 2016-18 | Mrs.R.N.Mahale                        | BCUD, SPPU, Pune                               |
| Minor projects             | 2016-18 | Dr.S.R.Pachorkar                      | BCUD,SPPU, Pune                                |
| Minor projects             | 2016-18 | Dr.S.J. Kokate                        | BCUD, SPPU, Pune                               |
| Major projects             | 2016-19 | Dr.S.B. Sonawane                      | SERB, DST, Govt. of<br>India                   |
| Interdisciplinary          | 2016-19 | Dr. N. S. Patil (Asst.                | SPPU, Pune & MHRD                              |
| projects                   |         | Coordinator-DIC)                      | New Delhi                                      |
| Industry sponsored project | 2016-17 | Mr. Y. P. Patil                       | Excel Industries<br>Ltd.,Navi Mumbai           |
| Students research project  | 2014-15 | Prasad Chavan<br>(Mechanical Student) | NDMVPS's KBT<br>College Engineering,<br>Nashik |
| Students research project  | 2015-16 | Sachin Kulkarni                       | NDMVPS's KBT<br>College Engineering,<br>Nashik |
| Remote Centre              | 2013-14 | Mrs. S.H.Jadhav                       | IIT Bombay, IIT<br>Kharagpur                   |
| Remote Centre              | 2014-15 | Mrs. S.H.Jadhav                       | IIT Bombay, IIT<br>Kharagpur                   |
| Aakash Centre              | 2014-15 | Mrs. S.H.Jadhav                       | IIT Bombay                                     |

| Remote Centre | 2015-16 | Mrs. S.H.Jadhav | IIT Bombay, IIT |
|---------------|---------|-----------------|-----------------|
|               |         |                 | Kharagpur       |

• To develop research based practices, eminent personalities must be visited or called as a resource person to institute time-to-time for guidance, motivation and counselling. The number of scientists/ researchers visited to institute are listed below:

Table 7.3.3(C): Scientists/ researchers visited to institute

| Academic Year | Number of researchers/scientist visited |
|---------------|---|
| 2016-17       | 04                                      |
| 2015-16       | 13                                      |
| 2014-15       | 05                                      |
| 2013-14       | 04                                      |

• Few names of scientist/researchers visited to institute is listed below:

Table 7.3.3(D): Names of scientist/researchers visited to institute

| Sr.<br>No. | Date       | Name of scientist /research person visited to institute                               | Department      |
|------------|------------|---|-----------------|
| 1          | 26/6/2016  | Padma Shri Dr. Deepak Phatak,<br>Scientist, Dept. of Computer<br>Science, IIT, Bombay | Instrumentation |
| 2          | 10/12/2014 | Dr. PSV Natraj, Professor, IIT<br>Bombay  | Instrumentation |
| 3          | 2015-16    | Dr. S.N. Sharma, SVNIT, Surat   | Instrumentation |
| 4          | 2015-16    | Dr. Vivekanand Mishra, SVNIT,<br>Surat  | Instrumentation |
| 5          | 5/1/2016   | Dr. Pankaj M. Koinkar, Scientist,<br>Tokushima University, Japan                      | Instrumentation |
| 6          | 27/1/2016  | Dr. Venkatesh Raghvan, President,<br>EPCOS, Ltd., Nashik                              | Instrumentation |
| 7          | 27/1/2016  | Dr. M. D. Patil, RAIT, Nerul,<br>Mumbai   | Instrumentation |
| 8          | 27/1/2016  | Dr. Vishwesh Vyawhare, IIT<br>Bombay  | Instrumentation |
| 9          | 28/1/2016  | Dr. K. S. Holkar, KKW IEER,<br>Nashik   | Instrumentation |
| 10         | 5/2/2016   | Dr. Umesh Gupta, IIT Bombay   | Instrumentation |
| 11         | 14/9/2016  | Dr. Omprakash G. Kulkarni   | Instrumentation |

| 12 | 26/10/2016               | Dr. Vikas Shinde, Manager R&D,<br>Excel Industries Ltd, Mumbai | Instrumentation |
|----|--------------------------|--|-----------------|
| 13 | 2014-15                  | Dr. Deepak Khare IIT Roorki.                                   | Civil           |
| 14 | 2014-15                  | Dr. H. S. Patil SVNIT Surat.                                   | Civil           |
| 15 | 2015-16                  | Dr. V.L Manekar, SVNIT, Surat                                  | Civil           |
| 16 | 8/10/2013 &<br>9/10/2013 | Dr. S. B. Nimse, VC, SRTM<br>University, Nanded                | MBA             |
| 17 | 29/01/2015               | Daniel Goodman & Mohammad,<br>Scientist, MIT, USA              | MBA             |
| 18 | 3/10/2013                | Mr.N.L.Soni.Senior Scientist,<br>BARC,Mumbai                   | Mechanical      |
| 19 | 4/10/2013                | Dr.D.V.Bhat, Professor, SVNIT,<br>Surat.                       | Mechanical      |
| 20 | 4/10/2013                | Dr.V.M.Phalle,Head VJTI,Mumbai                                 | Mechanical      |
| 21 | 4/02/2016                | Dr. K.N. Iyer, IIT Bombay                                      | Mechanical      |
| 22 | 4/02/2016                | Dr. R.P.Vedula, IIT Bombay                                     | Mechanical      |
| 23 | 4/02/2016                | Dr. Sridhara Sheshadri, IIT<br>Bombay                          | Mechanical      |
| 24 | 5/02/2016                | Dr.Avsar Lakdawala,Nirma<br>University,Ahmedabad.              | Mechanical      |
| 25 | 5/02/2016                | Dr. Pankaj Jagad, Nirma<br>University, Ahemedabad.             | Mechanical      |
| 26 | 5/02/2016                | Dr.Atul Srivastava IIT Mumbai                                  | Mechanical      |
| 27 | 14,15/02/2014            | Dr. M.B. Kokare, SGGS IET,<br>Nanded.                          | Computer        |
| 28 | 24/07/2014               | Dr. M.U. Kharat, MET's IOE,<br>Nashik                          | Computer        |
| 29 | 27/08/2015               | Dr. D.V.Patil, GESCOE, Nashik                                  | Computer        |
| 30 | 09/09/2016               | Dr. M.R.Sanghavi, SNJB's COE,<br>Chandwad                      | Computer        |

### 5. Evidence of Success

- Many faculty members have applied for research grants and many have been provided research grants from various funding agencies.
- Maximum faculty members have registered for Ph.D. and few more are in the process of registration.
- Details of on-going and completed projects and grants received during the last four years is given below

Table 7.3.3(E): On-going and completed projects and grants received

| A.Y.    | No. of faculty received | Funding Agencies     | <b>Project Type</b> | Total funding in lakhs |
|---------|-------------------------|----------------------|---------------------|------------------------|
|         | grants                  |                      |                     |                        |
| 2016-17 | 08                      | BCUD, SPPU, Pune,    | Minor projects,     | 160.19                 |
|         |                         | SERB, DST, Govt. of  | Major projects,     |                        |
|         |                         | India ,MHRD, New     | and Design          |                        |
|         |                         | Delhi, Excel         | Innovation          |                        |
|         |                         | Industries Ltd.,Navi | Centre              |                        |
|         |                         | Mumbai               |                     |                        |
| 2015-16 | 01                      | IIT, Bombay          | Remote Centre       | 2.8                    |
| 2014-15 | 03                      | BCUD, Pune and IIT,  | Minor projects      | 11.28                  |
|         |                         | Bombay               | and Remote          |                        |
|         |                         |                      | Centre              |                        |
| 2013-14 | 01                      | IIT, Bombay          | Remote Centre       | 1.17                   |
| 2012-13 | 02                      | BCUD, SPPU, Pune     | Minor projects      | 3.35                   |
| 2011-12 | 01                      | BCUD, SPPU, Pune     | Minor projects      | 0.44                   |

• Number of faculty members motivated by the institution for research and higher studies is given below.

Table 7.3.3(F): Faculty Higher Education Figures

| Qualification   | No. of staff |
|-----------------|--------------|
| PhD (Completed) | 13           |
| PhD (Pursuing)  | 35           |
| PG (Completed)  | 74           |

• Patent details are given below:

Table 7.3.3(G): Patents details

| Department                | Faculty                | Title  | Status   |
|---------------------------|------------------------|--|----------|
| Mechanical<br>Engineering | Dr.S.B.<br>Sonawane    | Nano Coolant for heavy Gearbox cooling   | Applied  |
| Mechanical<br>Engineering | Mr.A.A<br>Kapse        | Obtaining purified drinking water from boiler blow down in thermal & nuclear power plant | Applied  |
| Mechanical<br>Engineering | Miss. Sayali<br>Kerure | A system for Four wheeler Vehicle Tire maintenance                                       | Received |

• Faculty publications count is given below:

Table 7.3.3(H): Faculty research publication details

| Sr. No. | Journal publications | Conference publications |
|---------|----------------------|-------------------------|
| 1       | 107                  | 142                     |

• Number of co-curricular activities organised by institute:

Table 7.3.3(I): Co-curricular activities organised by institute

| A.Y.    | Workshops | FDP/STTP | Trainings | Seminar |
|---------|-----------|----------|-----------|---------|
| 2016-17 | 02        |          | 01        | 01      |
| 2015-16 | 05        | 01       | 02        | 04      |
| 2014-15 | 05        | 01       | 01        | 01      |
| 2013-14 | 10        |          |           | 02      |

• Number of co-curricular activities attended by faculty:

Table 7.3.3(J): Figures of co-curricular activities organised by institute

| A.Y.    | Workshops | Trainings/STTP/FDP | HRD | Orientation |
|---------|-----------|--------------------|-----|-------------|
| 2016-17 | 05        | 04                 |     | 03          |
| 2015-16 | 23        | 17                 | 08  | 09          |
| 2014-15 | 23        | 06                 | 01  | 12          |
| 2013-14 | 36        | 05                 | 02  | 10          |

• Student's participation in project exhibitions/innovations and contests is good platform for creating research mind-set among students and get motivated for further involvements in such activities. The participation of institute students is shown below:

Table 7.3.3(K): Figures of student's participation in project competitions

| Discipline      | Students Participation |         |         |         |  |
|-----------------|------------------------|---------|---------|---------|--|
|                 | 2016-17                | 2015-16 | 2014-15 | 2013-14 |  |
| Mechanical      | 27                     | 29      | 08      | 00      |  |
| Civil           | 06                     | 02      | 04      | 04      |  |
| Instrumentation | 04                     | 02      | 04      | 06      |  |
| E & TC          | 04                     | 04      | 04      | 04      |  |
| IT              | 00                     | 15      | 00      | 00      |  |
| Computer        | 04                     | 57      | 69      | 00      |  |
| MBA             | 13                     | 00      | 23      | 00      |  |
| MCA             | 00                     | 00      | 00      | 00      |  |

### 6. Problems Encountered and Resources Required

- Accreditation is must for most of the proposals.
- No research Centre.
- More awareness is needed to create among faculties and students about various funding agencies, writing good research proposal and Ph.D. research centre.

## 7. Contact Details

| Name of the Principal:   | Dr. Kailas S. Holkar                       |                |                       |  |  |  |
|--------------------------|--|----------------|-----------------------|--|--|--|
| Name of the Institution: | N.D.M.V.P.S's Karm<br>Thakare College of E |                | nte Baburao Ganpatrao |  |  |  |
| City:                    | Nashik                                     |                |                       |  |  |  |
| Pin Code:                | 422 013                                    |                |                       |  |  |  |
| Accredited               | Not Accredited                             | Not Accredited |                       |  |  |  |
| Status:                  |  |                |                       |  |  |  |
| Work Phone:              | 0253-2571439/25828                         | 891            |                       |  |  |  |
| Website:                 | www.kbtcoe.org                             | Fax:           | 0253-2317016          |  |  |  |
| Mobile:                  | 9822379056                                 | Email:         | principal@kbtcoe.org  |  |  |  |

#### **MECHANICAL ENGINEERING**

| 1. | Name of the Department   | Mechanical Engineering                              |
|----|--|---|
| 2. | Year of Establishment  | 1999  |
| 3. | Name of Programmes / Courses<br>Offered (UG, PG, M.Phil., Ph.D.,<br>Integrated Masters; Integrated Ph.D.,<br>etc.) | BE (Mechanical Engineering) ME( Design Engineering) |

- 4. Names of Interdisciplinary courses and the departments/units involved: Yes.
- 5. Annual/ semester/choice based credit system (programme wise)-

UG: FE and SE-Semester credit system & TE/BE- Semester System

PG: Semester credit system

- **6.** Participation of the department in the courses offered by other departments: Yes.
- 7. Courses in collaboration with other universities, industries, foreign institutions etc.- Nil
- 8. Details of courses/programmes discontinued (if any) with reasons: Nil

### 9. Number of teaching posts

| Post                 | Sanctioned | Filled |  |
|----------------------|------------|--------|--|
| Professors           | 4          | 00     |  |
| Associate Professors | 9          | 07     |  |
| Asst. Professors     | 23         | 22     |  |

## 10. Faculty profile with name, qualification, designation, specialization, (D.Sc./D.Litt./Ph.D./M. Phil. etc.,)

| Name of<br>Staff      | Qualification                                   | Designation            | Specialization            | No. of<br>Years of<br>Experience | No. of<br>Ph.D<br>Students<br>Guided<br>For The<br>Last<br>4 Years |
|-----------------------|---|------------------------|---------------------------|----------------------------------|--|
| Dr. S. P.<br>Mogal    | M.Tech.<br>(Design),<br>Ph.D                    | Associate<br>Professor | Mechanical<br>Engineering | 12.5                             | Nil  |
| Prof. A. B.<br>Kakade | M.E.<br>(Design),<br>Ph.D (Thesis<br>Submitted) | Associate<br>Professor | Mechanical<br>Engineering | 17                               | Nil  |

| Prof. Y. B.<br>Choudhari | M.Tech.<br>(Design)<br>Ph.D                         | Associate<br>Professor | Mechanical<br>Engineering | 19   | Nil |
|--------------------------|---|------------------------|---------------------------|------|-----|
| Prof. N. K.<br>Kharate   | Pursuing  M.Tech. (CAD/CAM) , Ph.D Pursuing         | Associate<br>Professor | Mechanical<br>Engineering | 14   | Nil |
| Prof. A. A.<br>Kapse     | M.Tech.<br>(Thermal),<br>Ph.D (Thesis<br>Submitted) | Associate<br>Professor | Mechanical<br>Engineering | 12.5 | Nil |
| Prof. V. C.<br>Shewale   | M.Tech.<br>(Thermal),<br>Ph.D (Thesis<br>Submitted) | Associate<br>Professor | Mechanical<br>Engineering | 19   | Nil |
| Dr. S. B.<br>Sonawane    | M.E.<br>(Thermal),<br>Ph.D                          | Associate<br>Professor | Mechanical<br>Engineering | 14.5 | Nil |
| Prof. M. S.<br>Patil     | M.E.<br>(Design),<br>Ph.D<br>(Pursuing)             | Assistant<br>Professor | Mechanical<br>Engineering | 14   | Nil |
| Prof. S. Y.<br>Pawar     | M.E.<br>(Design),<br>Ph.D<br>(Pursuing)             | Assistant<br>Professor | Mechanical<br>Engineering | 12   | Nil |
| Prof. P. C.<br>Shete     | M.E. (Production)                                   | Assistant<br>Professor | Mechanical<br>Engineering | 13   | Nil |
| Prof. D. D.<br>Kulkarni  | M.E.<br>(Design)                                    | Assistant<br>Professor | Mechanical<br>Engineering | 10   | Nil |
| Prof. N. S.<br>Gaikwad   | M.E.<br>(Design)                                    | Assistant<br>Professor | Mechanical<br>Engineering | 07   | Nil |
| Prof. R. B.<br>Jagtap    | M.E.<br>(Design)                                    | Assistant<br>Professor | Mechanical<br>Engineering | 6.3  | Nil |
| Prof. N. V.<br>Lokare    | M.E.<br>(CAD/CAM)                                   | Assistant<br>Professor | Mechanical<br>Engineering | 8    | Nil |

| Prof. V. V.         | M.E.               | Assistant              | Mechanical             | 6    | Nil           |
|---------------------|--------------------|------------------------|------------------------|------|---------------|
| Shinde              | (Design)           | Professor              | Engineering            |      |               |
|                     | ( 33 8 )           |                        |                        |      |               |
| Prof. S. J.         | M T1-              | A ==:=4===4            | Mechanical             |      | NUL           |
|                     | M.Tech.            | Assistant<br>Professor |                        | 9    | Nil           |
| Suryawansh          | (Thermal),<br>Ph.D | Professor              | Engineering            |      |               |
| 1                   | (Pursing)          |                        |                        |      |               |
| D C D M             | ` "                | <b>A</b> •             | M 1 ' 1                |      | 21.1          |
| Prof. R. M.         | M.E. (Thermal)     | Assistant<br>Professor | Mechanical Engineering | 5    | Nil           |
| Ghogare             | (Appeared)         | Professor              | Engineering            |      |               |
|                     | (Appeared)         |                        |                        |      |               |
| Prof. T. D.         | M.E.               | Assistant              | Mechanical             | 4.5  | Nil           |
| Dabhade             | (Thermal)          | Professor              | Engineering            |      |               |
|                     | (Appeared)         |                        |                        |      |               |
| Prof. M. N.         | M.E.               | Assistant              | Mechanical             | 6    | Nil           |
| Gadakh              | (Design)           | Professor              | Engineering            |      | 1111          |
| Gudukii             | (Design)           | 110103301              | Linginicering          |      |               |
| D CDD               | ME                 | <b>A</b> •             | D. 1 1 1               | 1.2  | <b>3.</b> T'1 |
| Prof. P. B.         | M.E.               | Assistant              | Mechanical             | 4.3  | Nil           |
| Sonawane            | (Design)           | Professor              | Engineering            |      |               |
|                     |                    |                        |                        |      |               |
| Prof. G. M.         | M.E.               | Assistant              | Mechanical             | 4.3  | Nil           |
| Shirsath            | (Design)           | Professor              | Engineering            |      |               |
|                     |                    |                        |                        |      |               |
| Prof. S. N.         | M.E.               | Assistant              | Mechanical             | 13.6 | Nil           |
| Palhe               | (Design)           | Professor              | Engineering            |      |               |
|                     |                    |                        |                        |      |               |
| Prof. D. V.         | M.E.               | Assistant              | Mechanical             | 12.6 | Nil           |
| Kushare             | (Design)           | Professor              | Engineering            | 12.0 | INII          |
| Trasitare           | (Design)           | 110103301              | Linginicering          |      |               |
| D 6 D 6             | ME                 |                        | 26 1 1 1               | 1.6  | 271           |
| Prof. P. S.<br>Tile | M.E.               | Assistant<br>Professor | Mechanical             | 4.6  | Nil           |
| THE                 | (Design)           | Professor              | Engineering            |      |               |
|                     |                    |                        |                        |      |               |
| Prof. (Mrs.)        | M.E.               | Assistant              | Mechanical             | 10   | Nil           |
| V. A. Ahire         | (Design)           | Professor              | Engineering            |      |               |
|                     |                    |                        |                        |      |               |
| Prof. D. S.         | M.Tech.            | Assistant              | Mechanical             | 1.5  | Nil           |
| Bhamare             | (Automobile)       | Professor              | Engineering            |      |               |
|                     |                    |                        |                        |      |               |
| Prof. P. N.         | B.E.               | Assistant              | Chemical               | 34   | Nil           |
| Aher                | (Chemical)         | Professor              | Engineering            | 7    | 1111          |
|                     | ĺ                  |                        |                        |      |               |
|                     |                    |                        |                        |      |               |

| Prof. J. J.<br>Nerkar | M.Sc.<br>(Mathematics) | Assistant<br>Professor | Engineering<br>Mathematics | 17 | Nil |
|-----------------------|------------------------|------------------------|----------------------------|----|-----|
| Dr. S. J.<br>Kokate   | M.Sc., Ph.D.           | Assistant<br>Professor | Engineering<br>Chemistry   | 7  | Nil |

## 11. List of senior visiting faculty\*

| Sr. No | Name of Faculty                                    |
|--------|--|
| 1      | Dr. K. N. Iyer, (IIT Bombay)                       |
| 2      | Dr. R. P. Vedula, (IIT Bombay)                     |
| 3      | Dr. Shreedhara Sheshadri, (IIT Bombay)             |
| 4      | Dr. R. S. Jha, (IIT Bombay)                        |
| 5      | Dr. Absar Lakdawala, (Nirma University, Ahmedabad) |
| 6      | Dr. Pankaj Jagad, (Nirma University, Ahmedabad)    |
| 7      | Dr. Atul Shrivastava, (IIT Bombay)                 |
| 8      | Dr. D. V. Bhat, (SVNIT Surat)                      |

<sup>\*</sup> Eminent persons visited to Department

# 12. Percentage of lectures delivered and practical classes handled (programme wise) by temporary faculty

| Sr. No | Name of Faculty | Lecture/Practical | Percentage |
|--------|-----------------|-------------------|------------|
| Nil    |                 | Nil               |            |

## 13. Student -Teacher Ratio (Programme wise)

| Sr. No | Academic<br>Year | Total No. of<br>Students | Total No. of<br>Staff | Student<br>Teacher Ratio |
|--------|------------------|--------------------------|-----------------------|--------------------------|
| 1      | 2016-17          | 528                      | 29                    | 18:1                     |
| 2      | 2015-16          | 528                      | 26                    | 20:1                     |
| 3      | 2014-15          | 528                      | 24                    | 22:1                     |
| 4      | 2013-14          | 528                      | 23                    | 23:1                     |

## 14. Number of academic support staff (technical) and administrative staff; sanctioned and filled

| Sr. No | Type of Staff       | Sanctioned | Filled |
|--------|---------------------|------------|--------|
| 1      | Technical Assistant | 07         | 07     |
| 2      | Workshop Attendent  | 04         | 04     |
| 3      | Attendant           | 03         | 03     |

## 15. Qualifications of teaching faculty with DSc/ D.Litt/ Ph.D/ MPhil / PG.

| Qualification  | No. of teaching faculty |
|----------------|-------------------------|
| PhD Completed  | 03                      |
| PhD Registered | 08                      |
| PG Completed   | 15                      |
| B.E.           | 03                      |

## 16. Number of faculty with ongoing projects from a) National b) International funding agencies and grants received

| Sr. No | Name of Faculty      | National /International | <b>Grant Received</b> |
|--------|----------------------|-------------------------|-----------------------|
|        |                      | funding agencies        |                       |
| 1      | Prof. S. B. Sonawane | DST, Govt. of India     | Rs. 19,02,850/-       |

# 17. Departmental projects funded by DST - FIST; UGC, DBT, ICSSR, etc. and total grants received

| Sr.<br>No. | Year          | Name of Project   | DST-FIST / UGC/<br>DBT/ICSSR/Others | Grant<br>Received |
|------------|---------------|---|-------------------------------------|-------------------|
| 1          | 2016-<br>2017 | Performance study of Spherical<br>Cavity Receiver of Solar<br>Concentrator  | BCUD SPPU, Pune                     | Rs. 2,10,000/-    |
| 2          | 2015-<br>2016 | Heat Transfer Enhancement using brine based nanofluids  | DST, Govt. of India                 | Rs. 19,02,850/-   |
| 3          | 2014-<br>2015 | Investigation of mechanical and wear properties of yttrium oxide and titanium carbide particle reinforced Aluminium matrix composites | BCUD SPPU, Pune                     | Rs. 2,00,000/-    |

## 18. Research Centre/facility recognized by the University

| Sr. No | Name of Research Centre/facility |
|--------|----------------------------------|
|        | NIL                              |

### 19. Publications

| 1 | Publication per faculty  | 0.84 |
|---|--|------|
| 2 | Number of papers published in peer reviewed journals by faculty and students | 32   |
| 3 | Number of Publications listed in International Database                      | 32   |
| 4 | Monographs   | Nil  |
| 5 | Chapter in Books   | Nil  |

| 6  | Books Edited  | Nil           |
|----|---|---------------|
| 7  | Books with ISBN/ISSN number with details of Publisher | Nil           |
| 8  | Citation Index  | Nil           |
| 9  | SNIP  | Nil           |
| 10 | SJR   | Nil           |
| 11 | Impact factor   | 2.73(highest) |
| 12 | H-Index   | 3 (highest)   |

## ${\bf 20.\ Areas\ of\ consultancy\ and\ income\ generated}$

| Sr. No. | Area of Consultancy   | Year    | <b>Income Generated</b> |
|---------|-----------------------|---------|-------------------------|
| 1.      | 1.Stress analysis     | 2016-17 | 3000/-                  |
|         | 2. Vibration analysis | 2016-17 | 20000/-                 |
| 2.      | 1. Vibration analysis | 2015-16 | 50000/-                 |
| 2.      | 2. Vibration analysis | 2015-16 | 20000/-                 |
|         | 3. Vibration analysis | 2015-16 | 15000/-                 |
|         | 4. Vibration analysis | 2015-16 | 10000/-                 |
|         | 5. Vibration analysis | 2015-16 | 8000/-                  |
|         | 6.Tribology           | 2015-16 | 2400/-                  |
| 3.      | 1. Vibration analysis | 2014-15 | 3000/-                  |
| 3.      | 2. Tribology          | 2014-15 | 6000/-                  |
|         | 3. Tribology          | 2014-15 | 2000/-                  |
|         | 4 Tribology           | 2014-15 | 500/-                   |

## 21. Faculty as members in a)National Committees, b)International Committees, c) Editorial Boards

| Sr. No | Name of Faculty       | Member of National / International<br>Committees/ Editorial Boards |
|--------|-----------------------|--|
| 1      | Dr. S. P. Mogal       | ISTE, IEI  |
| 2      | Prof. A. B. Kakade    | ISTE   |
| 3      | Prof. Y. B. Choudhari | ISTE   |
| 4      | Prof. N. K. Kharate   | ISTE, IEI  |
| 5      | Prof. A. A. Kapse     | ISTE   |
| 6      | Prof. V. C. Shewale   | ISTE   |
| 7      | Dr. S. B. Sonawane    | ISTE, IEI, IAENG, London   |
| 8      | Prof. M. S. Patil     | ISTE   |
| 9      | Prof. S. Y. Pawar     | ISTE   |

| 10 | Prof. D. D. Kulkarni    | ISTE, IEI |
|----|-------------------------|-----------|
| 11 | Prof. S. J. Suryawanshi | SAE INDIA |
| 12 | Prof. V. A. Ahire       | ISTE      |
| 13 | Prof. S. N. Palhe       | ISTE      |

## 22. Student projects

| Sr. No | Name  | Year    | Percentage |
|--------|---|---------|------------|
| 1      | Percentage of students who have done in-      | 2016-17 | 30         |
|        | house projects including inter                |         |            |
|        | departmental/programme                        |         |            |
| 2      | Percentage of students placed for projects    |         | 70         |
|        | in organizations outside the institution      |         |            |
|        | i.e. in Research laboratories/Industry/       |         |            |
|        | other agencies                                |         |            |
| 1      | Percentage of students who have done in-      | 2015-16 | 30         |
|        | house projects including inter                |         |            |
|        | departmental/programme                        |         |            |
| 2      | Percentage of students placed for projects    |         | 70         |
|        | in organizations outside the institution      |         |            |
|        | i.e. in Research laboratories/Industry/       |         |            |
|        | other agencies                                |         |            |
| 1      | Percentage of students who have done in-      | 2014-15 | 30         |
|        | house projects including inter                |         |            |
|        | departmental/programme                        |         |            |
| 2      | Percentage of students placed for projects    |         | 70         |
|        | in organizations outside the institution i.e. |         |            |
|        | in Research laboratories/Industry/ other      |         |            |
|        | agencies                                      |         |            |
| 1      | Percentage of students who have done in-      | 2013-14 | 30         |
|        | house projects including inter                |         |            |
|        | departmental/programme                        |         |            |
| 2      | Percentage of students placed for projects    |         | 70         |
|        | in organizations outside the institution      |         |            |
|        | i.e. in Research laboratories/Industry/       |         |            |
|        | other agencies                                |         |            |

# 23. Awards / Recognitions received by faculty and students Summary Faculty

| Sr. | Name of   | Year | <b>Event Name</b>         | Name of      | Prize/     | State/        |
|-----|-----------|------|---------------------------|--------------|------------|---------------|
| No. | Faculty   |      |                           | Organizer    | Achievem   | National/     |
|     |           |      |                           |              | ent        | International |
| 1   | Dr. S. B. | 2015 | 31 <sup>st</sup> National | Institute of | Young      | National      |
|     | Sonawane  | -16  | Convection                | Engineers,   | Engineers' |               |
|     |           |      | on                        | Bangalore    | Awards     |               |
|     |           |      | Mechanical                | Center       |            |               |
|     |           |      | Engineering               |              |            |               |
|     |           |      | at Bangalore              |              |            |               |
| 2   | Dr. S. B. | 2014 | Engineers                 | Institute of | Promising  | State         |
|     | Sonawane  | -15  | Day                       | Engineers,   | Engineer   |               |
|     |           |      |                           | Nashik       | Award      |               |
|     |           |      |                           | Center       |            |               |

### **Students:**

| Sr.<br>No | Name of the Student | Year    | Event /<br>Activity<br>Name | Rank/<br>Role/<br>Status | Place      |
|-----------|---------------------|---------|-----------------------------|--------------------------|------------|
| 1         | Akshay Deshmukh     | 2016-17 | Lathe war                   | Third                    | MET Nashik |

| Sr.<br>No. | Name of the Student   | Year        | Event / Activity<br>Name | Rank/<br>Status | Place                  |
|------------|-----------------------|-------------|--------------------------|-----------------|------------------------|
| 1          | Ketan Ghag            | 2015-<br>16 | Quiz competition         | First           | KKW COE Nasik          |
| 2          | Akshay Borse          | 2015-<br>16 | Auto-cad<br>/CAMD        | A Grade         | Dhule                  |
| 3          | Nikhil Patil          | 2015-<br>16 | Junk Yard                | Fourth          | PVG COE, Nasik         |
| 4          | Shubham<br>Pangavhane | 2015-<br>16 | Chess                    | First           | NDMVP<br>KBTCOE Nasik  |
| 5          | Rushikesh             | 2015-       | Lathe War                | Third           | MET Nashik             |
|            | Pawale                | 16          | Cricket                  | Second          | NDMVP<br>KBTCOE Nashik |
| 6          | Mayur Patil           |             | Junk Yard                | Third           | MET Nasik              |
|            |                       | 2015-<br>16 | Lathe War                | Second          | NDMVP<br>KBTCOE Nashik |
| 7          | Kiran Sonawane        | 2015-<br>16 | Lathe War                | Second          | NDMVP<br>KBTCOE Nashik |

| 8  | 8 Shubham 201<br>Tangade 16 |             | Robo War                              | First     | NDMVP<br>KBTCOE Nashik |
|----|-----------------------------|-------------|---------------------------------------|-----------|------------------------|
|    |                             |             | Junk yard                             | Third     | KKW COE<br>Nashik      |
|    |                             |             | Bike Mania                            | Third     | MET Nashik             |
| 9  | Vinayak Zade                | 2015-       | Catia V5                              | A Grade   | NDMVP<br>KBTCOE Nasik  |
|    |                             | 16          | Robo race                             | Third     | PVG COE,<br>Nashik     |
| 10 | Pushkraj<br>Salunke         | 2015-<br>16 | Catia V5                              | First     | Access Cad<br>Nashik   |
|    |                             |             | Robo race                             | Second    | NDMVP<br>KBTCOE Nashik |
|    |                             |             | Robo race                             | First     | NDMVP<br>KBTCOE Nashik |
| 11 | Parth Sawant                | 2015-<br>16 | Robo race                             | Second    | NDMVP<br>KBTCOE Nashik |
| 12 | Ajay Kaiche                 | 2015-<br>16 | CATIA<br>Competition                  | Second    | SVIT Chincholi         |
| 13 | Vicky Dalwani               | 2015-<br>16 | CATIA<br>Competition                  | Second    | SVIT Chincholi         |
| 14 | Sarvesh Aher                | 2015-<br>16 | Aavishkar                             | First     | Nashik zone            |
| 15 | Sagar Tarle                 | 2015-<br>16 | Aavishkar                             | Selection | Nashik zone            |
| 16 | Shailesh Patil              | 2015-<br>16 | Boxing                                | Second    | Nashik zone            |
| 17 | Shweta Raut                 | 2015-<br>16 | Interzonal<br>Competition<br>for Yoga | Second    | Nashik Zone            |
| 18 | Sameer Jadhav               | 2015-<br>16 | Bike Mania                            | Second    | Nashik                 |
| 19 | Akshay<br>Deshmukh          | 2015-<br>16 | Lathe war                             | Second    | MET Nashik             |

| Sr.<br>No. | Name of the<br>Student | Year        | Event /<br>Activity<br>Name | Rank/Role/Status | Place         |
|------------|------------------------|-------------|-----------------------------|------------------|---------------|
| 1          | Swami Pawar            | 2014-<br>15 | Hack the<br>Whell           | First            | PVG<br>Nashik |
| 2          | Nikhil Patil           | 2014-<br>15 | BOX<br>Cricket              | Second           | Nashik        |
| 3          | Siddhant Jadhav        | 2014-       | Laser                       | First            | MET's         |

|    |                             | 15          | Archery             |        | COE<br>Nashik            |
|----|-----------------------------|-------------|---------------------|--------|--------------------------|
| 4  | Rahul Suryawanshi 201<br>15 | 2014-<br>15 | Cricket             | Second | Gokhale<br>COE<br>Nashik |
|    |                             |             |                     | Second | KKW<br>COE<br>Nashik     |
| 5  | Shripad Tamboli             | 2014-<br>15 | Cricket             | First  | KKW<br>COE<br>Nashik     |
|    |                             |             |                     | Third  | IIT Delhi                |
| 6  | Vinayak Zade                | 2014-<br>15 | Lathe War           | Second | MET's<br>COE<br>Nashik   |
| 7  | Sachin<br>Vishwakarma       | 2014-<br>15 | ROBO-<br>Tryst      | Second | MET's<br>COE<br>Nashik   |
| 8  | Rahul Bagul                 | 2014-       | Canon Ball          | Third  | Nashik                   |
|    |                             | 15          | Hoop the<br>Loop    | Second | Nashik                   |
| 9  | Nikhil Rajput               | 2014-<br>15 | Robo race           | Second | KKW<br>COE,<br>Nashik    |
| 10 | Rohit Shahi                 | 2014-<br>15 | Quiz<br>competition | First  | KKW<br>COE,<br>Nashik    |
| 11 | Pushkraj Salunke            | 2014-<br>15 | Robo race           | Second | KKW<br>COE,<br>Nashik    |
| 12 | Parth Sawant                | 2014-<br>15 | Robo tank           | Fourth | IIT Delhi                |
| 13 | Sameer Jadhav               | 2014-<br>15 | Bike Mania          | Fifth  | Nashik                   |

| Sr.<br>No. | Name of the<br>Student | Year    | Event /<br>Activity<br>Name | Rank/Role/<br>Status | Place                |
|------------|------------------------|---------|-----------------------------|----------------------|----------------------|
| 1          | Akshay Borse           | 2013-14 | Poster<br>Competition       | Third                | Govt Poly.<br>Nashik |
| 2          | Shubham Thube          | 2013-14 | Poster<br>Competition       | Second               | Jalgaon              |
| 3          | Parth Sawant           | 2013-14 | Smart out                   | Third                | Suyojit,             |

|   |               |         | Competition |       | Nashik             |
|---|---------------|---------|-------------|-------|--------------------|
| 4 | Vishal Gatkal | 2013-14 | Bike Mania  | Third | KKW COE,<br>Nashik |

## 24. List of eminent academicians and scientists / visitors to the department:

| Sr. No | Sr. No Year Name of Visitor |   | Academicians/Scientists |  |
|--------|-----------------------------|---|-------------------------|--|
|        |                             |   | / Visitors              |  |
| 1      | 2016-17                     | Dr. Vinod Parekh  | Visitors                |  |
|        |                             | (Education Advisor)   |                         |  |
| 2      | 2015-16                     | Dr. K. N. Iyer (IIT Bombay)                                 | Academicians            |  |
| 3      | 2015-16                     | Dr. R. P. Vedula (IIT<br>Bombay)                            | Academicians            |  |
| 4      | 2015-16                     | Dr. Shreedhara Sheshadri (IIT<br>Bombay)                    | Academicians            |  |
| 5      | 2015-16                     | Dr. R. S. Jha (IIT Bombay)                                  | Academicians            |  |
| 6      | 2015-16                     | Dr. Absar Lakdawala (Nirma<br>University, Ahmedabad)        | Academicians            |  |
| 7      | 2015-16                     | Dr. Parag Sonawane Director, R&D, AIMID Ltd., Shezen, China | Visitors                |  |
| 8      | 2015-16                     | Dr. Pankaj Jagad (Nirma<br>University, Ahmedabad)           | Academicians            |  |
| 9      | 2015-16                     | Dr. Atul Shrivastava (IIT<br>Bombay)                        | Academicians            |  |
| 10     | 2013-14                     | Dr. D. V. Bhat (SVNIT Surat)                                | Academicians            |  |
| 11     | 2013-14                     | Mr. N. L. Soni, (Senior<br>Scientist, BAARC Mumbai)         | Scientists              |  |
| 12     | 2013-14                     | Dr. V. M. Palhe (VJTI,<br>Mumbai)                           | Academician             |  |

## 25. Seminars/ Conferences/Workshops organized & the source of funding: Seminar $\,$

| Sr. No. | Year    | Name of Seminars/<br>Conferences/Workshops organized              | Source of funding |
|---------|---------|---|-------------------|
| 1       | 2013-14 | Two days State level Seminar on<br>Tribological Aspects in Design | BCUD SPPU Pune    |

Workshop

| Sr. No. Year Name of Seminars/ Conferences/ Source of funding Workshops organized | Sr. No. |
|---|---------|
|---|---------|

| 1 | 2016-17 | Two days National level Workshop on<br>Condition Monitoring                | BCUD SPPU Pune |
|---|---------|--|----------------|
| 2 | 2014-15 | Two week ISTE Workshop on Fluid<br>Mechanics organized by IIT<br>Kharagpur |                |
| 3 | 2015-16 | Two days Workshop on Emerging<br>Trends in Heat Transfer Engineering       | BCUD SPPU Pune |

### Conference - NIL

## 26. Student profile programme/course wise

### F.E.

| Year    | Admission in First Year | Enrolled |    | Pass Percentage |
|---------|-------------------------|----------|----|-----------------|
|         |                         | *M       | *F |                 |
| 2016-17 | 116                     | 101      | 15 | -               |
| 2015-16 | 124                     | 106      | 18 | 71.11           |
| 2014-15 | 126                     | 106      | 20 | 75.00           |
| 2013-14 | 127                     | 106      | 21 | 70.80           |

<sup>\*</sup>M = Male \*F = Female

## 27. Diversity of Students

| Year    | Percentage of students from same | Percentage of<br>Students from | Percentage of Students from abroad |
|---------|----------------------------------|--------------------------------|------------------------------------|
|         | state                            | other state                    |                                    |
| 2016-17 | 99.04                            | 0.96                           | Nil                                |
| 2015-16 | 99.35                            | 0.65                           | Nil                                |
| 2014-15 | 99.46                            | 0.54                           | Nil                                |
| 2013-14 | 99.46                            | 0.54                           | Nil                                |

## 28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defense Services, etc.:

| Sr. No. | Name of Student | Gate Score | Year    |
|---------|-----------------|------------|---------|
| 1       | Pritam Sarkar   | 23.00      | 2015-16 |
| 2       | Atharva Pathak  | 16.23      | 2015-16 |
| 3       | Akshay Patil    | 20.01      | 2015-16 |
| 4       | Bhushan Pathak  | 30.00      | 2015-16 |
| 5       | Nikhil Ekhande  | 19.00      | 2015-16 |
| 6       | Swapnil Jain    | 21.00      | 2015-16 |
| 7       | Rahul Sonawane  | 22.04      | 2015-16 |

| 8  | Mahesh Medhe    | 24.00 | 2015-16 |  |  |  |
|----|-----------------|-------|---------|--|--|--|
| 9  | Rohit Rajbhog   | 18.00 | 2015-16 |  |  |  |
| 10 | Aditya Patil    | 22.85 | 2014-15 |  |  |  |
| 11 | Kunal Potdar    | 31.27 | 2015-16 |  |  |  |
| 12 | Uday Khairnar   | 25.90 | 2015-16 |  |  |  |
| 13 | Rohit Rajbhoj   | 18.00 | 2015-16 |  |  |  |
| 14 | Mayur Sonawane  | 22.00 | 2014-15 |  |  |  |
| 15 | Ajinkya Shendre | 22.00 | 2014-15 |  |  |  |
| 16 | Sagar Trimukhe  | 21.00 | 2014-15 |  |  |  |
| 17 | Mahesh Jadhav   | 33.41 | 2013-14 |  |  |  |
| 18 | Rahul Pawar     | 19.00 | 2013-14 |  |  |  |
|    | GRE             |       |         |  |  |  |
| 19 | Abhiraj Patil   | 307   | 2016-17 |  |  |  |
| 20 | Vicky Dalwani   | 303   | 2015-16 |  |  |  |
| 21 | Gaurav Patil    | 291   | 2014-15 |  |  |  |
| 22 | Darshan Aher    | 294   | 2013-14 |  |  |  |
| 23 | Soham Joshi     | 328   | 2013-14 |  |  |  |

## 29. Student progression

| Student progression              |                          | Against %<br>enrolled | Year    |
|----------------------------------|--------------------------|-----------------------|---------|
| PG to Ph.D.                      |                          | -                     | -       |
| Ph.D. to Pos                     | st-Doctoral              | -                     | -       |
| Employed                         |                          | 15                    | 2015-16 |
|                                  | Campus selection         | 12                    | 2014-15 |
|                                  |                          |                       | 2013-14 |
|                                  |                          | 07                    |         |
|                                  | Other than campus        | 18                    | 2015-16 |
|                                  | Recruitment (Off Campus) | 24                    | 2014-15 |
|                                  |                          | 46                    | 2013-14 |
| Entrepreneurship/Self-employment |                          | -                     | -       |

## **30.** Details of Infrastructural facilities(Department Library)

**a.** Library: Area– 37.90 Sq. meter

**b.** No. of Volumes Available- 152

c. No. of Titles Available - 134

**d.** Internet facilities for Staff & Student: Available

e. Class rooms with ICT facility: 05

## f. Laboratories:- 13 (11 UG and 2 PG)

# 31. Number of students receiving financial assistance from college, university, government or other agencies

| Academic Year | No.of students benifited<br>under State/ Central<br>Government | Other Agencies |
|---------------|--|----------------|
| 2016-17       |  | 25             |
| 2015-16       | 328  | 23             |
| 2014-15       | 192  | 25             |
| 2013-14       | 162  | -              |

# **32.** Details on student enrichment programmes (special lectures/workshops/seminar) with external Experts:

### 2016-17

| Sr. No. | Name of expert                      | Name of event                             | Lecture/Workshop<br>/Seminar |
|---------|-------------------------------------|---|------------------------------|
| 1       | Mr. Ravindra Khatale                | Competitive Exam guidance                 | Lecture                      |
| 2       | Mr. Mohit Baste                     | Personal Interview&<br>Placement guidance | Lecture                      |
| 3       | Mrs. Neha Khare                     | Entrepreneurship                          | Lecture                      |
| 4       | Dr. Vinod Parekh                    | Soft skill development                    | Workshop                     |
| 5       | Mr. Ganesh Godse<br>Mr. Rahul Kasar | 3-D Printing                              | Seminar                      |

### 2015-16

| Sr. No. | Name of expert                             | Name of event   | Lecture/<br>Workshop/<br>Seminar |
|---------|--|---|----------------------------------|
| 1       | Dr. K. N. Iyer (IIT<br>Bombay)             | Two days Workshop on<br>Emerging Trends in Heat<br>Transfer Engineering | Workshop                         |
| 2       | Dr. R. P. Vedula<br>(IITBombay)            | Two days Workshop on<br>Emerging Trends in Heat<br>Transfer Engineering | Workshop                         |
| 3       | Dr. Shreedhara<br>Sheshadri<br>(IITBombay) | Two days Workshop on<br>Emerging Trends in Heat<br>Transfer Engineering | Workshop                         |

| 4 | Dr. R. S. Jha (IIT<br>Bombay)  | Two days Workshop on<br>Emerging Trends in Heat<br>Transfer Engineering | Workshop |
|---|--|---|----------|
| 5 | Dr. Absar Lakdawala<br>(Nirma University,<br>Ahmedabad)              | Two days Workshop on<br>Emerging Trends in Heat<br>Transfer Engineering | Workshop |
| 6 | Dr. Parag Sonawane<br>Director, R&D,<br>AIMID Ltd., Shezen,<br>China | Two days Workshop on<br>Emerging Trends in Heat<br>Transfer Engineering | Workshop |
| 7 | Dr. Pankaj Jagad<br>(Nirma University,<br>Ahmedabad)                 | Two days Workshop on<br>Emerging Trends in Heat<br>Transfer Engineering | Workshop |
| 8 | Dr. Atul Shrivastava<br>(IIT Bombay)                                 | Two days Workshop on<br>Emerging Trends in Heat<br>Transfer Engineering | Workshop |

### 2014-15

| Sr.<br>No. | Name of expert                    | Name of event  | Lecture/Workshop/<br>Seminar |
|------------|-----------------------------------|--|------------------------------|
| 1          | Dr. B. P. Puranik<br>(IIT Bombay) | Two week ISTE workshop on<br>Fluid Mechanics, I.I.T. Bombay<br>funded by NMEICT, MHRD,<br>Govt. of India | Workshop                     |
| 2          | Mr. Swapnil<br>Sakurikar          | Ten days workshop on "Entrepreneurship Development" by MSME Mumbai                                       | Workshop                     |

### 2013-14

| Sr.<br>No. | Name of expert                  | Name of event  | Lecture/Workshop<br>/Seminar |
|------------|---------------------------------|--|------------------------------|
| 1          | Dr. D. V. Bhat<br>(SVNIT Surat) | Two days state level seminar on "Tribological aspects in Design" | Seminar                      |

## 33. Teaching methods adopted to improve student learning

- **a.** Improved lecture method using PPT, Animations
- **b.** NPTEL Videos
- c. Virtual Labs
- d. Industry Visits
- e. Self-Learning Activities

#### **f.** Subject Assignments

## 34. Participation in Institutional Social Responsibility (ISR) and Extension activities

- a. NSS Camps organized
- **b.** MVP Marathon
- c. Blood Donation Camp
- **d.** Swachchata Abhiyan

### 35. SWOC analysis of the department and Future plans

#### **Strength:**

- a. Qualified and Experienced faculty
- **b.** Industry expert lectures & Workshops
- **c.** Well-equipped labs
- **d.** Skilled technical/ supporting staff
- e. Industry oriented Projects
- **f.** Equipped CAD/ CAM lab with internet facility
- g. Student's performance monitoring through ERP

#### Weakness:

- **a.** Placements
- **b.** Digital Classrooms
- c. Soft Skills of students
- **d.** Consultancy in Industry
- e. Alumni meets and Parent meets

### **Opportunities:**

- a. Industry- Institute Interaction
- **b.** MOU with Professional Bodies
- c. Consultancy
- **d.** Software Trainings

#### **Challenges:**

- a. Improvements in Student Quality
- **b.** To produce employable students to satisfy requirements of Industries
- **c.** Solving technical problems of society

#### **Future Plans:**

- a. To start PG in Heat Power Engineering
- **b.** To start Ph.D. Research center
- c. To start CAD/CAM Training Center
- d. To start Post Graduate Diploma in Computer Aided Design
- e. To build strong Alumni Bonding
- **f.** To strengthen Industry-Institute Interaction Cell
- g. To enhance the consultancy activities of department

### **COMPUTER ENGINEERING**

| 1 | Name of the Department   | Computer Engineering    |
|---|--|-------------------------|
| 2 | Year of Establishment  | 1999                    |
| 3 | Names of Programmes / Courses offered (UG, PG, M.Phil., PhD, Integrated Masters; Integrated Ph.D., etc.) | UG                      |
| 4 | Names of Interdisciplinary courses and the departments/units involved                                    | Yes                     |
| 5 | Annual/ semester/choice based credit   | FE & SE Semester credit |
| 3 | system (program wise)  | system TE & BE Semester |
|   |  | System                  |
| 6 | Participation of the department in the   | Yes                     |
| 0 | courses offered by other departments   |                         |
| 7 | Courses in collaboration with other  | Nil                     |
| / | universities, industries, foreign  |                         |
|   | institutions etc.  |                         |
| 8 | Details of courses/programmes  | No                      |
| 0 | discontinued (if any) with reasons   |                         |

## 9. Number of Teaching posts

| Post                 | Sanctioned | Filled |
|----------------------|------------|--------|
| Professors           | 02         | 00     |
| Associate Professors | 04         | 03     |
| Asst. Professors     | 10         | 14     |

# 10. Faculty profile with name, qualification, designation, specialization, (D.Sc./D.Litt./Ph.D./ M. Phil. etc.,)

| Name of<br>Staff     | Qualification  | Designation                      | Specialization                  | No .of<br>Years of<br>Experience | No. of PhD<br>Students<br>Guided for<br>last 4<br>Years |
|----------------------|--|----------------------------------|---------------------------------|----------------------------------|---|
| Dr. V. S.<br>Pawar   | Ph.D.  | Associate<br>Professor &<br>Head | CSE-<br>Computer<br>Engineering | 17                               | Nil   |
| Prof. B. S.<br>Tarle | DIE, AMIE,<br>BE, M.E<br>(Computer<br>Engineering)<br>PhD Pursuing | Associate<br>Professor           | Software<br>Engineering         | 12.5                             | Nil   |

|                                | T                                      |                        |                         |     | _   |
|--------------------------------|--|------------------------|-------------------------|-----|-----|
| Prof. V. S.<br>Tidake          | BE,M.E. PhD<br>Pursuing                | Associate<br>Professor | CSE-IT                  | 16  | Nil |
| Prof. S. A.<br>Talekar         | M. Tech. PhD<br>Pursuing               | Assistant<br>Professor | CSE                     | 12  | Nil |
| Prof. P. P.<br>Shinde          | M.E.                                   | Assistant<br>Professor | Computer<br>Engineering | 11  | Nil |
| Prof. S. R.<br>Bhamare         | B.E.(Computer Engineering)             | Assistant<br>Professor | Computer<br>Engineering | 8.2 | Nil |
| Prof. R. R.<br>Shevale         | M. Tech. (<br>Computer<br>Engineering) | Assistant<br>Professor | Computer<br>Engineering | 8.2 | Nil |
| Prof. R. P.<br>Chandwadk<br>ar | M.E.(Computer<br>Engineering)          | Assistant<br>Professor | Computer<br>Engineering | 11  | Nil |
| Prof. S. T.<br>Datir           | M.E.(Computer<br>Engineering)          | Assistant<br>Professor | CSE                     | 6.3 | Nil |
| Prof. P. V.<br>Shinde          | M.E.(Computer<br>Engineering)          | Assistant<br>Professor | Computer<br>Engineering | 6.3 | Nil |
| Prof. S. V.<br>Pawar           | M.E.(Computer<br>Engineering)          | Assistant<br>Professor | Computer<br>Engineering | 6   | Nil |
| Prof. P. P.<br>Boraste         | M.E.(Computer<br>Engineering)          | Assistant<br>Professor | Computer<br>Engineering | 3   | Nil |
| Prof. M. B.<br>Thombare        | M.E.(Computer<br>Engineering)          | Assistant<br>Professor | Computer<br>Engineering | 3   | Nil |
| Prof. B. S.<br>Gholap          | M.E.(Computer<br>Engineering)          | Assistant<br>Professor | Computer<br>Engineering | 1.5 | Nil |
| Prof. R. S.<br>Derle           | BE(Computer),<br>M.Tech.<br>Pursuing   | Assistant<br>Professor | Computer<br>Engineering | 4.5 | Nil |
| Prof. N. B.<br>Desale          | M.Sc.(Phy.)<br>Ph.D.<br>(Pursuing)     | Assistant<br>Professor | Engineering Physics     | 17  | Nil |
| Prof. J. V.<br>Pagar           | M.Sc.<br>(Mathematics)<br>M.Phil.      | Assistant<br>Professor | Engineering Mathematics | 11  | Nil |

**Non Teaching Staff** 

| Sr.<br>No | Name of<br>Staff       | Qualification   | Designation                    | Specialization            | No. of<br>Years of<br>Experience |
|-----------|------------------------|---|--------------------------------|---------------------------|----------------------------------|
| 1         | Mr. A. B.<br>Sable     | B.E.  | Asst. Network<br>Administrator | Information<br>Technology | 5.3                              |
| 2         | Mr. V. G.<br>Nimbalkar | Diploma   | Service<br>Engineer            | Computer<br>Technology    | 11                               |
| 3         | Mr. H. N.<br>Ugale     | B.E.  | Service<br>Engineer            | Computer<br>Engineering   | 10                               |
| 4         | Mr. C. S.<br>Aher      | B.E,M. Tech. (<br>Pursuing)                                 | Technical<br>Assistant         | Information<br>Technology | 6.3                              |
| 5         | Mr. V. S.<br>Jadhav    | DCT, B.Tech,<br>M.Tech.<br>(Pursuing)<br>CCNA,CCNP,<br>MCSA | Technical<br>Assistant         | Computer<br>Engineering   | 6.2                              |
| 6         | Mr. S. K.<br>Gangurde  | Diploma   | Technical<br>Assistant         | Computer<br>Engineering   | 5.8                              |
| 7         | Ms. R. S.<br>More.     | ME  | Technical<br>Assistant         | Computer<br>Engineering   | 2                                |
| 8         | Mr. G. R.<br>Murkute   | I.T.I.  | Computer<br>Technician         | Computer<br>Engineering   | 5                                |
| 9         | Mr. C. K.<br>Nalawade  | B.A.  | Attendant                      | -                         | 18                               |
| 10        | Mr. K. G.<br>Warde     | S.S.C.  | Attendant                      | -                         | 5                                |

### 11. List of Senior Visiting Faculty

| Sr. No. | Name of Faculty |
|---------|-----------------|
|         | Nil             |

# 12. Percentage of lectures delivered and practical classes handled(programme wise) by temporary faculty

| Sr. No. | Name of Faculty Lecture/Practical Percentage |  | Percentage |  |
|---------|--|--|------------|--|
|         | Nil  |  |            |  |

### 13. Student -Teacher Ratio (Programme wise)

| Sr. | Academic | Total No of | Total No. of | Student Teacher |
|-----|----------|-------------|--------------|-----------------|
| no. | year     | students    | Staff        |                 |

|   |         |     |    | ratio |
|---|---------|-----|----|-------|
| 1 | 2016-17 | 240 | 17 | 14:1  |
| 2 | 2015-16 | 240 | 17 | 14:1  |
| 3 | 2014-15 | 240 | 17 | 14:1  |
| 4 | 2013-14 | 240 | 17 | 14:1  |

## 14. Number of academic support staff (technical) and administrative staff; sanctioned and filled

| Sr. No. | Type of Staff             | Sanctioned | Filled |
|---------|---------------------------|------------|--------|
| 1       | Support staff (technical) | 08         | 08     |
| 2       | Administrative (Peon)     | 02         | 02     |

### 15. Qualifications of teaching faculty with DSc/ D.Litt/ Ph.D/ MPhil / PG. -

| Sr. No. | Description                     | Count |
|---------|---------------------------------|-------|
| 1       | No. of staff having M.E./M.Tech | 13    |
| 2       | No. of staff having PhD         | 01    |
| 3       | No. of staff having MSc, MPhil  | 02    |

# 16. Number of faculty with ongoing projects from a) National b) International funding agencies and grants received

| Sr. No. | Name of<br>Faculty | National /International funding agencies | Grant<br>Received |
|---------|--------------------|--|-------------------|
|         | Nil                |  |                   |

# 17. Departmental projects funded by DST - FIST; UGC, DBT, ICSSR, etc. and total grants received

| Sr. No. | Name of | DST-FIST / UGC/         | Grant Received |
|---------|---------|-------------------------|----------------|
|         | Project | <b>DBT/ICSSR/Others</b> |                |
| Nil     |         |                         |                |

### 18. Research Centre/facility recognized by the University

| Sr. No. | Name of Research Centre/facility |
|---------|----------------------------------|
|         | Nil                              |

### 19. Publications

| 1 | Publication per faculty  | 0.60 |
|---|--|------|
| 2 | Number of papers published in peer reviewed journals by faculty and students | 10   |
| 3 | Number of Publications listed in International Database                      | 01   |
| 4 | Monographs   | Nil  |

| 5  | Chapter in Books                                      | Nil  |
|----|---|------|
| 6  | Books Edited  | Nil  |
| 7  | Books with ISBN/ISSN number with details of Publisher | Nil  |
| 8  | Citation Index  | 02   |
| 9  | SNIP  | Nil  |
| 10 | SJR   | Nil  |
| 11 | Impact factor   | 0.62 |
| 12 | H-Index   | 02   |

## 20. Areas of consultancy and income generated

| Sr. No. | Area of Consultancy                             | Income<br>Generated |
|---------|---|---------------------|
| 1       | Hardware and software maintenance for MVP Samaj | Rs. 1,00,000/-      |

# 21. Faculty as members in a)National Committees, b)International Committees, c) Editorial Boards

| Sr.<br>No. | Name of Faculty            | Member of National / International Committees /<br>Editorial Boards                          |
|------------|----------------------------|--|
| 1          | Dr. V. S Pawar             | ISTE LM 41930, CSI F8000167  |
| 1          | Prof. B. S. Tarle          | ISTE: LM 15587' IEI: AM097417-2, CSI: F8000166 CAP Director, UGC, and LIC Committee of SPPU. |
| 2          | Prof. V. S. Tidke          | ISTE: LM 41928, IEI: M141450-4, CSI: I1504328<br>CAP Director, UGC Committee of SPPU.        |
| 3          | Prof. S. A. Talekar        | ISTE:LM 53534 , IEI:AM098318-5, CAP Director, LIC Committee of SPPU.                         |
| 4          | Prof. Bhamare S. R.        | ISTE: LM 68861 Life Member since 2010  |
| 5          | Prof Shevale R. R.         | ISTE - LM 68864 Life Member since 2009   |
| 6          | Prof. R. P.<br>Chandwadkar | ISTE: LM 68862 , LIC Committee of SPPU.  |

### 22. Student projects

### 2016-17

| Sr. No. | Name  | Percentage |
|---------|---|------------|
| 1       | Percentage of students who have done in-house projects      | 50         |
| 1       | including inter departmental/programme                      |            |
| 2.      | Percentage of students placed for projects in organizations | 50         |
| _       | outside the institution i.e. in Research                    |            |
|         | laboratories/Industry/ other agencies                       |            |

### 2015-16

| Sr. No. | Name   | Percentage |  |  |  |
|---------|--|------------|--|--|--|
| 1       | Percentage of students who have done in-house projects |            |  |  |  |
|         | including inter departmental/programme                 |            |  |  |  |
| 2       | Percentage of students placed for projects in          | 35         |  |  |  |
| _       | organizations outside the institution i.e. in Research |            |  |  |  |
|         | laboratories/Industry/ other agencies                  |            |  |  |  |

### 2014-15

| Sr. No. | Name   | Percentage |
|---------|--|------------|
| 1       | Percentage of students who have done in-house projects | 61.91      |
| 1       | including inter departmental/programme                 |            |
| 2       | Percentage of students placed for projects in          | 38.09      |
|         | organizations outside the institution i.e. in Research |            |
|         | laboratories/Industry/ other agencies                  |            |

### 2013-14

| Sr. No. | Name   | Percentage |
|---------|--|------------|
| 1       | Percentage of students who have done in-house projects | 84.21      |
|         | including inter departmental/programme                 |            |
| 2       | Percentage of students placed for projects in          | 15.79      |
| _       | organizations outside the institution i.e. in Research |            |
|         | laboratories/ Industry / other agencies                |            |

### 23. Awards / Recognitions received by faculty and students Summary

| Sr.<br>No. | Name of Staff<br>and Student | Event<br>Name | Name of<br>Organizer | Prize/<br>Achievement | State/<br>National/<br>Internatio |  |  |
|------------|------------------------------|---------------|----------------------|-----------------------|-----------------------------------|--|--|
| 1          | Prof. S. A.                  | Engineers     | IE(I) Local          | Promising             | State                             |  |  |
|            | Talekar                      | Day           | Centre Nashik        | Engineer              |                                   |  |  |
| 2          | Prof. R. P.                  | Academic      | KKWIEER              | ME Topers             | College                           |  |  |
|            | Chandwadkar Award Nashik     |               | Nashik               | 2013-14               |                                   |  |  |
|            | Students Achievement 2015-16 |               |                      |                       |                                   |  |  |
| 1          | Nikita Patil,                | PRO-JIT       | JIT Nashik           | 2 <sup>nd</sup> prize | College                           |  |  |

|   | D 1 ' IZ1 ( 1             | . 1               |                  |                       |          |
|---|---------------------------|-------------------|------------------|-----------------------|----------|
|   | Roshni Khatod,            | national          |                  |                       |          |
|   | Aakansha Patil            | level event       |                  |                       |          |
|   | Roshan                    |                   |                  |                       |          |
|   | Bhadane                   |                   |                  | ot                    |          |
| 2 | Amit Kumar                | METASTO           | MET Nashik.      | 1 <sup>st</sup> prize | -        |
|   | Yadav                     | RM-15             |                  |                       |          |
|   |                           | PROFUSED          |                  |                       |          |
|   |                           | event             |                  |                       |          |
| 3 | Amit Kumar                | Codes             | JIT Nashik       | 1 <sup>st</sup> prize | National |
|   | Yadav                     | compition         |                  |                       | Level    |
|   |                           | during            |                  |                       |          |
|   |                           | PROJIT            |                  |                       |          |
| 4 | Gayatri                   | NES               | NES Nashik       | Selected in           | National |
|   | Pardeshi,                 | Innovation        |                  | top 50                | Level    |
|   | Ruchira Pingale,          | Awards            |                  | projects              | Level    |
|   | Varsha Shirode,           | 2016 at           |                  | r ·J····              |          |
|   | Kamini Wagh               | Pune              |                  |                       |          |
| 5 | Archana                   | NES               | NES Nashik       | Selected in           | National |
|   | Sathyan                   | Innovation        | 1 (Lb) I (dsiiik | top 50                | Level    |
|   | Radhika Joshi             | Awards            |                  | projects              | Level    |
|   | Karan Pawar               | 2016 at           |                  | projects              |          |
|   | Hemant Karve              | pune              |                  |                       |          |
| 6 | Shruti Anantwar           | Dell              | _                | Top 17 out of         | National |
| 0 | Siliuti Alialitwai        |                   | _                | 100 17 out of         |          |
|   |                           | Campassado        |                  | 100                   | Level    |
| 7 | Vomal Cymalian            | r Program<br>MET  | MET Nashik       | First                 | State    |
| / | Komal Supekar             | NIRMAAN           | IVIET Nasilik    | FIISt                 |          |
|   | Priyanka Salve<br>Harshad |                   |                  |                       | Level    |
|   |                           | 2k16              |                  |                       |          |
|   | Chikhale                  |                   |                  |                       |          |
|   | Bhushan Kadam             | G4 1 4 . A . 1. 2 | 2014 1           |                       |          |
|   | 1                         |                   | ievement 2014-1  |                       | T        |
| 1 |                           | PROJIT            | JIT Nashik       | Third                 | College  |
|   | Dusane Mansi              | Competition       |                  |                       | Level    |
|   | Gawali Snehal             |                   |                  |                       |          |
| 2 | Amit Yadav                | PROJIT            | JIT Nashik       | Third                 | College  |
|   |                           | Competition       |                  |                       | Level    |
| 3 | Pawankumar                | PROJIT            | JIT Nashik       | Second                | College  |
|   | Bagul                     | Competition       | orr resime       | Second                | Level    |
|   | Pritam                    | Competition       |                  |                       | Level    |
|   | Narkhede                  |                   |                  |                       |          |
|   | TATRICAC                  | Students Achi     | ievement 2013-1  | <u>1</u>              |          |
| 1 | Nitnaware                 | National          | PICT, Pune.      | First                 | National |
| 1 |                           |                   | rici, ruile.     | 1,1121                |          |
|   | Umesh                     | level Open        |                  |                       | Level    |
|   |                           | Hardware          |                  |                       |          |
|   | TZ 1 ' TZ 1               | event             | DIIGGGE          | T'                    | AT / 1   |
| 2 | Kankria Varsha            | IGNITRA           | RHSCOE,          | First                 | National |
|   | Hulule Poonam             | 2014              | Nashik           |                       | Level    |
|   | Patil Kushbhu             |                   |                  |                       |          |

### 24. List of eminent academicians and scientists / visitors to the department:

| Sr. No. | Name of Visitor       | Academicians /Scientists / Visitors |
|---------|-----------------------|-------------------------------------|
| 1       | Dr. D. B. Pathak      | Scientists / Visitors               |
| 2       | Dr. Rajeev Papaneja   | Scientists / Visitors               |
| 3       | Mr. Sunil Khandbahale | Scientists / Visitors               |
| 5       | Mr. Vikash Naik       | Scientists / Visitors               |
| 6       | Mr. Suchit Tiwari     | Scientists / Visitors               |
| 7       | Dr. Manesh Kokare     | Academicians                        |
| 8       | Dr. S. S. Sane        | Academicians                        |
| 9       | Dr. V. H. Patil       | Academicians                        |
| 10      | Dr. M. U. Kharat      | Academicians                        |
| 11      | Dr. D. V. Patil       | Academicians                        |
| 12      | Dr. M. R. Sanghvi     | Academicians                        |

## 25. Seminars/ Conferences/Workshops organized & the source of funding:

### a) National-03

| Year    | Conferences organized | Source of funding |
|---------|-----------------------|-------------------|
| 2015-16 | MVP-Kshitij 2016      | Self-Financing    |
| 2014-15 | MVP-Kshitij 2015      | Self-Financing    |
| 2013-14 | MVP-Kshitij 2014      | Self-Financing    |

### 26. Student profile programme/course wise

| Year    | Admission in First Year | Enrolled |    | Pass       |
|---------|-------------------------|----------|----|------------|
|         |                         | *M *F    |    | Percentage |
| 2016-17 | 63                      | 31       | 32 | -          |
| 2015-16 | 62                      | 23       | 39 | 74.2       |
| 2014-15 | 58                      | 24       | 34 | 64.3       |
| 2013-14 | 59                      | 21       | 38 | 55.00      |

<sup>\*</sup>M = Male \*F = Female

### 27. Diversity of Students

| Year    | Percentage of students from same state | Percentage of<br>Students from<br>other state | Percentage of<br>Students from<br>abroad |
|---------|--|---|--|
| 2016-17 | 100                                    | -   | NIL                                      |
| 2015-16 | 98.38                                  | 1.62  | NIL                                      |
| 2014-15 | 100                                    | -   | NIL                                      |
| 2013-14 | 98.33                                  | 1.67  | NIL                                      |

## 28. How many students have cleared national and state competitive examinations such as NET, SET, GATE, Civil services, Defense services, etc.?

| Sr.<br>No. | Year    | Gate | C<br>A<br>T | CMAT | P<br>G<br>C<br>T | MPSC | P<br>W<br>D | Irrigation<br>Dept. | Z<br>P | Total |
|------------|---------|------|-------------|------|------------------|------|-------------|---------------------|--------|-------|
| 1          | 2016-17 | -    | -           | -    | -                | -    | -           | -                   | 1      | -     |
| 2          | 2015-16 | 01   | -           | -    | -                | -    | -           | -                   | -      | 01    |
| 3          | 2014-15 | 02   | -           | -    | -                | -    | -           | -                   | -      | 02    |
| 4          | 2013-14 | 02   | -           | -    | -                | -    | -           | -                   | -      | 02    |

### 29. Student progression 2016-17

| Student progression    |                   | Against % enrolled | Against % enrolled | Against % enrolled | Against % enrolled |
|------------------------|-------------------|--------------------|--------------------|--------------------|--------------------|
|                        |                   | 2013-14            | 2014-15            | 2015-16            | 2016-17            |
| PG to Ph.D.            |                   | Nil                | Nil                | Nil                | Nil                |
| Ph.D. to Pos           | st-Doctoral       | Nil                | Nil                | Nil                | Nil                |
| Employed               | Campus selection  | 16.66              | 14.86              | 26.92              | -                  |
|                        | Other than campus |                    | 15.29              | 13.25              | -                  |
| Recruitment            |                   |                    |                    |                    |                    |
| Entrepreneurship/Self- |                   | Nil                | Nil                | Nil                | Nil                |
| employmen              | t                 |                    |                    |                    |                    |

### **30.** Details of Infrastructural facilities(Department Library)

**a.** Library: 39.3 sq.m.

b. No. of Volumes Available: 45c. No. of Titles Available: 45

d. Internet facilities for Staff & Student:155Mbps Leased Line

e. Class rooms with ICT facility: 02

**f.** Laboratories :08

## 31. Number of students receiving financial assistance from college, university, government or other agencies:

| Academic Year | No.of students benifited under State/<br>Central Government |
|---------------|---|
| 2016-17       |   |
| 2015-16       | 176   |
| 2014-15       | 158   |
| 2013-14       | 165   |

# **32.** Details on student enrichment programmes (special lectures/workshops/seminar) with external experts2016-17

| Sr.<br>No. | Name of expert            | Name of event                                  | Lecture/Workshop/<br>Seminar |
|------------|---------------------------|--|------------------------------|
| 1          | Shubham Totla,            | Applied CS with Android workshop               | Workshop                     |
| 2          | Mr. A. B. Karode          | Traffic Awareness Training<br>Program          | Training Program             |
| 3          | Prof. S. R.<br>Pachorkar, | Motivational Seminar                           | Seminar                      |
| 4          | Prof. V. M. Birari        | Stress Management                              | Seminar                      |
| 5          | Mr. Vijayeta<br>Bhat      | Android App development<br>Workshop            | Workshop                     |
| 6          | Dr. Mahesh<br>Sanghvi     | Literature survey and<br>Mathematical Modeling | Seminar                      |
| 7          | Mr. Pankaj Singh          | Bigdata and Hadoop                             | Workshop                     |

### 2015-16

| Sr. No. | Name of expert     | Name of event              | Lecture/Workshop/<br>Seminar |
|---------|--------------------|----------------------------|------------------------------|
| 1       | Dr. D. V. Patil    | Mathematical Modelling     | Seminar                      |
| 2       | Mr. Ganesh Gudekar | One day workshop on Python | Seminar                      |

### 2014-15

| Sr.<br>No. | Name of expert                            | Name of event | Lecture/Workshop/<br>Seminar |
|------------|---|---------------|------------------------------|
| 1          | Dr. M. U. Kharat, HOD Department of       | Literature    | Seminar                      |
|            | Computer Engineering, MET's IOE<br>Nashik | survey        |                              |

## 2013-14

| Sr. | Name of expert                                    | Name of event                        | Lecture/Workshop/ |
|-----|---|--------------------------------------|-------------------|
| No  |   |                                      | Seminar           |
| 1   | Dr. M. B. Kokare<br>NDMVPS's KBTCOE,<br>Nashik    | Research Methodology                 | Workshop          |
| 2   | Mr. Atul Kahate Software<br>Consultant            | Cryptography and Network Security    | Seminar           |
| 3   | Ketan Lohar, WINJIT                               | .NET and cloud                       | Seminar           |
| 4   | Cybertech Global Learning<br>Solutions, New Delhi | Cyber Security & Penetration Testing | Workshop          |

### 33. Teaching methods adopted to improve student learning

- **a.** Improved lecture method (Use of PPTs and videos)
- **b.** Industrial visits

## 34. Participation in Institutional Social Responsibility (ISR) and Extension activities

- a. NSS
- **b.** Marathon
- c. Clean Godavari Abhiyan
- d. Swachchha Bharat Abhiyan
- **e.** Tree plantation
- **f.** Blood donation camp

#### 35. SWOC analysis of the department and Future plans

#### **Strengths:**

- a. Modern infrastructure available with Wi-Fi & LAN connectivity.
- **b.** Qualified, young dynamic and experienced team of faculty members with varied experience in areas of computing.
- **c.** State of the art computing facilities in 8 modern labs with exposures to latest hardware, various operating systems like windows, Linux and latest software as oracle, Java visual studio, Mat Lab, Rational Suite etc.
- **d.** Class rooms equipped with modern teaching aids like LCD projectors.
- **e.** Expert talks as well as workshop/seminar are arranged by students and faculties.
- **f.** Students are encouraged to undertake industrial and research oriented projects in various areas of expertise.
- **g.** 18 students per batch in practical to give special attention to individual students and to help them enhance their programming skills.
- **h.** Departmental library facilities available for staff and students.
- **i.** Attendance monitoring is based on intranet ERP.

#### Weaknesses:

- a. Industrial relationship
- **b.** Department lags in Research activities
- **c.** Limited alumni and development programs
- d. Less funding received
- e. Lack of advanced training programs to faculty
- **f.** No collaboration with other universities

#### **Opportunities:**

- **a.** PG program for Computer Engineering
- **b.** Development in research activities
- **c.** Parents, Alumni and development programs
- **d.** Consultancy work can be started in different areas

### **Challenges:**

- a. Less IT industries in Nashik
- **b.** Large number of institutes and decreasing quality of education

### **Future plans:**

- a. NBA/NAAC/ISO accreditation
- **b.** Post Graduation Course in Computer Engg.
- **c.** To improve research related activities
- **d.** To acquire funds
- e. To establish Industry Institute Interaction Cell
- **f.** To provide consultancy

### INSTRUMENTATION & CONTROL ENGINEERING

| 1. | Name of the department  | Instrumentation and Control<br>Engineering                |
|----|---|---|
| 2. | Year of Establishment   | 1999  |
| 3. | Names of Programmes / Courses offered (UG, PG, M.Phil., Ph.D.,Integrated Masters; Integrated Ph.D., etc.) | Under Graduate in Instrumentation and Control Engineering |
| 4. | Names of Interdisciplinary coursesand the departments/units involved                                      | Yes   |
| 5. | Annual/ semester/choice based credit system (programme wise)  | FE & SE Semester credit system TE & BE Semester System    |
| 6. | Participation of the department in the courses offered by other departments                               | Yes   |
| 7. | Courses in collaboration with other universities, industries, foreign institutions etc.                   | Nil   |
| 8. | Details of courses/programmes<br>discontinued (if any) with reasons                                       | Nil   |

### 9. Number of teaching posts

| Post                 | Sanctioned |    |
|----------------------|------------|----|
| Professors           | 01         | 02 |
| Associate Professors | 03         | 01 |
| Assistant Professors | 07         | 10 |

# 10. Faculty profile with name, qualification, designation, specialization, (D.Sc./D.Litt./Ph.D. / M. Phil. etc.,)

| Name of<br>Staff | Qualification | Designation | Specializa-<br>tion | No. of<br>Years of<br>Experi-<br>ence | No. of Ph. D<br>Students<br>Guided for the<br>last 4 Years |
|------------------|---------------|-------------|---------------------|---------------------------------------|--|
| Dr. K. S.        | Ph.D.(Instru  | Principal   | Model               | 25                                    | Nil  |
| Holkar           | mentation)    |             | Predictive          |                                       |  |
|                  |               |             | Control             |                                       |  |
| Dr. B. B.        | Ph.D. (       | Professor   | Process             | 20                                    | 01 (Co-guide   |
| Musmade          | Instrumentati |             | Control,            |                                       | at COEP)   |
|                  | on)           |             | Sliding             |                                       |  |
|                  |               |             | Mode                |                                       |  |
|                  |               |             | Control             |                                       |  |

| Dr. N. S.   | M.E.(         | Professor | Control     | 16 | Nil |
|-------------|---------------|-----------|-------------|----|-----|
| Patil       | Instrumentati |           | System,     |    |     |
|             | on &          |           | Stochastic  |    |     |
|             | Control),     |           | Control     |    |     |
|             | PhD (Elect.   |           | Systems     |    |     |
|             | Engg.)        |           |             |    |     |
| Prof. S. H. | M.E.          | Associate | Process     | 17 | Nil |
| Jadhav      | (Instrumentat | Professor | Modeling,   |    |     |
|             | ion), PhD     |           | Network     |    |     |
|             | Pursuing      |           | Theory      |    |     |
| Dr. A. R.   | M.E.(         | Assistant | Process     | 18 | Nil |
| Kulkarni    | Instrumentati | Professor | Instrument  |    |     |
|             | on &          |           | ation       |    |     |
|             | Control),     |           |             |    |     |
|             | PhD (Elect.   |           |             |    |     |
|             | Engg.)        |           |             |    |     |
| Prof. Y. P. | M. Tech (     | Assistant | Biomedica   | 14 | Nil |
| Patil       | Instrumentati | Professor | 1           |    |     |
|             | on &          |           | Instrument  |    |     |
|             | Control),     |           | ation,      |    |     |
|             | PhD Pursuing  |           | Control     |    |     |
|             |               |           | Systems     |    |     |
| Prof. A. K. | M.E.(         | Assistant | Drives &    | 15 | Nil |
| Patil       | Instrumentati | Professor | Control,    |    |     |
|             | on &          |           | Process     |    |     |
|             | Control),     |           | Engg. &     |    |     |
|             | PhD Pursing   |           | Manageme    |    |     |
|             |               |           | nt          |    |     |
| Prof. S. R. | M.E.(         | Assistant | Analytical  | 14 | Nil |
| Pandit      | Instrumentati | Professor | &           |    |     |
|             | on &          |           | Biomedica   |    |     |
|             | Control)      |           | 1           |    |     |
|             |               |           | Instrument  |    |     |
|             |               |           | ation       |    |     |
| Prof. S. D. | M.E.(         | Assistant | Digital &   | 15 | Nil |
| Nikam       | Instrumentati | Professor | Embedded    |    |     |
|             | on &          |           | Systems,    |    |     |
|             | Control)      |           | Building    |    |     |
|             |               |           | Automatio   |    |     |
|             |               |           | n           |    |     |
| Prof. V. A. | M.E.(         | Assistant | Electronics | 20 | Nil |
| Ahirrao     | Instrumentati | Professor | Instrument  |    |     |
|             | on mentation) |           | ation,      |    |     |

|             |               |           | Optical      |    |     |
|-------------|---------------|-----------|--------------|----|-----|
|             |               |           | Instrument   |    |     |
|             |               |           | ation        |    |     |
| Prof. D. B. | M.E.(         | Assistant | Sensors &    | 13 | Nil |
| Ghodke      | Instrumentati | Professor | Transducers  |    |     |
|             | on &          |           | Agricultural |    |     |
|             | Control)      |           | Instrumenta  |    |     |
|             | Coming        |           | tion         |    |     |
| Prof. S. B. | M.E.(         | Assistant | Digital      | 06 | Nil |
| Lukare      | Instrumentati | Professor | Signal       |    |     |
|             | on &          |           | Processing   |    |     |
|             | Control)      |           | , Digital    |    |     |
|             |               |           | Control      |    |     |
| Prof. G. B. | M.Sc.,        | Assistant | Engineering  | 03 | Nil |
| Bahare      | (Org.Chemist  | Professor | Chemistry    |    |     |
|             | ry) B.Ed,     |           |              |    |     |
|             | NET           |           |              |    |     |
| Prof.P. V.  | ME            | Assistant | Basic Ele.   | 04 | Nil |
| Joshi       | (Electrical)  | Professor | Engineering  |    |     |

## 11. List of senior visiting faculty

| Sr. No. | Name of Faculty  |
|---------|--|
| 1.      | Mr. Pralhad G. Dhumal, General Manager- Drives & Business, Fox Solutions, Nashik.      |
| 2.      | Ms. Sujata D. Tidame, Sr. Engineer, Multiquadrant Ind. Controls (I) Pvt. Ltd., Nashik. |

# 12. Percentage of lectures delivered and practical classes handled(programme wise) by temporary faculty: NA

| Sr. No | Name of Faculty | Lecture/Practical | Percentage |  |
|--------|-----------------|-------------------|------------|--|
| Nil    |                 |                   |            |  |

### 13. Student - Teacher Ratio (programme wise)

| Sr.<br>No. | Academic<br>Year | Total No. of<br>Students | Total No. of<br>Staff | Student Teacher<br>Ratio |
|------------|------------------|--------------------------|-----------------------|--------------------------|
| 1          | 2016-17          | 160                      | 13                    | 12:1                     |
| 2          | 2015-16          | 160                      | 13                    | 12:1                     |
| 3          | 2014-15          | 160                      | 13                    | 12:1                     |
| 4          | 2013-14          | 160                      | 13                    | 12:1                     |

## 14. Number of academic support staff (technical) and administrative staff; sanctioned and filled

| Sr. No | Type of Staff       | Sanctioned | Filled |
|--------|---------------------|------------|--------|
| 01     | Technical Assistant | 03         | 03     |
| 02     | Attendant           | 01         | 01     |

## 15. Qualifications of teaching faculty with DSc / D.Litt/ Ph.D/ MPhil / PG. – PhD-04, PhD (Registered) – 03, PG-07.

# 16. Number of faculty with ongoing projects from a) National b) International funding agencies and grants received

| Sr. No. | Name of         | National /International funding     | Grant      |
|---------|-----------------|-------------------------------------|------------|
|         | Faculty         | agencies                            | Received   |
| 1       | Dr. N. S. Patil | National- Asst. Coordinator         | 1.5 Crore  |
|         |                 | M V P Design Innovation Center –    |            |
|         |                 | Spoke Center (Sponsored by S P Pune |            |
|         |                 | University and MHRD New Delhi       |            |
| 2       | Prof. S. H.     | University-BCUD, SPPU Pune.         | 1.40 Lakhs |
|         | Jadhav          |                                     |            |

# 17. Departmental projects funded by DST - FIST; UGC, DBT, ICSSR, etc. and total grants received

| Sr. No | Name of Project   | DST-FIST / UGC/ DBT/      | <b>Grant Received</b> |
|--------|-------------------|---------------------------|-----------------------|
|        |                   | ICSSR/ Others             |                       |
| 1      | Dr. B. B. Musmade | BCUD – university of Pune | 50,000/-              |

### 18. Research Centre/facility recognized by the University

| Sr. No. | Name of Research Centre/facility |  |  |
|---------|----------------------------------|--|--|
| Nil     |                                  |  |  |

#### 19. Publications

| 1 | Publication per faculty 0.93                   |     |
|---|--|-----|
| 2 | Number of papers published in peer reviewed    | 13  |
|   | journals by faculty and students               |     |
| 3 | Number of Publications listed in International | 45  |
|   | Database                                       |     |
| 4 | Monographs                                     | 00  |
| 5 | Chapter in Books                               | 01  |
| 6 | Books Edited                                   | Nil |
| 7 | Books with ISBN/ISSN number with details of    | Nil |
| , | Publisher                                      |     |

| 8  | Citation Index | 147            |
|----|----------------|----------------|
| 9  | SNIP           | -              |
| 10 | SJR            | -              |
| 11 | Impact factor  | 2.327(highest) |
| 12 | H-Index        | 07             |

### 20. Areas of consultancy and income generated

| Sr. No. | Area of Consultancy | Income Generated |
|---------|---------------------|------------------|
|         | Nil                 |                  |

# 21. Faculty as members in a)National Committees, b)International Committees, c) Editorial Boards

| Sr. No. | Name of<br>Faculty   | Member of National / International Committees /<br>Editorial Boards   |
|---------|----------------------|---|
| 1       | Dr. B. B.<br>Musmade | Member, Board of Studies, Instrumentation & Control Engg., SPPU, Pune Member, Board of Studies, Instrumentation Engg., GCOE, Jalgaon (Autonomous Institute). Session Chair, IEEE ICIC 2015 at COE Pune. |
| 2.      | Dr. N. S.<br>Patil   | Education Officer of Maratha Vidya Prasarak Samaj,<br>Nashik.   |

### **22. Student projects (AY:2016-17)**

| Sr. No  | Name   | Percentage |
|---|--|------------|
| 1   | Percentage of students who have done in-house          |            |
| 1   | projects including inter departmental/programme        |            |
| Percentage of students placed for projects in |  | 57.50      |
| 2   | organizations outside the institution i.e. in Research |            |
|   | laboratories/Industry/ other agencies                  |            |

# 23. Awards / Recognitions received by faculty and students Summary (2013-14, 2014-15, 2015-16, 2016-17)

| Sr.<br>No. | Name of<br>Faculty/<br>Student | Event<br>Name   | Name of<br>Organizer                 | Prize/<br>Achievement | State/<br>National/<br>International |
|------------|--------------------------------|-----------------|--------------------------------------|-----------------------|--------------------------------------|
| 1          | Dr. K. S.<br>Holkar            | Best<br>Teacher | SPPU                                 | Best Teacher          | University<br>Level (SPPU)           |
| 2          | Mrs. P. A.<br>Muttha           | Cricket         | Inter Zone,<br>University of<br>Pune | Sportsman             | University<br>Level                  |

### 24. List of eminent academicians and scientists / visitors to the department:

| Sr. No. | Name of Visitor      | Academicians /Scientists/Visitors  |
|---------|----------------------|--|
| 1       | Mr. Henry Hans       | Industrialist-Emerson Global Head  |
| 2       | Mr. Rajesh Bhave     | Industrialist-Emerson Pune-Vice Presient   |
| 3       | Mr. Shirish Chapekar | Industrialist-Emerson, Nashik-Director   |
| 4       | Dr. Pankaj Koinkar   | Faculty of Tukushima University Japan  |
| 5       | Mr. Sunil Jadhav     | Instru. Manager, Emerson Dubai.  |
| 6       | Mr. Sameer Patil     | Director-Sigma Controls Automation Pune  |
| 7       | Dr. P. S. V. Natraj  | Professor, IIT Mumbai  |
| 8       | Mr. A. K. Das        | "Mumbai Monorail Project – Challenges in Design, Construction and Financing" by Mr. A. |
|         |                      | K. Das, Project Director at Louis Berger Group of                                      |
|         |                      | Consultants.   |

### 25. Seminars/ Conferences/Workshops organized & the source of funding:

- a. National-Nil
- b. International- IET Nashik Local Network; (AY 2015-16) Total Amount Rs. 10,000=00

### 26. Student profile programme/course wise

| Year    | Admission in First | Enro | lled | Pass Percentage |
|---------|--------------------|------|------|-----------------|
|         | Year               | *M   | *F   |                 |
| 2016-17 | 12                 | 8    | 4    | -               |
| 2015-16 | 27                 | 18   | 9    | 62.96           |
| 2014-15 | 30                 | 24   | 6    | 42.85           |
| 2013-14 | 22                 | 16   | 6    | 47.61           |

<sup>\*</sup>M = Male \*F = Female

### 27. Diversity of Students

| Year    | Percentage of      | Percentage of       | Percentage of Students |
|---------|--------------------|---------------------|------------------------|
|         | students from same | Students from other | from abroad            |
|         | state              | state               |                        |
| 2016-17 | 100                | Nil                 | Nil                    |
| 2015-16 | 100                | Nil                 | Nil                    |
| 2014-15 | 100                | Nil                 | Nil                    |
| 2013-14 | 100                | Nil                 | Nil                    |

## 28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defense services, etc.?

| Sr. No. | Academic Year | GATE | CMAT |
|---------|---------------|------|------|
| 1       | 2015-16       | 02   | -    |
| 2       | 2014-15       | 00   | 03   |
| 3       | 2013-14       | 01   | 02   |

### 29. Student progression (2015-16)

| Student progression              |                   | Against % enrolled |
|----------------------------------|-------------------|--------------------|
| PG to Ph.D.                      |                   | 03                 |
| Ph.D. to Post-Doctoral           |                   | 00                 |
| Employed                         | Campus selection  | 10                 |
|                                  | Other than campus | 13                 |
| Recruitment                      |                   |                    |
| Entrepreneurship/Self-employment |                   | 00                 |

### 30. Details of Infrastructural facilities

a. Department Library: 01

b. No. of Volumes Available: 317c. No. of Titles Available: 177

**d.** Area 33.00 sq. m.

e. Internet facilities for Staff & Student: 155 Mbps Leased Line, VPN

**f.** Class rooms with ICT facility: 03

g. Laboratories: 08

## 31. Number of students receiving financial assistance from college, university, government or other agencies: 03

| Academic Year | State/ Central Government |
|---------------|---------------------------|
| 2016-17       |                           |
| 2015-16       | 91                        |
| 2014-15       | 64                        |
| 2013-14       | 68                        |

#### 2016-17

| Sr. No. | Name of Company          | Amount           | Students  |
|---------|--------------------------|------------------|---|
|         |                          | Sanctioned (Rs.) |   |
| 1       | Excel Industries, Mumbai | 35,000/-         | Kasturkar Sagar<br>Samadhan Joshi<br>Vikram Bhosale |

# **32.** Details on student enrichment programmes (special lectures/workshops/ seminar) with external experts

### 2016-17:

| Sr. | Name of expert         | Name of event                  | Lecture/  |
|-----|------------------------|--------------------------------|-----------|
| No. |                        |                                | Workshop/ |
|     |                        |                                | Seminar   |
| 1   | Milind Bhavsar         | PLC, SCADA Training            | Workshop  |
|     | Visionary Automation,  |                                |           |
|     | Nashik                 |                                |           |
| 2   | Aniruddha Sanwatsare   | Embedded Systems &             | Lecture   |
|     |                        | Applications                   |           |
| 3   | Dr. Omprakash Kulkarni | Opportunities for              | Lecture   |
|     |                        | Instrumentation and Control    |           |
|     |                        | Engineers                      |           |
| 4   | Dr. Vinod Parekh       | Attitude, Skills and Knowledge | Workshop  |
| 5   | Dr. Vinod Parekh       | Review Session on Workshop     | Workshop  |
| 6   | Dr. Ajit Thete         | Outcome Based Education        | Seminar   |

### 2015-16

| Sr.<br>No. | Name of expert                            | Name of event                           | Lecture/<br>Workshop/<br>Seminar |
|------------|---|---|----------------------------------|
| 1          | Mr. Suresh Bandekar                       | Comparisons of Power Plants             | Lecture                          |
| 2          | Mr. Sahebrao Patil                        | Instrumentation in Thermal Power Plants | Seminar                          |
| 3          | Mr. Umesh Gupta                           | HPC Research & Career                   | Lecture                          |
| 4          | Saurabh Karandikar                        | DeltaV DCS Fundamentals                 | Workshop                         |
| 5          | Milind Bhavsar<br>Visionary Tech., Nashik | Industrial Automation using PLC & SCADA | Workshop                         |
| 6          | Dr. Vishwesh Vywahare                     | Advanced Topics in Control              | Workshop                         |
|            | Dr. Mukesh Patil                          | Systems                                 |                                  |
|            | Dr. Kailas S. Holkar                      |   |                                  |
|            | Dr. Nanasaheb S. Patil                    |   |                                  |

### 2014-15

| Sr.<br>No. | Name of expert       | Name of event                          | Lecture/<br>Workshop/<br>Seminar |
|------------|----------------------|--|----------------------------------|
| 1          | Mr. Prashant Shewale | Career Guidance                        | Seminar                          |
| 2          | Mr. Sahebrao Patil   | Instrumentation In Thermal Power plant | Lecture                          |

| 3 | Ms. Punam Borah    | DCS & PLC Overview    | Workshop |
|---|--------------------|-----------------------|----------|
|   | Mr. Vinay Raju     |                       |          |
| 4 | Mr. Nitin Nikam    | Get Ready For success | Lecture  |
| 5 | Mr. Pralhad Dhumal | Interview Techniques  | Lecture  |

#### 2013-14

| Sr.<br>No. | Name of expert                       | Name of event                                    | Lecture/<br>Workshop/<br>Seminar |
|------------|--------------------------------------|--|----------------------------------|
| 1          | Mr. Sunil Jadhav                     | Scope of Delta V DCS in Industrial<br>Automation | Lecture                          |
| 2          | Mr. Ajinkya Patil                    | Scope of engineers in Astronomy                  | Lecture                          |
| 3          | Mr. Nitin Lokhande                   | Industrial Automation: Job<br>Opportunities      | Lecture                          |
| 4          | Mr. Atul Gupta<br>Mr. Vijay Patil    | Brit US Spoken English                           | Seminar                          |
| 5          | Mr.Deepak Jain<br>Mr.Saurabh Salotra | Automation a booming field                       | Seminar                          |

#### 33. Teaching methods adopted to improve student learning

Improved Lecture Method by Power Point Presentation, Video Lectures, Story Telling, Quizzes.

## 34. Participation in Institutional Social Responsibility (ISR) and Extension activities

NSS activites, Swachha Bharat Abhiyan, Godawari Swachha Abhiyan, MVP-Marathon.

# **35.** SWOC analysis of the department and Future plans Strength:

- **a.** Faculty has a commitment to quality, dedication and work ethics.
- **b.** Experienced Faculty with expertise in specialized topics.
- **c.** Faculty having exposure with some premium institutes.

#### Weakness:

- a. Soft Skills of students.
- **b.** Less participation in Competitive Examinations.
- c. Coordination with Alumni and Industry.

#### **Opportunities:**

- a. Associations with reputed companies.
- **b.** Automation trainings as per changing demands of industries.
- c. Professional society activities.
- d. Consultancy Services

### **Challenges:**

- **a.** Bridging gap between theory and practice.
- **b.** Awareness of branch.
- **c.** Quality of incoming students

#### **Future Plan:**

- Increase interaction and collaboration with industry.
- To upgrade and strengthen all the laboratories so as to promote research and development activities in the field of Automation.
- To conduct postgraduate courses in various fields of Instrumentation and Control Engineering.
- To become a Ph.D. recognized centre for Instrumentation and Control Engineering.
- To be a centre of excellence in the field of Automation through education, research and development.

### **ELECTRONICS & TELECOMMUNICATION ENGINEERING**

| 1 | Name of the Department                 | Electronics &                        |
|---|--|--------------------------------------|
|   |  | <b>Telecommunication Engineering</b> |
| 2 | Year of Establishment                  | 2002                                 |
|   |  |                                      |
| 3 | Names of Programmes / Courses          | UG                                   |
|   | offered(UG, PG, M.Phil.,               |                                      |
|   | Ph.D.,Integrated Masters; Integrated   |                                      |
|   | Ph.D., etc.)                           |                                      |
| 4 | Names of Interdisciplinary courses and | Yes                                  |
|   | the departments/units involved         |                                      |
| 5 | Annual/ semester/choice based credit   | FE & SE Semester credit system       |
|   | system (programme wise)                | TE & BE Semester System              |
| 6 | Participation of the department in the | Yes                                  |
|   | courses offered by other departments   |                                      |
| 7 | Courses in collaboration with other    | Nil                                  |
|   | universities, industries, foreign      |                                      |
|   | institutions etc.                      |                                      |
| 8 | Details of courses/programmes          | Nil                                  |
|   | discontinued (if any) with reasons     |                                      |

### 9. Number of Teaching posts

| Post                 | Sanctioned | Filled |
|----------------------|------------|--------|
| Professors           | 01         | 00     |
| Associate Professors | 03         | 04     |
| Asst. Professors     | 10         | 12     |

# 10. Faculty profile with name, qualification, designation, specialization, (D.Sc./D.Litt./Ph.D. / M. Phil. etc.,)

| Name of Staff         | Qualifica-<br>tion            | Designation            | Specialization    | No. of<br>Years of<br>Experi-<br>ence | No of<br>Ph.D<br>Students<br>Guided<br>for the<br>last 4<br>Years |
|-----------------------|-------------------------------|------------------------|-------------------|---------------------------------------|---|
| Prof. V. M.<br>Birari | Ph.D. (pursuing) M.Tech., BE. | Associate<br>Professor | Wireless<br>Comm. | 24                                    | Nil   |

| Prof. B. N.       | M.Tech.,      | Associate | Signal          | 18.2 | Nil  |
|-------------------|---------------|-----------|-----------------|------|------|
| Shinde            | BE.           | Professor | Processing      |      |      |
| Prof. A. P.       | Ph.D.         | Associate | Digital         | 18   | Nil  |
| Meshram           | (pursuing)    | Professor | Electronics     |      | 1,11 |
|                   | M.E., B.E.    |           |                 |      |      |
| Prof. B. J. Pawar | Ph.D.         | Assistant | Analog &        | 12   | Nil  |
|                   | (pursuing)    | Professor | Power           |      |      |
|                   | M.E., B.E.    |           | Electronics     |      |      |
| Prof. S. A.       | M.E., B.E.    | Assistant | Microprocess    | 11.3 | Nil  |
| Dhumane           | ,             | Professor | or &            |      |      |
|                   |               |           | Microcontroller |      |      |
| Prof. A. R.       | M.Tech,       | Assistant | Signal          | 13   | Nil  |
| Chaudhari         | BE.           | Professor | Processing      |      |      |
| Prof. B. N.       | Ph.D.         | Assistant | Communicati     | 08   | Nil  |
| Rajole            | (pursu)       | Professor | on              |      |      |
|                   | M.E., B.E.    |           | Engineering     |      |      |
| Prof. S. M.       | Ph.D.         | Assistant | Signal          | 13.2 | Nil  |
| Jagtap            | (pursu)       | Professor | Processing      |      |      |
|                   | M.E., B.E.    |           |                 |      |      |
| Prof. V. P.       | Ph.D.         | Assistant | VLSI            | 13.3 | Nil  |
| Gawai             | (pursu)       | Professor |                 |      |      |
|                   | M.E., B.E.    |           |                 |      |      |
| Prof. D. V. Patil | M.E., B.E.    | Assistant | VLSI &          | 9.4  | Nil  |
|                   |               | Professor | Embedded        |      |      |
| Prof. T. S.       | M.E., B.E.    | Assistant | VLSI &          | 8.5  | Nil  |
| Deshmukh          |               | Professor | Embedded        |      |      |
| Prof.V.R.         | M.E., B.E.    | Assistant | Communication   | 3    | Nil  |
| Sonawane          |               | Professor | Engineering     |      |      |
| Prof.S.M.         | M.E., B.E.    | Assistant | Communication   | 3    | Nil  |
| Dharrao           |               | Professor | Engineering     |      |      |
| Prof. G. R.       | M.Sc.         | Assistant | Engineering     | 4    | Nil  |
| Thorat            | (Phy)         | Professor | Physics         |      |      |
| Prof. V. A.       | M.Sc.         | Assistant | Engineering     | 9    | Nil  |
| Tamboli           | (Mathematics) | Professor | Mathematics     |      |      |
| Non Teaching Sta  | aff           |           | •               |      |      |
| M C C C 1         | D: 1 :        | m 1 · ·   | T 1             | 11   | NT'1 |
| Mrs. S. S. Gade   | Diploma in    | Technical | Ind.            | 11   | Nil  |
|                   | I.            | Assistant | Electronics     |      |      |
| ) / D /           | Electronics   | m 1 · ·   | TI.             | 0.2  | NT'1 |
| Mrs. D. A.        | Diploma in    | Technical | Electronics     | 8.3  | Nil  |
| Jadhav            | Electronics   | Assistant |                 | 0.6  | 2711 |
| Mr. V. B.         | Diploma in    | Technical | Computer        | 9.6  | Nil  |
| Thakare           | Computer      | Assistant |                 |      |      |

| Mr. D. U.        | B.E. E        | Technical | Electronics & | 7.6 | Nil |
|------------------|---------------|-----------|---------------|-----|-----|
| Chaudhari        | &TC           | Assistant | Telecommun    |     |     |
|                  |               |           | ication       |     |     |
| Mrs. A. K.       | B.E. E        | Technical | Electronics & | 3   | Nil |
| Pangavhane       | &TC           | Assistant | Telecommun    |     |     |
|                  |               |           | ication       |     |     |
| Mrs. S. S. Mogal | Diploma in    | Technical | Electronics & | 2.5 | Nil |
|                  | E&TC          | Assistant | Telecommun    |     |     |
|                  |               |           | ication       |     |     |
| Mr. D.R. Handge  | Diploma in    | Technical | Ind.          | 11  | Nil |
|                  | I.Electronics | Assistant | Electronics   |     |     |
|                  | Post          |           |               |     |     |
|                  | Diploma in    |           |               |     |     |
|                  | Telematics    |           |               |     |     |

### 11. List of senior visiting faculty\*

| Sr. No | Name of Faculty                                     |
|--------|---|
| 1.     | Mrs. Archana Wadnere from SEED INFO, Nashik         |
| 2.     | Mr. Amol Deshmukh, Rishabh Instrument, Nashik.      |
| 3      | Mr. Parag Salvekar, Jai Gajanan DIGI Trains, Nashik |
| 4      | Mrs. Monalisa Jain, Counstant.                      |
| 5      | Mr. Gordan Narolla, Counstant.                      |
| 6      | Mr. Bachhav Prashant, Arya Robotics, Nashik.        |
| 7      | Mr. Shrikant Atkarne, NI2, Pune.                    |
| 8      | Mr. Ajinkya Patil , Scientist, Netharland.          |
| 9      | Mr. Ravi Bodhani, Trainer, Wisdom Solutions, Pune   |
| 10     | Mr. Rohit Parmar, Trianer, Mumbai.                  |

<sup>\*</sup>Eminent persons visited to Department

# 12. Percentage of lectures delivered and practical classes handled(programme wise) by temporary faculty

| Sr. No | Name of Faculty | Lecture/Practical | Percentage |
|--------|-----------------|-------------------|------------|
|        | Nil             |                   |            |

## 13. Student -Teacher Ratio (Programme wise)

| Sr.<br>No | Academic<br>Year | Total No. of<br>Students | Total No. of<br>Staff | Student Teacher<br>Ratio |
|-----------|------------------|--------------------------|-----------------------|--------------------------|
| 1         | 2016-17          | 240                      | 16                    | 15:1                     |
| 2         | 2015-16          | 240                      | 16                    | 15:1                     |
| 3         | 2014-15          | 240                      | 16                    | 15:1                     |

| 1 | 2013-14 | 240 | 16 | 15:1 |
|---|---------|-----|----|------|
| - |         |     |    |      |

# 14. Number of academic support staff (technical) and administrative staff; sanctioned and filled

| Sr. No. | Type of Staff       | Sanctioned | Filled |
|---------|---------------------|------------|--------|
| 1       | Technical Assistant | 7          | 7      |
| 2       | Technician          | 2          | 2      |
| 3       | Nonteaching         | 2          | 2      |

### 15. Qualifications of teaching faculty with

Ph.D. = 00

Ph. D. (Registered) = 07

PG = 09

# 16. Number of faculty with ongoing projects from a) National b) International funding agencies and grants received

| Sr. No | Name of Faculty | National /International funding agencies | Grant<br>Received |
|--------|-----------------|--|-------------------|
|        |                 | Nil                                      |                   |

# 17. Departmental projects funded by DST - FIST; UGC, DBT, ICSSR, etc. and total grants received

| Sr. No | Year | Name of Project | DST-FIST /<br>UGC/ DBT/<br>ICSSR/ Others | Grant<br>Received |
|--------|------|-----------------|--|-------------------|
|        |      | Nil             |  |                   |

### 18. Research Centre/facility recognized by the University

| Sr. No | Name of Research Centre/facility |
|--------|----------------------------------|
|        | Nil                              |

#### 19. Publications

| 1  | Publication per faculty                                 | 1  |
|----|---|----|
| 2. | Number of papers published in peer reviewed journals by | 18 |
|    | faculty and students                                    |    |
| 3  | Number of Publications listed in International Database | 11 |
| 4  | Monographs  | -  |
| 5  | Chapter in Books  | -  |
| 6  | Books Edited  | -  |
| 7  | Books with ISBN/ISSN number with details of Publisher   | 03 |
| 8  | Citation Index  | -  |

| 9  | SNIP          | - |
|----|---------------|---|
| 10 | SJR           | - |
| 11 | Impact factor | - |
| 12 | H-Index       | - |

### 20. Areas of consultancy and income generated

| Sr. No | Area of Consultancy | Income Generated |
|--------|---------------------|------------------|
|        | Nil                 |                  |

# 21. Faculty as members in a)National Committees, b)International Committees, c) Editorial Boards

| Sr. No | Name of Faculty       | Member of National / International<br>Committees / Editorial Boards |
|--------|-----------------------|---|
| 1      | Prof. V. M. Birari    | Member of LIC committee of SPPU, Pune                               |
| 2      | Prof. B. N. Shinde    | Member of LIC committee of SPPU, Pune                               |
| 3      | Prof. A. P. Meshram   | Member of LIC committee of SPPU, Pune                               |
| 4      | Prof. H. V. Patil     | Member of LIC committee of SPPU, Pune                               |
| 5      | Prof. V. M. Birari    | Chairman / Paper setter for Exam of SPPU,<br>Pune                   |
| 6      | Prof. A. P. Meshram   | Chairman / Paper setter for Exam of SPPU,<br>Pune                   |
| 7      | Prof. A. R. Chaudhari | Chairman / Paper setter for Exam of SPPU,<br>Pune                   |

### 22. Student projects

| Sr. No.  | Name   | Year    | Percentage |
|----------|--|---------|------------|
| 1        | Percentage of students who have done in-   | 2016-17 | 84         |
|          | house projects including inter departmental/programme  | 2015-16 | 100        |
|          |  | 2014-15 | 89         |
|          |  | 2013-14 | 92         |
| 2        | Percentage of students placed for projects in  | 2016-17 | 16         |
| <u> </u> | organizations outside the institution i.e. in Research laboratories/Industry/ other agencies | 2015-16 | 0          |
|          |  | 2014-15 | 11         |
|          |  | 2013-14 | 8          |

### 23. Awards / Recognitions received by faculty and students Summary

| Sr. | Name of     | <b>Event Name</b> | Name of   | Prize/       | State/        |
|-----|-------------|-------------------|-----------|--------------|---------------|
| No. | Faculty     |                   | Organizer | Achievement  | National/     |
|     | /Student    |                   |           |              | International |
| 1   | Prof. V. M. | Paper             | IEEE Pune | Best paper   | International |
| 1   | Birari      | Presentation at   | chapter   | presentation | conference    |
|     |             | Int. Conference   |           |              |               |

## 24. List of eminent academicians and scientists / visitors to the department:

| Sr.<br>No | Year    | Name of Visitors       | Academicians and scientists/<br>visitors |
|-----------|---------|------------------------|--|
| 1         |         | Mr. B.A. Patil         | Visitors                                 |
| 2         |         | Mr. Amol Deshmukh      | Visitors                                 |
| 3         |         | Mrs. Archana Wadnere   | Academicians                             |
| 4         | 2016-17 | Mr. Parag Salvekar     | Visitors                                 |
| 5         |         | Mrs. Monalisa Jain     | Visitors                                 |
| 6         |         | Mr. Gordan Noronha     | Visitors                                 |
| 7         |         | Mr. Shrikant Atkarne   | Visitors                                 |
| 8         |         | Mr. Bachhav Prashant   | Visitors                                 |
| 9         |         | Mrs. Monalisa Jain     | Visitors                                 |
| 10        | 2015-16 | Mr. Shrikant Atkarne   | Visitors                                 |
| 11        |         | Mr. A. H. Patil.       | Scientist                                |
| 12        |         | Mr. Parag Salvekar     | Scientist                                |
| 13        |         | Mr. Ravi Bodane, Pune  | Visitors                                 |
| 14        | 2014-15 | Mr. Rohit Parmar, Pune | Visitors                                 |
| 15        | 2014-13 | Mr. Ram Kulkarni       | Academicians                             |
| 16        |         | Mr. Shrikant Atkarne   | Visitors                                 |
| 17        |         | Mr. Deepak Jain        | Visitors                                 |
| 18        |         | Mr. Ravi Bodhani, Pune | Visitors                                 |
| 19        |         | Mr. SagarNikam, Nashik | Academicians                             |
| 20        | 2013-14 | Dr. V. M. Wadhai       | Academicians                             |
| 21        | 2013-14 | Mr., Ajay Badve Nashik | Visitors                                 |
| 22        |         | Mrs. AshwiniDeshpande  | Visitors                                 |
| 23        |         | Mr. Sanjay Choudhari   | Visitors                                 |
| 24        |         | Mr. Gajendra Medhi     | Visitors                                 |

## 25. Seminars/ Conferences/Workshops organized & the source of funding:

### a. National-

#### b. International-

| Sr. No. | Year   | Title   | Funded By           | Grants       |
|---------|--|---|---------------------|--------------|
| 1       | 2016-17<br>30Jan to 4<br>Feb.2017            | CMOS & Mixed Signal<br>& Radio Frequency<br>VLSI Design | NMEICT, Delhi       | Rs.100000/-  |
| 2       | 2016-17                                      | CMOS Circuit Design using MICROWIND                     | BCUD, SPPU,<br>Pune | Rs. 100000/- |
| 3       | 2014-15<br>(2 <sup>nd</sup> to 12<br>Jan.14) | Signals and System workshop                             | NMEICT, Delhi       | Rs.102929/-  |

### 26. Student profile programme/course wise

| Year    | Admission in | Enrolled |    | Pass Percentage |
|---------|--------------|----------|----|-----------------|
|         | First Year   | *M       | *F |                 |
| 2016-17 | 42           | 15       | 27 | NA              |
| 2015-16 | 58           | 23       | 35 | 74.57           |
| 2014-15 | 60           | 20       | 40 | 75.43           |
| 2013-14 | 62           | 23       | 39 | 44.26           |

<sup>\*</sup>M = Male, \*F= Female

### 27. Diversity of Students

| Year    | Percentage of students from same state | Percentage of<br>Students from other<br>state | Percentage of<br>Students from<br>abroad |
|---------|--|---|--|
| 2016-17 | 65 (39)                                | 5 (3)   | Nil                                      |
| 2015-16 | 96.66 (58)                             | 0 (0)   | Nil                                      |
| 2014-15 | 98.33 (59)                             | 1.66 (1)                                      | Nil                                      |
| 2013-14 | 98.33 (59)                             | 5 (3)   | Nil                                      |

# 28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defense services, etc.?

| Sr. | Name of Student   | Gate Score | Year    |
|-----|-------------------|------------|---------|
| No. |                   |            |         |
| 1   | Pratiksha Jadhav  | 25         | 2015-16 |
| 2   | Ankita Bhagat     | 19         | 2015-16 |
| 3   | Chetan Mahale     | 17         | 2015-16 |
| 4   | Prajakta Kulkarni | 27         | 2014-15 |
| 5   | Vrushali Dolas    | 19         | 2014-15 |
| 6   | Seema Gumbade     | 17         | 2014-15 |
| 7   | Nikita Korgaonkar | 26         | 2013-14 |

| 8 | Kaveri Bachchhav | 19 | 2013-14 |
|---|------------------|----|---------|
| 9 | Ejaj Maniyar     | 25 | 2013-14 |

### 29. Student progression

| Year                               |                   | Admission in Third Year |         |
|------------------------------------|-------------------|-------------------------|---------|
| PG to Ph.D. Ph.D. to Post-Doctoral |                   | -                       |         |
|                                    |                   |                         |         |
|                                    |                   | 08                      | 2015-16 |
|                                    |                   | 09                      | 2014-15 |
|                                    |                   | 03                      | 2013-14 |
|                                    | Other than campus | NA                      | 2016-17 |
|                                    | Recruitment       | 39                      | 2015-16 |
|                                    |                   | 27                      | 2014-15 |
|                                    |                   | 48                      | 2013-14 |
| Entrepreneurship/Self-employment   |                   | NA                      | 2016-17 |
|                                    |                   | 01                      | 2015-16 |
|                                    |                   | 02                      | 2014-15 |
|                                    |                   | 02                      | 2013-14 |

### **30. Details of Infrastructural facilities (Department Library)**

**a.** Library: 01

**b.** No. of Volumes Available- 323

c. No. of Titles Available -168

**d.** Internet facilities for Staff & Student: Yes (4Mbps)

e. Class rooms with ICT facility: 04

**f.** Laboratories :- 10

## 31. Number of students receiving financial assistance from college, university, government or other agencies

| Academic Year | State/ Central Government |
|---------------|---------------------------|
| 2016-17       |                           |
| 2015-16       | 154                       |
| 2014-15       | 149                       |
| 2013-14       | 167                       |

# **32.** Details on student enrichment programmes (special lectures/workshops/seminar) with external experts

### 2016-17:

| Sr.<br>No. | Name of expert  | Name of event                              | Lecture/<br>Workshop/<br>Seminar |
|------------|---|--|----------------------------------|
| 01         | Mr. B. A. Patil<br>Prolofic System                    | "Automation Technology Covers PLC & SCADA" | Workshop                         |
| 02         | Mr. Amol Deshmukh<br>Rishabh Instrument,<br>Nashik.   | "Electronics Products"                     | Seminar                          |
| 03         | Mrs. Archana Wadnere<br>Seed Infotech Ltd.<br>Nashik. | "C Programming"                            | Workshop                         |
| 04         | Mr. Parag alvekar                                     | Embedded system                            | Lecture                          |
| 05         | Mrs. Monalisa Jain                                    | Soft Skill                                 | Lecture                          |
| 06         | Mr. Gordan Narolla                                    | Soft Skill                                 | Seminar                          |
| 07         | Mr. Shrikant Atkarne                                  | CMOS layer designing                       | Workshop                         |

### 2015-16

| Sr.<br>No. | Name of expert       | Name of event        | Lecture/<br>Workshop/<br>Seminar |
|------------|----------------------|----------------------|----------------------------------|
| 01         | Mr. Prashant Bachhav | PCB Design           | Workshop                         |
| 02         | Mrs. Monalisa Jain   | Soft Skill           | Seminar                          |
| 03         | Mr. Shrikant Atkarne | CMOS layer designing | Workshop                         |
| 04         | Mr. A. H. Patil.     | Gender Equality      | Lecture                          |
| 05         | Mr. Parag Salvekar   | Embedded system      | Lecture                          |

### 2014-15

| Sr.<br>No. | Name of expert          | Name of event                          | Lecture/<br>Workshop/<br>Seminar |
|------------|-------------------------|--|----------------------------------|
| 01         | Mr. Ravi Bodane         | Personality Development"               | Workshop                         |
| 02         | Mr. Rohit Parmar        | Ardino Procesor, Latex, PCB<br>Design" | Workshop                         |
| 03         | Mr. Ram Kulkarni        | Personality Development"               | Lecture                          |
| 04         | Mr. Shrikant<br>Atkarne | CMOS layer designing                   | Workshop                         |

## 2013-14

| Sr. Na | ame of expert | Name of event | Lecture/Worksho |
|--------|---------------|---------------|-----------------|
|--------|---------------|---------------|-----------------|

| No. |                        |                                     | p/<br>Seminar |
|-----|------------------------|-------------------------------------|---------------|
| 01  | Mr. Deepak Jain        | Automation System                   | Lecture       |
| 02  | Mr. Ravi Bodhani       | Personal Power                      | Workshop      |
| 03  | Mr. Sagar Nikam        | Power of MBA                        | Lecture       |
| 04  | Dr. V. M. Wadhai       | Emotional Freedom<br>Technique EFT  | Lecture       |
| 05  | Mr., Ajay Badve        | Campus to Corporate                 | Lecture       |
| 06  | Mrs. Ashwini Deshpande | Etiquettes & Manners                | Lecture       |
| 07  | Mr. Sanjay Choudari    | Industrial Approach For Electronics | Workshop      |
| 08  | Mr.Vinay Tambat        | How To crack GATE                   | Lecture       |
| 09  | Mr. Kunal Takate       | How To Crak GATE & CAT              | Lecture       |
| 10  | Mr. Sanjay Choudhari   | Industrial Approach For Electronics | Lecture       |
| 11  | Mr. Gajendra Medhi     | Personality Development             | Lecture       |

### 33. Teaching methods adopted to improve student learning

- **a.** Improved Lecture method by use of PPT
- **b.** Use of Video Lectures of NPTL
- c. Industrial visits
- **d.** Use of chart and Models

## 34. Participation in Institutional Social Responsibility (ISR) and Extension activities

- a. NSS Camp
- **b.** Blood Donation
- **c.** Tree Plantation
- **d.** Godavari SwashataAbhiyan
- e. MVP Marathon

### 35. SWOC analysis of the department and Future plans

#### **Strengths:**

- a. Experienced and highly qualified faculties
- **b.** Well maintain laboratory infrastructure with state of art hardware equipments and software tools.
- **c.** Consistently good academic results.
- **d.** Mentor scheme for students
- **e.** Departmental student association to motivate the students for extracurricular activities.

- **f.** Healthy teacher-student ratio.
- **g.** Soft skill programs, training, value added courses and industrial visit are organized regularly to groom students for industry.
- h. Students performance monitoring through ERP

#### Weaknesses:

- a. Lack of faculty at higher cadre.
- **b.** Research, publication and consultancy work needs improvement.
- **c.** No grants from AICTE, DST,UGC.
- d. Weak in Industry Institute Interaction
- e. Less Students placements

#### **Opportunities:**

- **a.** Improvement in the Industry-Institute interaction
- **b.** PG Programmes and PhD Research center to improve research activities
- c. Linkage to alumni and parents for the overall development of programme

#### **Challenges:**

- a. Consultancy work
- **b.** Placement of students
- **c.** To attract the good quality students for the admission to programme.

#### **Future Plan of the Department:**

- **a.** To establish the PG Programmes and Ph.D. Research center.
- **b.** To establish a good linkage with alumni and parents
- **c.** To motivate the faculties for Ph.D.
- **d.** To equip the students with soft skill and advanced technical training programme
- e. To start entrepreneurship cell.
- **f.** To build robust alumni bonding

### **CIVIL ENGINEERING**

| 1  | Name of the Department  | Civil Engineering  |
|----|---|--|
| 2  | Year of Establishment   | UG 2006-2007<br>PG 2012-2013   |
| 3  | Names of Programmes / Courses offered(UG, PG, M.Phil., Ph.D., Integrated Ph.D., etc.)   | UG-Civil Engineering PG- Construction Management                                 |
| 4. | Names of Interdisciplinary courses and the departments/units involved                   | Yes  |
| 5. | Annual/ semester/choice based credit system (programme wise)                            | FE & SE Semester credit system TE & BE Semester System PG Semester credit system |
| 6. | Participation of the department in<br>the courses offered by other<br>departments       | Yes  |
| 7. | Courses in collaboration with other universities, industries, foreign institutions etc. | Nil  |
| 8. | Details of courses/programmes<br>discontinued (if any) with reasons                     | Nil  |

## 9. Number of teaching posts

| Post                 | Sanctioned | Filled |
|----------------------|------------|--------|
| Professors           | 03         | 02     |
| Associate Professors | 05         | 02     |
| Asst. Professors     | 14         | 17     |

## 10. Faculty profile with name, qualification, designation, specialization, (D.Sc./D.Litt./Ph.D. / M. Phil. etc.,)

| Name of Staff | Qualification    | Designation | Specialization | No. of<br>Years of<br>Experi-<br>ence | No. of Ph.D<br>Students<br>Guided for<br>the last 4<br>Years |
|---------------|------------------|-------------|----------------|---------------------------------------|--|
| Dr. M. P.     | BE (Civil) Govt. | Associate   | Structural     | 18                                    | Nil  |
| Kadam         | CoE              | Professor   | Engineering,   |                                       |  |
|               | Aurangabad       |             | Concrete,      |                                       |  |
|               | M.E.(Structure)  |             | Industrial     |                                       |  |
|               | VJTI Ph.D.       |             | waste          |                                       |  |

|                          | SVNIT Surat  |                        |  |      |     |
|--------------------------|--|------------------------|--|------|-----|
| Dr. P. G.<br>Gaikwad     | BE (Civil),<br>ME(Civil),<br>Ph.D  | Professor              | Environmental<br>Engineering,<br>Ground Water,<br>Construction<br>Management | 19   | Nil |
| Dr. A. B. Saner          | BE (Civil), ME(Environme ntal Engineering), Ph.D                               | Professor              | Environmental<br>Engineering   | 15   | Nil |
| Prof. M. P.<br>Chougale  | BE (Civil) ME<br>(Geotech) PhD<br>Pursuing<br>SPCOE Mumbai                     | Associate professor    | Geotechnical<br>Engineering  | 15   | Nil |
| Dr. K. T. Patil          | M.Sc,(Geology) Ph.D.(Eco. Geology  | Assistant<br>Professor | Geology(Fluid<br>Inclusion Geo-<br>thermocryometry                           | 16.5 | Nil |
| Prof. K. J.<br>Pawar     | BE (Civil),<br>ME(Civil)   | Assistant<br>Professor | Environmental<br>Engineering   | 15   | Nil |
| Prof. A. P.<br>Shelorkar | BE (Civil), ME (Structures), Ph.D. Pursuing in S.P.P.U.                        | Assistant<br>Professor | Structural<br>Engineering  | 16   | Nil |
| Prof. M. C.<br>Aher      | BE (Civil & Water Manage) ME (Building Science & Techno), Ph.D. Purs. in SVNIT | Assistant<br>Professor | Building<br>Science and<br>Technology  | 12   | Nil |
| Prof. R. P.<br>Kajale    | BE (Civil) ME<br>(Water<br>Resourses)<br>Ph.D. (Pursuing)                      | Assistant<br>Professor | Water<br>resources   | 6    | Nil |
| Prof. S. M.<br>Waysal    | BE (Civil) ME (Structural Engineering)Ph. D(Pursuing)                          | Assistant<br>Professor | Structural Engineering   | 10   | Nil |
| Prof. R. V.<br>Devalkar  | BE (Civil) ME<br>(Construction<br>Management,M<br>BA.                          | Assistant<br>Professor | Construction<br>Management   | 8.5  | Nil |
| Prof. S. J.<br>Kadbhane  | BE (Civil)<br>MTech (Soil  | Assistant<br>Professor | Geotechnical<br>Engineering  | 5    | Nil |

|                   | Mech.& F.        |                        |                |     |           |
|-------------------|------------------|------------------------|----------------|-----|-----------|
|                   |                  |                        |                |     |           |
| Prof. A. M.       | Engg) PhD Purs.  |                        | C41            | 1 5 |           |
|                   | BE (Civil) M.    | Assistant              | Structural     | 4.5 | Nil       |
| Bhoi              | Tech (Structural | Professor              | Engineering    |     |           |
|                   | Engineering)     |                        |                |     |           |
|                   | PhD (Pursuing)   |                        |                |     |           |
| Prof. A. S. Patil | BE (Civil) ME    | Assistant              | Construction   | 4.5 | Nil       |
|                   | (Construction    | Professor              | Management     |     |           |
|                   | Management)      |                        |                |     |           |
| Prof. P. D.       | BE (Civil) ME    | Assistant              | Construction   | 3   | Nil       |
| Aher              | (Construction    | Professor              | Management     |     | 1111      |
|                   | Management)      |                        |                |     |           |
| Prof. D. N.       | BE (Civil) ME    | Assistant              | Structural     | 4.5 | Nil       |
| Nathe             | (Structures)     | Professor              | Engineering    |     | INII      |
| Prof. P. S.       | BE (Civil)       | Assistant              | Construction   | 6   | NT:1      |
| Kapadnis          | ME               | Professor              | Management     |     | Nil       |
|                   | (Construction    |                        |                |     |           |
|                   | Management)      |                        |                |     |           |
| Prof. S. Kare     | BE (Civil)       | Assistant              | Construction   | 1   |           |
| 1101. S. Karc     | ME               | Professor              | Management     | 1   | Nil       |
|                   | (Construction    | 1 10168801             | Management     |     |           |
|                   | `                |                        |                |     |           |
| Dorf M.D.         | Management)      | <b>A</b> :             | C              | 2   |           |
| Prof. M. B.       | BE (Civil)       | Assistant              | Construction   | 3   | Nil       |
| Murkute           | ME               | Professor              | Management     |     |           |
|                   | (Construction    |                        |                |     |           |
|                   | Management)      |                        |                |     |           |
| Prof. P. S.       | M.Sc.            | Assistant              | Engineering    | 0.5 | Nil       |
| Sarkar            | (Mathematcs)     | Professor              | Mathematics    |     |           |
| Prof. Y. S.       | ME (Electrical)  | Assistant              | Basic Ele.     | 4   | Nil       |
| Bhavsar           |                  | Professor              | Engineering    |     | ·         |
| Mr. P.S.          | BE (Civil)       | Civil                  | Infrastructure | 5   | Nil       |
| Sangamnere        | ME Pursuing      | Engineer               | and            |     | 1111      |
|                   |                  |                        | Maintenance    |     |           |
| Mr. D. D.         | B.Sc             | Technical              | Chemistry      | 18  | Nil       |
| Dabhade           |                  | Assistant              |                |     | 1 1 1 1 1 |
| Mrs. S. V.        | DCM              | Technical              | Computer       | 7.5 | Nii       |
| Jadhav            |                  | Assistant              |                |     | Nil       |
| Mr. V. R.         | B. Sc            |                        | Electronics    | 6   | NT:1      |
| Salunke           | (Electronics)    | Technical<br>Assistant |                |     | Nil       |
|                   | ,                | Assistant              |                |     |           |
| Mrs. P. E.        | Diploma in       | Technical              | Civil          | 3   | Nil       |
| Shinde            | Civil            | Assistant              | Engineering    |     |           |
|                   | Engineering      |                        |                |     |           |
|                   |                  |                        |                |     |           |

| Mr. A. M. Aher      | Diploma in<br>Civil<br>Engineering<br>BE Pursuing | Technical<br>Assistant | Civil<br>Engineering | 1  | Nil |
|---------------------|---|------------------------|----------------------|----|-----|
| Mr. S. S.<br>Jadhav | Diploma in<br>Civil<br>Engineering                | Technical<br>Assistant | Civil<br>Engineering | 4  | Nil |
| Mr. P. K.<br>Wagh   | Peon  | H.S.C                  |                      | 19 | Nil |
| Mr. Musale S. D.    | Peon  | S.S.C                  |                      | 15 | Nil |

### 11. List of senior visiting faculty

| Sr. No | Name of Faculty |
|--------|-----------------|
|        | Nil             |

## 12. Percentage of lectures delivered and practical classes handled(programme wise) by temporary faculty

| Sr. No | Name of Faculty | Lecture/Practical | Percentage |
|--------|-----------------|-------------------|------------|
| Ni     |                 |                   |            |

## 13. Student - Teacher Ratio (Programme wise)

| Sr. No. | Academic<br>Year | Total No. of<br>Students | Total No. of<br>Staff | Student<br>Teacher Ratio |
|---------|------------------|--------------------------|-----------------------|--------------------------|
| 1       | 2016-17          | 288                      | 21                    | 14:1                     |
| 2       | 2015-16          | 288                      | 21                    | 14:1                     |
| 3       | 2014-15          | 288                      | 20                    | 14:1                     |
| 4       | 2013-14          | 288                      | 17                    | 17:1                     |

## 14. Number of academic support staff (technical) and administrative staff; sanctioned and filled

| Sr. No. | Type of Staff      | Sanctioned | Filled |
|---------|--------------------|------------|--------|
| 1       | Technical Assitant | 06         | 06     |
| 2       | Civil Engineer     | 03         | 03     |
| 2       | Attendant          | 02         | 02     |

## 15. Qualifications of teaching faculty with DSc/ D.Litt/ Ph.D/ MPhil / PG. -

Ph.D.: 04

Ph.D. (Registered): 09

**PG: 08** 

## 16. Number of faculty with ongoing projects from a) National b) International funding agencies and grants received

| Sr. No. | Name of Faculty | National /International funding agencies | Grant<br>Received |
|---------|-----------------|--|-------------------|
|         |                 | Nil                                      |                   |

## 17. Departmental projects funded by DST - FIST; UGC, DBT, ICSSR, etc. and total grants received

| Sr. No. | Name of Project   | DST-FIST / UGC/ DBT/    | <b>Grant Received</b> |
|---------|-------------------|-------------------------|-----------------------|
|         |                   | ICSSR/ Others           |                       |
| 1       | Dr. P. G. Gaikwad | BCUD University of Pune | Rs 2.6 lakhs          |
| 2       | Dr. A B Saner     | BCUD University of Pune | Rs 2.8 lakhs          |

## 18. Research Centre/facility recognized by the University

| Sr. No | Name of Research Centre/facility |
|--------|----------------------------------|
|        | Nil                              |

### 19. Publications

| 1  | Publication per faculty  | 1.09           |
|----|--|----------------|
| 2  | Number of papers published in peer reviewed journals by and students | 23             |
| 3  | Number of Publications listed in International Database              | 2              |
| 4  | Monographs   | -              |
| 5  | Chapter in Books   | -              |
| 6  | Books Edited   | -              |
| 7  | Books with ISBN/ISSN number with details of Publisher                | -              |
| 8  | Citation Index   | -              |
| 9  | SNIP   | -              |
| 10 | SJR  | -              |
| 11 | Impact factor  | 1.24 (Heighst) |
| 12 | H-Index  | 2              |

## 20. Areas of consultancy and income generated

| Sr. No | Area of Consultancy       | <b>Income Generated</b> |
|--------|---------------------------|-------------------------|
| 1      | Material testing          | 3.27 lakh               |
| 2      | Soil testing              | 61.90 lakh              |
| 3      | Surveying                 | 1.00 lakh               |
| 4      | Structural Audit Facility | 0.40 lakh               |
| 5      | Geology Lab               | 0.20 lakh               |

## 21. Faculty as members in a)National Committees, b)International Committees, c) Editorial Boards

| Sr. No | Name of Faculty      | Member of National / International<br>Committees / Editorial Boards   |  |  |
|--------|----------------------|---|--|--|
| 1      | Dr. M. P. Kadam      | Worked as Building committee member for Pune University women's hostel.   |  |  |
|        |                      | Worked as UGC selection committee member for Pune University  |  |  |
| 2      | Dr. P. G. Gaikwad    | LIC Committee, UGC Committee, Subject Chairman(Construction  Management2012Pat), ME Paper Sette (Project Economics & Financia Management)   |  |  |
| 3      | Prof. M. P. Chougale | Subject Chairman, Examiner, Paper Setter (ME, Geotechnical Engineering)   |  |  |
| 4      | Dr. K. T. Patil      | Paper Setter & Examiner for SE (Engineering Geology), BE (Advanced Engineering Geology with Rock Mechanics), External Senior Supervisor, (SPPU), Paper Setter & Examiner for MSc Applied Geology (Solapur University) |  |  |
| 5      | Prof. R. V. Devalkar | Subject Chairman (Construction Management 2008 Pat), Examiner, Paper Setter for BE (Construction Management 2008Pat.), Paper Setter for ME (Construction & Management)  |  |  |

## 22. Student projects

| Sr. No | Name  | Percentage |     |     |     |
|--------|---|------------|-----|-----|-----|
| 1      | Percentage of students who have done in-<br>house projects including inter<br>departmental/ programme | 100        | 100 | 100 | 100 |
| 2      | Percentage of students placed for projects in organizations outside the institution i.e.              |            |     |     |     |

| in Research laboratories/Industry/ other |  |  |
|--|--|--|
| agencies                                 |  |  |

## 23. Awards / Recognitions received by faculty and students Summary

| Sr. | Name of                | <b>Event Name</b>       | Name of                     | Prize/          | State/                     |
|-----|------------------------|-------------------------|-----------------------------|-----------------|----------------------------|
| No. | Student                |                         | Organizer                   | Achievement     | National/<br>International |
| 1   | Kashish<br>Vigh        | BE Exam                 |                             | Yashashri award | State                      |
| 2   | Sagar .<br>Shinde      | AAKAAR                  | IIT Bombay                  | First Prize     | National                   |
| 3   | Vidhi Patel            | DESIRE 16               | Sandip<br>Foundation        | Second Prize    | National                   |
| 4   | Durwakshi<br>Patil     | DESIRE 16               | Sandip<br>Foundation        | Second Prize    | National                   |
| 5   | Sahil<br>Thakare       | DESIRE 16               | Sandip<br>Foundation        | Second Prize    | National                   |
| 6   | Sahil<br>Thakare       | Sanskrit<br>Gangahara   | HPT Arts & RYK Sci. College | Second Prize    | National                   |
| 7   | Durwakshi<br>Patil     | Sanskrit<br>Gangahara   | HPT Arts & RYK Sci. College | Second Prize    | National                   |
| 8   | Shaunk<br>Tanpure      | Sanskrit<br>Gangahara   | HPT Arts & RYK Sci. College | Second Prize    | National                   |
| 9   | Vidhi Patel            | Sanskrit<br>Gangahara   | HPT Arts & RYK Sci.         | Second Prize    | National                   |
| 10  | Sagar<br>Shinde        | Constructo<br>Tech Fest | IIT Bombay                  | First Prize     | National                   |
| 11  | Ajay Dhuria            | Civil<br>Championship   | IBCC                        | First Prize     | National                   |
| 12  | Sagar<br>Shinde        | Civil<br>Championship   | IBCC                        | First Prize     | National                   |
| 13  | Aniruddha<br>Chopdekar | Civil<br>Championship   | IBCC                        | First Prize     | National                   |
| 14  | Aniruddha<br>Chopdekar | AXIS 14                 | VNIT<br>Nagpur              | Third Prize     | National                   |
| 15  | Pranav<br>More         | AVISHKAR-<br>2013       | KTHM<br>College<br>Nashik   | Participated    | State                      |
| 16  | Aniruddha<br>Chopdekar | AAKAAR 14               | IIT Bombay                  | Second Prize    | National                   |
| 17  | Vishwadip<br>Date      | TECH FEAST              | Matoshri<br>COE Nashik      | Second Prize    | State                      |
| 18  | Aniruddha<br>Chopdekar | TECH FEAST              | Matoshri<br>COE Nashik      | Second Prize    | State                      |

| 19 | Vishwadip<br>Date      | Techunique2k14               | Amrutvahini<br>COE<br>Sangamner | First Prize         | National |
|----|------------------------|------------------------------|---------------------------------|---------------------|----------|
| 20 | Kiran<br>Chaudhary     | Techunique2k14               | Amrutvahini<br>COE<br>Sangamner | First Prize         | National |
| 21 | Irfan Shaik            | Architects & Engineers Asso. | Nashik                          | Yashashree<br>Award | State    |
| 22 | Jaisal<br>Chourasia    | AAKAAR 13                    | IIT Bombay                      | Second Prize        | National |
| 23 | Aniruddha<br>Chopdekar | AAKAAR 13                    | IIT Bombay                      | Second Prize        | National |
| 24 | Ajay Dhuria            | AAKAAR 13                    | IIT Bombay                      | Second Prize        | National |
| 25 | Swapnil<br>Dhane       | COGNIZANC<br>E 2012          | IIT<br>Roorkee                  | Third Position      | National |
| 26 | Shalmali<br>Tambat     | COGNIZANC<br>E 2012          | IIT<br>Roorkee                  | Third Position      | National |
| 27 | Jaisal<br>Chourasia    | AAKAAR 12                    | IIT<br>Bombay                   | Second Prize        | National |
| 28 | Jaisal<br>Chourasia    | AVISHKAR-<br>2012            | KTHM<br>College<br>Nashik       | First Prize         | State    |
| 29 | Pankaj Gore            | DESIRE 13                    | SIE Nashik                      | Third Position      | National |
| 30 | Santosh<br>Nagare      | DESIRE 13                    | SIE Nashik                      | Third Position      | National |
| 31 | Sachin<br>Jadhav       | DESIRE 13                    | SIE Nashik                      | Third Position      | National |
| 32 | Bhushan<br>More        | DESIRE 13                    | SIE Nashik                      | First Position      | National |
| 33 | Dnyaneshwar<br>Kumawat | DESIRE 13                    | SIE Nashik                      | Third Position      | National |
| 34 | Nikita<br>Jamkar       | G-ELEGANT                    | RH Sapat<br>COE<br>Nashik       | First Position      | State    |
| 35 | Janavi Bhat            | G-ELEGANT                    | RH Sapat<br>COE<br>Nashik       | First<br>Position   | State    |

## ${\bf 24.\ List\ of\ eminent\ academic ians\ and\ scientists\ /\ visitors\ to\ the\ department:}$

| Sr. | Name of Visitor     | Academicians /Scientists / Visitors |
|-----|---------------------|-------------------------------------|
| No  |                     |                                     |
| 1   | Dr. N.V. Ramamurthi | Academicians NIT Warangal           |
| 2   | Dr Deepak Khare     | IIT, Roorkee                        |
| 3   | Dr. H. S. Patil     | SVNIT Surat                         |
| 4   | Dr. V. L. Manekar   | SVNIT Surat                         |
| 5   | Dr. Y. D. Patil     | SVNIT Surat                         |

| 6 | Er. Thomos Scoanrich | MD G. S. Wasr, Germany |
|---|----------------------|------------------------|
|   |                      |                        |

## 25. Seminars/ Conferences/Workshops organized & the source of funding:

## Workshop

| Sr. No | Academic Year | Topic       | Duration      | Remark     |
|--------|---------------|-------------|---------------|------------|
| 1      | 2013-14       | Engineering | 26-11-2013    | NMICET-IIT |
|        |               | Mechanics   | To 06-12-2013 | Bombay     |
| 2      | 2015-16       | Structural  | 04-01-2016    | NMICET-IIT |
|        |               | Analysis    | To 09-01-2016 | Roorkee    |

## 26. Student profile programmer/course wise

| Year    | Admission in First | First Enrolled |            | Pass       |
|---------|--------------------|----------------|------------|------------|
|         | Year               | *M             | * <b>F</b> | Percentage |
| 2016-17 | 61                 | 41             | 20         |            |
| 2015-16 | 63                 | 37             | 26         | 68.85      |
| 2014-15 | 63                 | 37             | 26         | 78.94      |
| 2013-14 | 64                 | 44             | 20         | 61.90      |

<sup>\*</sup>M = Male \*F = Female

## 27. Diversity of Students

| Year    | Percentage of students from same state | Percentage of<br>Students from other<br>state | Percentage of<br>Students from<br>abroad |
|---------|--|---|--|
| 2016-17 | 96.67                                  | 3.33  | NIL                                      |
| 2015-16 | 100                                    | NIL   | NIL                                      |
| 2014-15 | 100                                    | NIL   | NIL                                      |
| 2013-14 | 96.67                                  | 3.33  | NIL                                      |

## 28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defense services, etc. ?

| Sr.<br>No | Year     | GA<br>TE | PG<br>CET | MPSC | P<br>W<br>D | Irrigation<br>Dept.<br>/ MJP | ZP | GRE /<br>TOFEL | ВМС | Total |
|-----------|----------|----------|-----------|------|-------------|------------------------------|----|----------------|-----|-------|
| 1         | 2016-17  |          |           |      | 1           |                              |    |                |     |       |
| 2         | 2015 -16 | 3        |           |      | 1 1         |                              |    | 3              |     | 6     |
| 3         | 2014-15  | 1        |           |      | 3           | 1                            |    |                | 2   | 7     |
| 4         | 2013-14  |          |           |      | 2           |                              |    | 1              |     | 3     |

### 29. Student progression

| Student pr                       | ogression                     | Against % enrolled |         |         |         |  |
|----------------------------------|-------------------------------|--------------------|---------|---------|---------|--|
|                                  |                               | 2016-17            | 2015-16 | 2014-15 | 2013-14 |  |
| UG to PG                         | UG to PG                      |                    | 25      | 31.66   | 16.66   |  |
| PG to PhD                        | PG to PhD                     |                    | Nil     | Nil     | Nil     |  |
| Ph.D. to Po                      | st-Doctoral                   | Nil                | Nil     | Nil     | Nil     |  |
| Employed                         | Employed Campus selection     |                    | 2       | Nil     | Nil     |  |
|                                  | Other than campus Recruitment |                    | 10      | 20      | 38.33   |  |
| Entrepreneurship/Self-employment |                               |                    | 01      | 02      | 02      |  |

## **30.** Details of Infrastructural facilities(Department Library)

**a.** Library: 26.83 sq.m

**b.** No. of Volumes Available- 103

c. No. of Titles Available - 95

d. Internet facilities for Staff & Student: Yes

e. Class rooms with ICT facility: 02

**f.** Laboratories :- 08

## 31. Number of students receiving financial assistance from college, university, government or other agencies

| Academic Year | State/ Central Government | Other Agencies |
|---------------|---------------------------|----------------|
| 2016-17       |                           | 01             |
| 2015-16       | 197                       | 01             |
| 2014-15       | 144                       | 01             |
| 2013-14       | 162                       |                |

## **32.** Details on student enrichment programmes (special lectures/ workshops/ seminar) with external experts

### 2016-17:

| Sr. | Name of expert         | Name of event                | Lecture/ Workshop/ |
|-----|------------------------|------------------------------|--------------------|
| No. |                        |                              | Seminar            |
| 1   | Er. Sameer             | Career opportunity in civil  | Lecture            |
|     | Alone                  | engineering                  |                    |
| 2   | Er. Arun Ghate         | Water Managment              | Lecture            |
| 3   | Er. Avinash<br>Shisode | Entrepreneurship Development | Seminar            |
| 4   | Er. Vijay              | Mumabi Metro and             | Seminar            |
|     | Shejwal                | Professional ethics          |                    |

### 2015-16

| Sr.<br>No. | Name of expert | Name of event              | Lecture/Workshop/<br>Seminar |
|------------|----------------|----------------------------|------------------------------|
| 1          | Dr. H. S Patil | Introduction to structural | Seminar                      |

|   |                      | analysis                   |          |
|---|----------------------|----------------------------|----------|
| 2 | Ar. Unmesh Gaidhani  | Architectural Design       | Lecture  |
| 3 | Prof. Harshad Wagh   | Microsoft Project Software | Workshop |
| 4 | Er. Suresh Bhondekar | Hydro Power Engineering    | Lecture  |
| 5 | Er. Sunil Sawardekar | Water use and audit        | Lecture  |
| 6 | Dr. Sunil Kute       | View towards the life      | Lecture  |

### 2014-15

| Sr.<br>No. | Name of expert     | Name of event                       | Lecture/Workshop/<br>Seminar |
|------------|--------------------|-------------------------------------|------------------------------|
| 1          | Prof. K. L. Bidkar | Advanced Construction<br>Technology | Lecture                      |
| 2          | Prof. T. H. Sutar  | Town Planning                       | Lecture                      |
| 3          | Dr. V. L Manekar   | Hydrology and Water resource        | Seminar                      |

#### 2013-14

| Sr.<br>No. | Name of expert       | Name of event                  | Lecture/Workshop/<br>Seminar |
|------------|----------------------|--------------------------------|------------------------------|
| 1          | Mr. Anil Deshpande   | Scope in civil engineering     | Lecture                      |
| 2          | Dr. Prachi Pawar     | Health Care                    | Seminar                      |
| 3          | Dr. Rajesh Phadke    | Contract and Tendering Process | Lecture                      |
| 4          | Dr. N. V. Ramamurthy | Watershed Management           | Lecture                      |

### 33. Teaching methods adopted to improve student learning

NPTEL Videos, Power Point Presentation (PPT), field test, Case studies.

## 34. Participation in Institutional Social Responsibility (ISR) and Extension activities

- a. National Service Scheme (NSS)
- **b.** Blood donation Camp
- c. Tree Plantation
- d. MVP Marathon
- e. Water Audit
- f. Godawari Swachhata Abhiyan

## 35. SWOC analysis of the department and Future plans

## Strength

- a. Qualified and Experienced faculty
- **b.** Industry expert lectures & Workshops
- **c.** Well equipped labs and class rooms
- d. Regular Site visits
- e. Skilled technical/ supporting staff

- **f.** Industry oriented Projects and seminar
- g. Equipped CAD lab with internet facility
- **h.** Student's performance monitoring through ERP
- i. Technical symposiums and events.

### Weakness

- a. Resarch Publication
- **b.** Digital Classrooms
- c. Soft Skills
- **d.** Alumni meets and Parent meets

### **Opportunities**

- a. Industry- Institute Interaction
- **b.** MoU with Professional Bodies
- **c.** Consultancy
- **d.** Software Trainings

### **Challenges**

- a. Improvements in Student Quality
- **b.** To produce employable students to satisfy requirements of Industries.

### **Future Plan of Action**

- **a.** To start a cell which will enhance the employable skill of student
- **b.** To do MOU with industries which will help in training the student to cope up with technology
- **c.** To provide coaching for student for technical competitive examinations such as GATE, IES, MPSC etc.

### **INFORMATION TECHNOLOGY**

| 1. | Name of the Department   | Information Technology          |
|----|--|---------------------------------|
| 2. | Year of Establishment  | 2008-2009                       |
| 3. | Names of Programs / Courses offered (UG, PG, M. Phil., Ph. D., Integrated Masters; Integrated Ph.D., etc.) | UG: B.E. Information Technology |
| 4. | Names of Interdisciplinary courses and the departments/units involved                                      | Yes                             |
| 5. | Annual/ semester/choice based credit   | FE & SE Semester Credit system  |
|    | system (program wise)  | TE & BE Semester System         |
| 6. | Participation of the department in the   | Yes                             |
| 0. | courses offered by other departments   |                                 |
| 7. | Courses in collaboration with other  | -                               |
| ′• | universities, industries, foreign  |                                 |
|    | institutions etc.  |                                 |
| 8. | Details of courses/programmes  | Nil                             |
| 3. | discontinued (if any) with reasons   |                                 |

## 9. Number of teaching posts

| Post                 | Sanctioned | Filled |
|----------------------|------------|--------|
| Professors           | 01         |        |
| Associate Professors | 03         | 01     |
| Assistant Professors | 09         | 16     |

## $10.\ Faculty\ profile\ with\ name,\ qualification,\ designation,\ specialization,\ (D.Sc./D.Litt./Ph.D.\ /\ M.\ Phil.\ etc.,)$

| Name of Staff          | Qualification                  | Designation            | Specialization          | No. of<br>Years of<br>Experience | No. of Ph.D<br>Students<br>Guided for<br>the last 4<br>Years |
|------------------------|--------------------------------|------------------------|-------------------------|----------------------------------|--|
| Prof. H. V.<br>Patil   | Ph.D. (pursuing) M. Tech., BE. | Associate<br>Professor | E & TC<br>Engineering   | 30                               | Nil  |
| Ms. R. R.<br>Tajanpure | M.Tech Ph.D Pursuing           | Asst.<br>Professor     | Computer<br>Enigneering | 13                               | Nil  |
| Prof. S. P.<br>Jadhav  | M.E.                           | Assistant<br>Professor | Computer<br>Engineering | 9                                | Nil  |

| Prof. J. R. | Ph.D.         | Assistant | Computer    | 9  | Nil |
|-------------|---------------|-----------|-------------|----|-----|
| Surywanshi  | (Pursuing)    | Professor | Engineering |    |     |
| Prof. D. R. | M.E.          | Assistant | Computer    | 7  | Nil |
| Gatne       |               | Professor | Engineering |    |     |
| Prof. T. S. | M.E.          | Assistant | Computer    | 7  | Nil |
| Pawar       |               | Professor | Engineering |    |     |
| Prof. A. G. | M.E.          | Assistant | Computer    | 7  | Nil |
| Khairnar    |               | Professor | Engineering |    |     |
| Prof. A. D. | M.E.          | Assistant | Computer    | 6  | Nil |
| Deore       |               | Professor | Engineering |    |     |
| Prof. S. J. | M.E.          | Assistant | Computer    | 6  | Nil |
| Suryawanshi |               | Professor | Engineering |    |     |
| Prof. S. S. | M.E.          | Assistant | Computer    | 5  | Nil |
| Bhamre      |               | Professor | Engineering |    |     |
| Prof. Y. H. | M.E.          | Assistant | Computer    | 4  | Nil |
| Palve       | (Pursuing)    | Professor | Engineering |    |     |
| Prof. U. S. | M.E.          | Assistant | Computer    | 4  | Nil |
| Tambe       |               | Professor | Engineering |    |     |
| Prof. N. S. | M.E.          | Assistant | Computer    | 10 | Nil |
| Ujgare      |               | Professor | Engineering |    |     |
| Prof. B. A. | M.E.          | Assistant | Computer    | 8  | Nil |
| Ahire       |               | Professor | Engineering |    |     |
| Prof. D. A. | M.E.          | Assistant | Computer    | 5  | Nil |
| Birari      |               | Professor | Engineering |    |     |
| Prof. V. P. | ME            | Assistant | Basic Ele.  | 8  | Nil |
| Harak       | (Electrical)  | Professor | Engineering |    |     |
| Prof. S. D. | M.Sc.         | Assistant | Engineering | 2  | Nil |
| Marathe     | (Mathematics) | Professor | Mathematics |    |     |

## 11. List of senior visiting faculty

| Sr. No | Name of Faculty |
|--------|-----------------|
|        | Nil             |

## 12. Percentage of lectures delivered and practical classes handled(program wise) by temporary faculty

| Sr. | Name of Faculty | Lecture/Practical | Percentage |
|-----|-----------------|-------------------|------------|
| No  |                 |                   |            |
|     |                 | Nil               |            |

### 13. Student - Teacher Ratio (program wise)

| Sr. No. | Academic<br>Year | Total No. of<br>Students | Total No. of<br>Staff | Student<br>Teacher Ratio |
|---------|------------------|--------------------------|-----------------------|--------------------------|
| 1       | 2016-17          | 240                      | 17                    | 14:1                     |
| 2       | 2015-16          | 240                      | 16                    | 15:1                     |
| 3       | 2014-15          | 240                      | 16                    | 15:1                     |
| 4       | 2013-14          | 240                      | 16                    | 15:1                     |

## 14. Number of academic support staff (technical) and administrative staff; sanctioned and filled

| Sr. No | Type of Staff       | Sanctioned | Filled |
|--------|---------------------|------------|--------|
| 1      | Technical Assistant | 05         | 05     |
| 2      | Attendant           | 01         | 01     |

## 15. Qualifications of teaching faculty with DSc/ D.Litt/ Ph.D/ MPhil / PG. – PhD (Registered) -02, PG-14

## 16. Number of faculty with ongoing projects from a) National b) International funding agencies and grants received

| Sr. No | Name of Faculty | National /International funding agencies | Grant<br>Received |  |  |
|--------|-----------------|--|-------------------|--|--|
|        | Nil             |  |                   |  |  |

## 17. Departmental projects funded by DST - FIST; UGC, DBT, ICSSR, etc. and total grants received

| Sr. | Name of Project | DST-FIST / UGC/ DBT/ ICSSR/ | <b>Grant Received</b> |  |
|-----|-----------------|-----------------------------|-----------------------|--|
| No  |                 | Others                      |                       |  |
| Nil |                 |                             |                       |  |

### 18. Research Centre/facility recognized by the University

| Sr. No | Name of Research Centre/facility |
|--------|----------------------------------|
|        | Nil                              |

#### 19. Publications

### **Publication per faculty**

| 1 | Publication per faculty                                 | 1.41 |
|---|---|------|
| 2 | Number of papers published in peer reviewed journals by | 29   |
|   | faculty and students                                    |      |
| 3 | Number of Publications listed in International Database | 24   |
| 4 | Monographs  | Nil  |
| 5 | Chapter in Books  | Nil  |
| 6 | Books Edited  | Nil  |

| 7  | Books with ISBN/ISSN number with details of Publisher | Nil |
|----|---|-----|
| 8  | Citation Index  | Nil |
| 9  | SNIP  | Nil |
| 10 | SJR   | Nil |
| 11 | Impact factor   | Nil |
| 12 | H-Index   | Nil |

## 20. Areas of consultancy and income generated

| Sr. No Area of Consultancy |     | Income Generated |
|----------------------------|-----|------------------|
|                            | Nil |                  |

## 21. Faculty as members in a)National Committees, b)International Committees, c) Editorial Boards

| Sr. No | Name of Faculty      | Member of National / International<br>Committees / Editorial Boards |
|--------|----------------------|---|
| 1      | 1 Prof. N. S. Ujgare | International Journal of Computer Trends and Technology(IJCTT)      |
|        |                      | Reviewer of IJARCE Journal  |

## 22. Student projects

| Sr. | Name   | Percentage |
|-----|--|------------|
| No. |  |            |
| 1   | Percentage of students who have done in-house          | 80%        |
| 1   | projects including inter departmental/program          |            |
| 2   | Percentage of students placed for projects in          | 20%        |
|     | organizations outside the institution i.e. in Research |            |
|     | laboratories/Industry/ other agencies                  |            |

## 23. Awards / Recognitions received by faculty and students Summary

|     |          | _            | -         |             | ~                |
|-----|----------|--------------|-----------|-------------|------------------|
| Sr. | Name of  | Event Name   | Name of   | Prize/      | State/ National/ |
| No  | Student  |              | Organizer | Achievement | International    |
| 1   | Rani     | MVP-Kshitij  | NDMVPS's  | Third prize | National         |
|     | Wagh     | 2016-Pro-    | KBTCOE,   |             |                  |
|     |          | Manifesto    | Nashik    |             |                  |
|     |          | Project Mine | Matoshri  | First Prize | National         |
|     |          | 2016         | COERC,    |             |                  |
|     |          |              | Nashik    |             |                  |
| 2   | Pooja    | MVP-Kshitij  | NDMVPS's  | First Prize | National         |
|     | Jadhav   | 2016-Pro-    | KBTCOE,   |             |                  |
|     |          | Manifesto    | Nashik    |             |                  |
| 3   | Yogita   | MVP-Kshitij  | NDMVPS's  | Third Prize | National         |
|     | Shirsath | 2016-Pro-    | KBTCOE,   |             |                  |

|    |                      | Manifesto                                  | Nashik                        |              |          |
|----|----------------------|--|-------------------------------|--------------|----------|
| 4  | Mayur<br>Bachhav     | MVP-Kshitij<br>2016-Paper-azzi             | NDMVPS's<br>KBTCOE,<br>Nashik | Second Prize | National |
| 5  | Manish<br>Wagh       | MVP-Kshitij<br>2016-Paper-azzi             | NDMVPS's<br>KBTCOE,<br>Nashik | Second Prize | National |
| 6  | Vijay<br>Gare        | MVP-Kshitij<br>2016-Paper-azzi             | NDMVPS's<br>KBTCOE,<br>Nashik | Second Prize | National |
| 7  | Chhakuli<br>Dhurjad  | Project Mine<br>2016                       | Matoshri<br>COERC,<br>Nashik  | First Prize  | National |
| 8  | Rabaab<br>Ratlamwa   | Ignite 2015-<br>TechByte                   | MET COE,<br>Nashik            | First Prize  | National |
|    | la                   | Ascend 2015-<br>Code Sureon                | KKWCOE,<br>Nashik             | Second Prize | National |
| 9  | Vaishnavi<br>Handore | Meteorite 2015-<br>C Programming           | MET COE,<br>Nashik            | Second prize | National |
| 10 | Vaidehi<br>Kakodkar  | Meteorite 2015-<br>C Programming           | MET COE,<br>Nashik            | Second prize | National |
| 11 | Nupoor<br>Lokwani    | MVP-Kshitij<br>2016-Huntington             | NDMVPS's<br>KBTCOE,<br>Nashik | Second Prize | National |
|    |                      | MVP-Throw<br>Ball                          | NDMVPS's<br>KBTCOE,<br>Nashik | First Prize  | National |
|    |                      | MVP-Elicit<br>2015- Coding<br>Geek         | NDMVPS's<br>KBTCOE,<br>Nashik | Second Prize | National |
| 12 | Pranjal<br>Darekar   | MVP-Kshitij<br>2016 – Throw<br>ball        | NDMVPS's<br>KBTCOE,<br>Nashik | First Prize  | National |
| 13 | Sayli<br>Bodake      | MVP-Kshitij<br>2016 – Cricket<br>under arm | NDMVPS's<br>KBTCOE,<br>Nashik | Second Prize | National |
| 14 | Priyanka<br>Bhandari | Art Gallery-<br>Poster Making              | NDMVPS's<br>KBTCOE,<br>Nashik | First Prize  | National |
| 15 | Pooja<br>Patil       | Throw Ball                                 | NDMVPS's<br>KBTCOE,           | First Prize  | National |

|    |                    |                                 | Nashik                        |                   |          |
|----|--------------------|---------------------------------|-------------------------------|-------------------|----------|
| 16 | Pranjal<br>Darekar | Throw Ball                      | NDMVPS's<br>KBTCOE,<br>Nashik | First Prize       | National |
| 17 | Akash<br>Deshpande | Snap-O-Graphy                   | MET COE,<br>Nashik            | First Prize       | National |
|    |                    | Sherlocked                      | KKWIEER,<br>Nashik            | Second prize      | National |
|    |                    | Gaming-NFS                      | NDMVPS's<br>KBTCOE,<br>Nashik | Third prize       | National |
|    |                    | Instrubotics<br>2015- Apti-Quiz | KKWIEER,<br>Nashik            | First Prize       | National |
| 18 | Mahesh<br>Ahire    | Mapathon                        | MET COE,<br>Nashik            | Second Prize      | National |
|    |                    | Equinox 2014-<br>Sherlocked     | KKWIEER,<br>Nashik            | Second Prize      | National |
| 19 | Priyanka<br>Deore  | Fusion 2014-<br>Cricket         | NDMVPS's<br>KBTCOE,<br>Nashik | First Prize       | National |
|    |                    | Fusion 2014-<br>Cricket         | NDMVPS's<br>KBTCOE,<br>Nashik | Man of the series | National |
| 20 | Monika<br>Mandge   | C-Coding in<br>ITIAZZA-14       | KKWIEER,<br>Nashik            | First Prize       | National |
| 21 | Kavita<br>Daware   | Profest in<br>ITIAZZA-14        | KKWIEER,<br>Nashik            | Second Prize      | National |

## 24. List of eminent academicians and scientists / visitors to the department:

| Sr.<br>No | Name of Visitor | Academicians /Scientists / Visitors |
|-----------|-----------------|-------------------------------------|
|           |                 | Nil                                 |

## 25. Seminars/ Conferences/Workshops organized & the source of funding:

| Sr. | Name of                        | Source of Funding |
|-----|--------------------------------|-------------------|
| No. | Seminars/Conferences/Workshops |                   |
| 1   | Kshitij                        | Self-financed     |
| 2   | STTP Workshops                 | IIT               |

| 3 | STTP Workshop     | Self-financed |
|---|-------------------|---------------|
| 4 | Android Workshop  |               |
| 5 | Big Data & Hadoop | Self-financed |

### 26. Student profile program/course wise

| Year    | Admission in | Enrolled |    | Pass Percentage |
|---------|--------------|----------|----|-----------------|
|         | First Year   | *M       | *F |                 |
| 2016-17 | 53           | 24       | 29 |                 |
| 2015-16 | 61           | 22       | 39 | 49.90%          |
| 2014-15 | 52           | 16       | 36 | 62.07%          |
| 2013-14 | 56           | 17       | 39 | 76.47%          |

<sup>\*</sup>M = Male \*F = Female

## 27. Diversity of Students

| Year    | Percentage of students from same state | Percentage of<br>Students from other<br>state –FE | Percentage of<br>Students from<br>abroad |
|---------|--|---|--|
| 2016-17 | 98.11                                  | 1.88  | Nil                                      |
| 2015-16 | 100                                    | Nil   | Nil                                      |
| 2014-15 | 100                                    | Nil   | Nil                                      |
| 2013-14 | 98.21                                  | 1.78  | Nil                                      |

## 28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defense services, etc.? Nil

#### 29. Student progression

| <b>Student progression</b>           | Against % enrolled |         |         |         |
|--------------------------------------|--------------------|---------|---------|---------|
|                                      | 2013-14            | 2014-15 | 2015-16 | 2016-17 |
| UG to PG                             |                    | 10      |         |         |
| PG to M.Phil                         |                    |         |         |         |
| PG to Ph.D.                          |                    |         |         |         |
| Ph.D. to Post-Doctoral               |                    |         |         |         |
| Employed Campus selection Other than | 06                 | 05      | 08      | 03      |
| campus selection                     |                    | 09      | 09      |         |
| Entrepreneurship/Self-<br>employment |                    |         |         |         |

## 30. Details of Infrastructural facilities (Department Library) -

- a. Library: -
- **b.** No. of Volumes Available: -

- c. No. of Titles Available -
- **d.** Internet facilities for Staff & Student: Avilable
- e. Class rooms with ICT facility: 03
- **f.** Laboratories: 09

## 31. Number of students receiving financial assistance from college, university, government or other agencies?

| Academic Year | State/ Central Government |
|---------------|---------------------------|
| 2016-17       |                           |
| 2015-16       | 171                       |
| 2014-15       | 95                        |
| 2013-14       | 135                       |

## **32.** Details on student enrichment programs (special lectures/workshops/seminar) with external experts

#### 2016-17:

| Sr. | Name of expert   | Name of event       | Lecture/Workshop/Seminar |
|-----|------------------|---------------------|--------------------------|
| No  |                  |                     |                          |
| 1   | Mr. Pankaj Singh | Big data and Hadoop | Workshop                 |
| 2   | Mrs. Vijayta     | Android App         | Workshop                 |
|     | Bhat             | Development         |                          |

#### 2015-16

| Sr.<br>No | Name of expert                  | Name of event                        | Lecture/Workshop/Seminar |
|-----------|---------------------------------|--------------------------------------|--------------------------|
| 1         | Dr. Partha Pratim<br>Chkraborty | Introduction to design of algorithms | Workshop                 |

### 2014-15

| Sr.<br>No | Name of expert            | Name of event       | Lecture/Workshop/Seminar |
|-----------|---------------------------|---------------------|--------------------------|
| 1         | Dr.Kameshwari<br>Chebrolu | Computer Networking | Workshop                 |

## 33. Teaching methods adopted to improve student learning

- a. Video Lectures
- **b.** Power Point Presentations
- **c.** Industrial visit

## 34. Participation in Institutional Social Responsibility (ISR) and Extension activities

- **a.** Swachhata Abhiyan conducted on the occasion of Dr. Vasantaro Pawar Smruti din during
- **b.** September 2016.
- c. Tiffin Service for Civil Hospital

- **d.** NSS camp under the leadership of Prof. Tejaswini S. Pawar was held at Govardhan, Nashik under the umbrella of special winter NSS camp, SPPU, NDMVP KBTCOE, Nashik during 2015-16.
- e. Godavari River Cleaning during 2014-15.
- **f.** Tree Plantation on the occasion of MVP Samaj din on 19<sup>th</sup> August during 2013-14, 2014- 15, 2015-16, and 2016-17.

### 35. SWOC analysis of the department and Future plans

### **Strength:**

- a. Enthusiastic faculty
- b. Optimistic and unbiased approach
- **c.** Healthy competition amongst the students
- **d.** Best infrastructure facilities

#### Weakness:

- a. Research faculty/publication/grants
- **b.** Alumni meet
- c. Parents meet
- **d.** Industry institute interaction(III)
- e. Placements
- **f.** Only one faculty pursuing Ph.D.

### **Opportunities:**

- a. Working on accreditation
- **b.** Improving all entities and processes
- c. IT Consultancies

### **Challenges:**

- a. Contribution of parents and alumnus
- **b.** Industry interaction
- c. To improve faculty research

### **Future plans of the Department:**

- **a.** To start the PG Program and Ph. D. research center
- **b.** To improve interaction with Industry, Alumni and parents
- **c.** To encourage the staff for Doctoral programs enrolment
- **d.** To improve entrepreneur skills of the students
- **e.** To improve technical and soft skills of the students to lead the healthy competition

## MASTER OF BUSINESS ADMINISTRATION

| 1 | Name of the Department   | Master of Business Administration   |
|---|--|-------------------------------------|
| 2 | Year of Establishment  | 2009-10                             |
| 3 | Names of Programmes / Courses offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., etc.) | P.G.                                |
| 4 | Names of Interdisciplinary courses and the departments/units involved                                      | -                                   |
| 5 | Annual/ semester/choice based credit system (programme wise)   | Semester/Choice based credit system |
| 6 | Participation of the department in the courses offered by other departments                                | YES                                 |
| 7 | Courses in collaboration with other universities, industries, foreign institutions etc.                    | Nil                                 |
| 8 | Details of courses/programmes<br>discontinued (if any) with reasons  | Nil                                 |

## 9. Number of teaching posts

| Post                 | Sanctioned | Filled |
|----------------------|------------|--------|
| Professors           | 01         | 01     |
| Associate Professors | 02         | 01     |
| Assistant Professors | 05         | 04     |

## 10. Faculty profile with name, qualification, designation, specialization, (D.Sc./ D.Litt./ Ph.D. / M. Phil. etc.,)

| Name of<br>Staff      | Qualification   | Designation            | Specialization                      | No. of<br>Years of<br>Experi-<br>ence | No. of<br>Ph.D<br>Students<br>Guided<br>for the<br>last4<br>Years |
|-----------------------|-----------------|------------------------|-------------------------------------|---------------------------------------|---|
| Dr. D. T.<br>Khairnar | BE, MBA,<br>PhD | Professor              | Productions & Operations Management | Teaching 14; Industrial : 5           | 01  |
| Dr. S.R.<br>Pachorkar | BE, MBA,<br>PhD | Associate<br>Professor | Marketing<br>Management             | 10                                    | Nil   |

| Prof. N. J. | BE, MBA,     | Assistant | Marketing  | 06 | Nil |
|-------------|--------------|-----------|------------|----|-----|
| Salunke     | SET          | Professor | Management |    |     |
| Prof. L. C. | BBA,MBA      | Assistant | Marketing  | 06 | Nil |
| Sontakke    |              | Professor | Management |    |     |
| Prof. R. N. | MCOM,        | Assistant | Finance    | 07 | Nil |
| Mahale      | MBA          | Professor | Management |    |     |
| Prof. S. V. | BE, MBA      | Assistant | System     | 04 | Nil |
| Bachhav     |              | Professor | Management |    |     |
| Ms. S .N.   | DE           | Technical | Computer   | 06 | Nil |
| Salade      | (Computer    | Assistant |            |    |     |
|             | Engineering) |           |            |    |     |

## 11. List of senior visiting faculty

| Sr. No. | Name of Visiting Faculty     |
|---------|------------------------------|
| 1       | Prof. Dr. R. R. Berad        |
| 2       | Prof. Shirin Sonawane        |
| 3       | Prof. Roland Lobo            |
| 4       | Prof. Minu Sethi             |
| 5       | Prof. Deepali Mukharjee      |
| 6       | Prof. Jyoti Kelkar           |
| 7       | Prof. Gordon Noronha         |
| 8       | Prof. Neeta Nigam            |
| 9       | Prof. Vishal Potdar          |
| 10      | Prof. Sanjivan Tambulvadikar |
| 11      | Prof. JitendraChaudhari      |
| 12      | Prof. Sandip Shirsath        |
| 13      | Dr. Vishal Khandelwal        |

## 12. Percentage of lectures delivered and practical classes handled (programme wise) by temporary faculty:

| Sr. No | Name of Faculty | Lecture/Practical | Percentage |
|--------|-----------------|-------------------|------------|
|        | Nil             |                   |            |

## 13. Student -Teacher Ratio (programme wise)

| Sr. No. | Academic<br>Year | Total No. of<br>Students | Total No. of<br>Staff | Student<br>Teacher Ratio |
|---------|------------------|--------------------------|-----------------------|--------------------------|
| 1       | 2016-17          | 120                      | 6                     | 20:1                     |
| 2       | 2015-16          | 120                      | 6                     | 20:1                     |

| 3 | 2014-15 | 120 | 6 | 20:1 |
|---|---------|-----|---|------|
| 4 | 2013-14 | 120 | 7 | 17:1 |

## 14. Number of academic support staff (technical) and administrative staff; sanctioned and filled

| Sr. No | Type of Staff                | Sanctioned | Filled |
|--------|------------------------------|------------|--------|
| 1      | Technical Assistant          | 01         | 01     |
| 2      | Administrative Support Staff |            |        |

## 15. Qualifications of teaching faculty with DSc/ D.Litt/ Ph.D/ MPhil / PG. -

Ph.D.: 02

Ph.D. Registered: 01

P.G.: 03

## 16. Number of faculty with ongoing projects from a) National b) International funding agencies and grants received:

| Sr. No | Name of Faculty     | National /International funding agencies | Grant<br>Received |
|--------|---------------------|--|-------------------|
| 1      | Dr. S. R. Pachorkar | BCUD, SPPU, Pune                         | 1,00,000/-        |
| 2      | R. N. Mahale        | BCUD, SPPU, Pune                         | 2,00,000/-        |

## 17. Departmental projects funded by DST - FIST; UGC, DBT, ICSSR, etc. and total grants received : NIL

| Sr. No | Name of Project | DST-FIST / UGC/ DBT/<br>ICSSR/ Others | Grant<br>Received |
|--------|-----------------|---------------------------------------|-------------------|
| Nil    |                 |                                       |                   |

### 18. Research Centre/facility recognized by the University: Nil

| Sr. No | Name of Research Centre/facility |
|--------|----------------------------------|
|        | Nil                              |

#### 19. Publications

| 1 | Publication per faculty                                 | 03 |
|---|---|----|
| 2 | Number of papers published in peer reviewed journals by | 04 |
|   | faculty and students                                    |    |
| 3 | Number of Publications listed in International Database | -  |
| 4 | Monographs  | -  |
| 5 | Chapter in Books  | -  |
| 6 | Books Edited  | -  |
| 7 | Books with ISBN/ISSN number with details of Publisher   | -  |
| 8 | Citation Index  | -  |

| 9  | SNIP          | - |
|----|---------------|---|
| 10 | SJR           | - |
| 11 | Impact factor | - |
| 12 | H-Index       | - |

## 20. Areas of consultancy and income generated:

| Sr. No | Area of Consultancy | <b>Income Generated</b> |
|--------|---------------------|-------------------------|
|        | Nil                 |                         |

## 21. Faculty as members in a)National Committees, b)International Committees, c) Editorial Boards

| Sr.<br>No | Name of<br>Faculty    | Member of National / International Committees /<br>Editorial Boards  |
|-----------|-----------------------|--|
| 1         | Dr. D. T.<br>Khairnar | Reviewer, Journal of Business and Economics - published by Academic Star Publishing Company, New York NY 10017. (ISSN:2155-7950) |
|           |                       | Member, Board of Studies, SPPU, Pune, Period: November-2014 To November-2016   |
|           |                       | Member, 32/5 Committee, SPPU, Pune, Period: November-2014 To November-2016   |
|           |                       | Member, Local Inquiry Committee, SPPU, Pune  |
|           |                       | Member, Board of Studies, Sandip University, Nashik  |

## 22. Student projects

| Sr. No | Name   | Percentage |
|--------|--|------------|
| 1      | Percentage of students who have done in-house projects including inter departmental/programme  | -          |
| 2      | Percentage of students placed for projects in organizations outside the institution i.e. in Research laboratories/Industry/ other agencies | 100%       |

## 23. Awards / Recognitions received by faculty and students Summary

| Sr.<br>No. | Name of<br>Student     | Event<br>Name     | Name of<br>Organizer         | Prize/<br>Achievement       | State/<br>National/<br>International |
|------------|------------------------|-------------------|------------------------------|-----------------------------|--------------------------------------|
| 1          | Dr. S. R.<br>Pachorkar | Avishkar<br>-2013 | Government of<br>Maharashtra | State level-<br>Avishkar-13 | State Level                          |

## 24. List of eminent academicians and scientists / visitors to the department:

| Sr.<br>No | Name of Visitor               | Academicians /Scientists / Visitors                    |
|-----------|-------------------------------|--|
| 1         | Dr. Omprakash Kulkarni        | Advisor, Mentor, Consulting Engineer & Young Scientist |
| 2         | Mrs. Arya Hycinth             | Corporate Trainer                                      |
| 3         | Mr. Gordon Noronha            | Corporate Trainer                                      |
| 4         | Mr. Hanmantrao Rao (TCS)      | CEO, TCS   |
| 5         | Mr. Daniel Goodman & Mohammad | Scientists (MIT Media Lab, USA)                        |
| 6         | CA Tushar Jagtap              | Practicing CA  |
| 7         | Mr. Mansukhbhai Prajapati     | Awarded Most Powerful Rural<br>Entrepreneur            |
| 8         | Mr. Yashovardhan Baramatikar  | CEO, KVIC, Mumbai                                      |
| 9         | Mr. S. R. Patil               | Director (R-SETI, Bank of Maharashtra)                 |
| 10        | Manas Gajare                  | Entrepreneur   |
| 11        | CA SanjivanT ambulvadikar     | Practicing CA  |
| 12        | Mr. Amit Pandey               | Entrepreneur   |
| 13        | Ms. Kalyani Khodake           | Entrepreneur   |
| 14        | Mr. Shaunak Chafekar          | Entrepreneur   |
| 15        | Ms. Bhagyashri Dashpute       | Entrepreneur   |
| 16        | Ms. Aishwarya Bodke           | Entrepreneur   |
| 17        | Mr. Bhavesh Bhatia            | Entrepreneur   |
| 18        | Mr. Uddhav Aher               | Entrepreneur   |
| 19        | Mr. Pramod Gaikwad            | Entrepreneur   |
| 20        | CA Vishal Poddar              | Practicing CA  |
| 21        | Mr. Kiran Bhide               | Entrepreneur   |
| 22        | Mr. Aditya Oak                | Music Director   |
| 23        | Mr. Amol Kadam                | Entrepreneur   |

## 25. Seminars/ Conferences/Workshops organized & the source of funding:

- a. National Conferences- 02 (QIP, BCUD, SPPU, Pune)
- b. International-Nil

## 26. Student profile programme/course wise

| Year    | Admission in First | Enrolled   |               | Pass Percentage |
|---------|--------------------|------------|---------------|-----------------|
|         | Year               | * <b>M</b> | $*\mathbf{F}$ |                 |
| 2016-17 | 60                 | 26         | 34            |                 |

| 2015-16 | 60 | 31 | 29 | 94.44% |
|---------|----|----|----|--------|
| 2014-15 | 54 | 26 | 28 | 91.23% |
| 2013-14 | 60 | 28 | 32 | 85.71% |

<sup>\*</sup>M = Male \*F = Female

### 27. Diversity of Students

| Year    | Percentage of students from same state | Percentage of Students from other state | Percentage of<br>Students<br>from abroad |
|---------|--|---|--|
| 2016-17 | 100%                                   | Nil                                     | Nil                                      |
| 2015-16 | 100%                                   | Nil                                     | Nil                                      |
| 2014-15 | 100%                                   | Nil                                     | Nil                                      |
| 2013-14 | 100%                                   | Nil                                     | Nil                                      |

## 28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defense services, etc.? Nil

### 29. Student progression

| Student progression                                      |  | Against % enrolled                            |
|--|--|---|
| PG to Ph.D.  |  | Nil   |
| Ph.D. to Post-Doctoral                                   |  | Nil   |
| Employed Campus selection  Other than campus Recruitment |  | 2014-15: 15%<br>2015-16: 39%                  |
|  |  | 2014-15: 47%<br>2015-16: 37%                  |
| Entrepreneurship/Self-employment                         |  | 2014-15: 06- Students<br>2015-16: 03-Students |

## 30. Details of Infrastructural facilities(Department Library):

a. Library: Available

b. No. of Volumes Available: - -c. No. of Titles Available: - 177

d. Internet facilities for Staff & Student: Availablee. Class rooms with ICT facility: Available 02

**f.** Laboratories :- Computer Labs: 02

## 31. Number of students receiving financial assistance from college, university, government or other agencies

| Academic Year | State/ Central Government |
|---------------|---------------------------|
| 2016-17       | 28                        |
| 2015-16       | 36                        |
| 2014-15       | 21                        |

|--|

# 32. Details on student enrichment programmes (special lectures/workshops/ seminar) with external experts 2016-17:

| Sr.<br>No. | Name of expert     | Name of event                 | Lecture/<br>Workshop/ |
|------------|--------------------|-------------------------------|-----------------------|
|            |                    |                               | Seminar               |
| 1          | Mr. Gordon Noronha | Personality development       | 01 Day                |
|            |                    | programmes                    | Workshop              |
| 2          | Mr. Amar Thakare & | Cyber Security Awareness      | Lecture               |
|            | PSI Shinde Madam   | Programme                     |                       |
| 3          | Mr. Amol Kadam     | Digital Marketing Expert Talk | Lecture               |
| 4          | Mr. Kiran Bhide    | SwayamTumchyaDaari            | Lecture               |
|            |                    | (Entrepreneurship)            |                       |
| 5          | Mr. Aditya Oak     | SwayamTumchyaDaari            | Lecture               |
|            |                    | (Entrepreneurship)            |                       |

## 2015-16

| Sr.<br>No. | Name of expert           | Name of event                            | Lecture/<br>Workshop<br>/Seminar |
|------------|--------------------------|--|----------------------------------|
| 1          | Mr. Ravikumar Iyar       | Talk on Swadeshi Movement                | Lecture                          |
| 2          | Mr. Ravindran            | Talk on Financial Planning               | Lecture                          |
| 3          | Mr. V. P. Joshi          | Talk on Financial Planning               | Lecture                          |
| 4          | CA Tushar Jagtap         | Talk on Taxation & Financial Planning    | Lecture                          |
| 5          | Mr. Laxman Gole          | Experience Sharing                       | Lecture                          |
| 6          | Mr. Papalkar             | Talk on "Swami Vivekananda"              | Lecture                          |
| 7          | Mr. Bhavesh Bhatia       | Talk on "Entrepreneurship"               | Lecture                          |
| 8          | Mr.Mansukhbhai Prajapati | National Conference-2015                 | Lecture                          |
| 9          | Mr. Amit Pandey          | Young Turks National Conference-2015     | Lecture                          |
| 10         | Ms. Kalyani Khodake      | Young Turks National Conference-<br>2015 | Lecture                          |
| 11         | Mr. Shaunak Chafekar     | Young Turks National Conference-<br>2015 | Lecture                          |
| 12         | Ms. Bhagyashri Dashpute  | Young Turks National Conference-<br>2015 | Lecture                          |
| 13         | Ms. Aishwarya Bodke      | Young Turks National Conference-<br>2015 | Lecture                          |
| 14         | Mr. Milind Kulkarni      | Talk on Arth-Kranti                      | Lecture                          |
| 15         | CA Tushar Jagtap         | Talk on Financial Planning               | Lecture                          |

#### 2014-15

| Sr.<br>No. | Name of expert                   | Name of event                            | Lecture/<br>Workshop/<br>Seminar |
|------------|----------------------------------|--|----------------------------------|
| 1          | Mr. Dilip Chavan                 | Talk on "Ethics & Social Responsibility" | Lecture                          |
| 2          | Mr. Chirag Patil                 | Art of Living                            | Lecture                          |
| 3          | Dr. Smita Kolhe                  | Talk on Social Responsibilities          | Lecture                          |
| 4          | Mr. Gordon Norolla               | Personality development programmes       | 01-Day<br>Workshop               |
| 5          | Mr. Ajit Takke                   | Talk on Life Style                       | Lecture                          |
| 6          | Mr. Hanumant Rao                 | Talk on Innovations                      | Lecture                          |
| 7          | Mr. Danial Goodman<br>& Mohammad | Talk on Smart City                       | Lecture                          |
| 8          | Ms. Krushna Patil                | Motivational Talk                        | Lecture                          |
| 9          | Mr. Matin Bhosale                | Motivational Talk                        | Lecture                          |

#### 2013-14

| Sr.<br>No | Name of expert   | Name of event          | Lecture/Workshop/<br>Seminar |
|-----------|------------------|------------------------|------------------------------|
| 1         | Mrs. Nandita Ray | Soft Skill Development | Workshop                     |

### 33. Teaching methods adopted to improve student learning

- **a.** Case Study / Case-lets / Situation Analysis (Group Activity or Individual Activity)
- **b.** Field Survey / Study tour and report of the same
- c. Small Group Project
- d. Group Discussion
- e. Role Play / Story Telling
- **f.** Industry Analysis (Group Activity or Individual Activity)
- **g.** Literature Review / Book Review
- **h.** Model Development / Simulation Exercises (Group Activity or Individual Activity)
- i. Quiz/Debate
- j. News Paper Reading
- **k.** Poster Presentation
- **l.** Mobile Ad-Making
- **m.** Entrepreneur Interviews

## 34. Participation in Institutional Social Responsibility (ISR) and Extension activities

- a. Project Bandhan
- **b.** Project Divyang
- c. NSS

- d. MVP Marathon
- e. Mission Clean Godavari
- f. Clean Nashik Competition
- g. Blood Donation Camp

### 35. SWOC analysis of the department and Future plans

#### **Strengths:**

- a. Innovative Learning Practices
- **b.** Well-Equipped Infrastructure
- c. Strong Industrial Connect
- **d.** Well Qualified And Experienced Faculty
- **e.** Developed Individual Brands Of Social Entrepreneurship Through Project Bandhan & Project Divyang.

#### Weaknesses:

- a. Lack In Student & Faculty Exchange Program With Reputed Universities
- **b.** Lack in Faculty Development Program
- c. Unable to Organize Parent Meets & Alumni Meets

### **Opportunities:**

- a. To Attract Graduates Who Are Looking For Entrepreneurship
- **b.** Strong Industrial Bonding Will Help In The Area Of Management Research & Innovations
- c. Research Center For Ph.D.

### **Challenges:**

- **a.** To Scale Up Resources For Organizing Management Development Programs
- **b.** To Attract Good Quality Graduates Who Will Take Admission As A Full Time Student

### **Future Plans:**

- **a.** To strengthen the research and consultancy activities in the department.
- **b.** To establish a center of excellence in the education for PhD programs

### MASTER OF COMPUTER APPLICATIONS

| 1. | Name of the Department  | Master of Computer Applications (Engg.)                               |  |
|----|---|---|--|
| 2. | Year of Establishment   | 2010  |  |
| 3. | Names of Programmes / Courses offered (UG, PG, M.Phil., Ph.D. Integrated Masters; Integrated Ph.D., etc.) | PG: Master of Computer Applications (Engineering) (3 years full time) |  |
| 4. | Names of Interdisciplinary courses and the departments/units involved                                     | Nil   |  |
| 5. | Annual/ semester/choice based credit system (programme wise)  | PG: Semester& Choice based Credit system                              |  |
| 6. | Participation of the department in the courses offered by other departments                               | Nil   |  |
| 7. | Courses in collaboration with other universities, industries, foreign institutions etc.                   | Nil   |  |
| 8. | Details of<br>courses/programmes<br>discontinued (if any) with<br>reasons                                 | NA  |  |

## 9. Number of teaching posts

| Post                 | Sanctioned | Filled |
|----------------------|------------|--------|
| Professors           | Nil        | -      |
| Associate Professors | 01         | -      |
| Assistant Professors | 04         | 04     |

## 10. Faculty profile with name, qualification, designation, specialization, (D.Sc./D.Litt./Ph.D. / M. Phil. etc.,)

| Name of     | Qualification | Designation | Specializa- | No. of Years | No. of Ph.D |
|-------------|---------------|-------------|-------------|--------------|-------------|
| Staff       |               |             | tion        | of           | Students    |
|             |               |             |             | Experience   | Guided for  |
|             |               |             |             |              | the last 4  |
|             |               |             |             |              | Years       |
|             |               |             |             |              |             |
| Prof. N. R. | BSc,          | Assistant   | Computer    | 5.2          | Nil         |
| Kakad       | MCA(Engg.)    | Professor   | Application |              |             |
| Prof. S. M. | BCS,MCA       | Assistant   | Computer    | 8            | Nil         |
| Yawalkar    |               | Professor   | Application |              |             |

| Prof. M. V. | B.E(Computer), | Assistant | Computer | 5.3 | Nil |
|-------------|----------------|-----------|----------|-----|-----|
| Malode      | M.E(Computer)  | Professor |          |     |     |
| Prof. D. L. | B.E(I.T),      | Assistant | Computer | 5.3 | Nil |
| Tidke       | M.E(Computer)  | Professor |          |     |     |
| Mrs. S. S.  | DCT            | Technical | Computer | 6.2 | Nil |
| Patil       |                | assistant |          |     |     |
| Mrs. S. D.  | SSC            | Peon      | -        | 8.3 | Nil |
| Thombre     |                |           |          |     |     |

## 11. List of senior visiting faculty

| Sr. No. | Name of Faculty    |
|---------|--------------------|
| 1       | Dr. B. D. Ekade    |
| 2       | Prof. B. J. Gade   |
| 3       | Prof. D. V. Nandre |

## 12. Percentage of lectures delivered and practical classes handled (programme wise) by temporary faculty

| Sr. No. | Name of Faculty     | Lecture/Practical | Percentage |
|---------|---------------------|-------------------|------------|
| 1       | Prof. G. D. Dhatrak | Lecture           | 100%       |
| 2       | Prof. Shaileja Bhor | Lecture           | 100%       |
| 3       | Prof. Vandana Bhor  | Lecture           | 100%       |
| 4       | Prof. G. D. Kale    | Lecture           | 100%       |

### 13. Student - Teacher Ratio (programme wise)

| Sr. No. | Academic<br>Year | Total No. of<br>Students | Total No. of<br>Staff | Student<br>Teacher Ratio |
|---------|------------------|--------------------------|-----------------------|--------------------------|
| 1       | 2016-17          | 120                      | 04                    | 30:1                     |
| 2       | 2015-16          | 120                      | 08                    | 32:1                     |
| 3       | 2014-15          | 120                      | 09                    | 20:1                     |
| 4       | 2013-14          | 180                      | 11                    | 16:1                     |

## 14. Number of academic support staff (technical) and administrative staff; sanctioned and filled

| Sr. No | Type of Staff       | Sanctioned | Filled |
|--------|---------------------|------------|--------|
| 1      | Technical Assistant | 01         | 01     |
| 2      | Attendant           | 01         | 01     |

- 15. Qualifications of teaching faculty with DSc/ D.Litt./ Ph.D./ MPhil / PG. Refer: PG- 04.
- 16. Number of faculty with ongoing projects from a) National b) International funding agencies and grants received: Nil

## 17. Departmental projects funded by DST - FIST; UGC, DBT, ICSSR, etc. and total grants received: Nil

## 18. Research Centre/facility recognized by the University: MCA CAP(2013)

#### 19. Publications

| 1  | Publication per faculty  | 1.0 |
|----|--|-----|
| 2  | Number of papers published in peer reviewed journals by faculty and students | 04  |
| 3  | Number of Publications listed in International Database                      | 06  |
| 4  | Monographs   | Nil |
| 5  | Chapter in Books   | Nil |
| 6  | Books Edited   | Nil |
| 7  | Books with ISBN/ISSN number with details of Publisher                        | Nil |
| 8  | Citation Index   | Nil |
| 9  | SNIP   | Nil |
| 10 | SJR  | Nil |
| 11 | Impact factor  | Nil |
| 12 | H-Index  | Nil |

## 20. Areas of consultancy and income generated: Nil

## 21. Faculty as members in a)National Committees, b)International Committees, c) Editorial Boards

### A.Y 2016-17

| Sr. No. | Name of Faculty    | Committee               |
|---------|--------------------|-------------------------|
| 1       | Prof. M. V. Malode | Paper Setter in SPPU.   |
| 2       | Prof. M. V. Malode | Paper Examiner in SPPU. |
| 3       | Prof. D. L. Tidke  | Paper Setter in SPPU.   |

### A.Y 2015-16

| Sr. No. | Name of Faculty    | Committee               |
|---------|--------------------|-------------------------|
| 1       | Prof. M. V. Malode | Paper Setter in SPPU.   |
| 2       | Prof. M. V. Malode | Paper Examiner in SPPU. |
| 3       | Prof. D. L. Tidke  | Paper Setter in SPPU.   |

#### A.Y 2014-15

| Sr. No. | Name of Faculty    | Committee             |
|---------|--------------------|-----------------------|
| 1       | Prof. V. S. Tidake | Chairman in SPPU      |
| 2       | Prof. M. V. Malode | Paper Setter in SPPU. |

| 3 | Prof. M. V. Malode | Paper Examiner in SPPU. |
|---|--------------------|-------------------------|
| 4 | Prof. D. L. Tidke  | Paper Setter in SPPU.   |

## A.Y 2013-14

| Sr. No. | Name of Faculty      | Committee               |
|---------|----------------------|-------------------------|
| 1       | Prof. V. S. Tidake   | Chairman in SPPU        |
| 2       | Prof. M. V. Malode   | Paper Setter in SPPU.   |
| 3       | Prof. M. V. Malode   | Paper Examiner in SPPU. |
| 4       | Prof. D. L. Tidke    | Paper Setter in SPPU.   |
| 5       | Prof. R. S. Junagade | Paper Setter in SPPU.   |

## 22. Student projects

## Year 2015-16

| Sr. No. | Name  | Percentage |
|---------|---|------------|
| 1       | Percentage of students who have done in-house projects      | 2.8%       |
|         | including inter departmental/programme                      |            |
| 2       | Percentage of students placed for projects in organizations | 97.18%     |
|         | outside the institution i.e. in Research                    |            |
|         | laboratories/Industry/ other agencies                       |            |

## Year 2014-15

| Sr. No. | Name  | Percentage |
|---------|---|------------|
| 1       | Percentage of students who have done in-house projects      | 2%         |
|         | including inter departmental/programme                      |            |
| 2       | Percentage of students placed for projects in organizations | 90%        |
|         | outside the institution i.e. in Research                    |            |
|         | laboratories/Industry/ other agencies                       |            |

## Year 2013-14

| Sr. No. | Name   | Percentage |
|---------|--|------------|
| 1       | Percentage of students who have done in-house projects including inter departmental/programme  | -          |
| 2       | Percentage of students placed for projects in organizations outside the institution i.e. in Research laboratories/Industry/ other agencies | 95%        |

## 23. Awards / Recognitions received by faculty and students Summary

| Sr. No. | Name of<br>Student | <b>Event Name</b>               | Name of<br>Organizer | Prize/<br>Achievement | State/<br>National/<br>International |
|---------|--------------------|---------------------------------|----------------------|-----------------------|--------------------------------------|
| 1       | Sandip<br>Donde    | Roobaru-<br>Poster<br>Challenge | MVP,MBA<br>Dept.     | Runner up             | State                                |

| 2 | Rahul    | Roobaru-     | MVP,MBA  | Runner up   | State    |
|---|----------|--------------|----------|-------------|----------|
|   | Ambekar  | Solo Singing | Dept.    |             |          |
| 3 | Rahul    | Roobaru-     | MVP,MBA  | First Prize | State    |
|   | Ambekar  | Music Masti  | Dept.    |             |          |
| 4 | Shrirang | TQuest       | MET,IOE, | First Prize | National |
|   | Kulkarni | (SPARK-13)   | Nasik    |             |          |

## 24. List of eminent academicians and scientists / visitors to the department:

| Sr. No. | Name of Visitor      | Academicians /Scientists / Visitors      |
|---------|----------------------|--|
| 1       | Mr. Swapnil Kulkarni | Project Manager, Kanaka Softwares, Pune. |

## 25. Seminars/ Conferences/Workshops organized & the source of funding: National-

| Sr. No. | Name of Seminars/ Conferences/Workshops | Source of Funding |
|---------|---|-------------------|
| 1       | Mozilla Workshop                        | Self financed     |
| 2       | Google Apps for Education               | Self financed     |
| 3       | Advanced Java                           | Institute         |
| 4       | Software Testing                        | Self financed     |
| 5       | Virtual reality, Zabuza LAB             | Self financed     |

## 26. Student profile programme/course wise

| Year    |       | Admission in First | Enre | Enrolled   |            |
|---------|-------|--------------------|------|------------|------------|
|         |       | Year               | *M   | * <b>F</b> | Percentage |
| 2016-17 |       | Nil                | NA   | NA         | NA         |
| 2015-16 |       | 17                 | 05   | 12         | 64.7%      |
| 2014-15 | F.Y   | Nil                | NA   | NA         | NA         |
|         | D.S.Y | 56                 | 17   | 38         | 46.4%      |
| 2013-14 | F.Y   | 15                 | 08   | 07         | 50%        |
|         | D.S.Y | 16                 | 08   | 13         | 54.8%      |

<sup>\*</sup>M = Male \*F = Female

## 27. Diversity of Students

| Year    | Percentage of students from same state | Percentage of Students<br>from other state | Percentage<br>of Students<br>from<br>abroad |
|---------|--|--|---|
| 2016-17 | NA                                     | NA   | NA  |
| 2015-16 | 100%                                   | NA   | NA  |
| 2014-15 | NA                                     | NA   | NA  |
| 2013-14 | 100%                                   | NA   | NA  |

## 28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defense services, etc.? :Nil

### 29. Student progression

| Student pr  | ogression                     | Against % enrolled |         |
|-------------|-------------------------------|--------------------|---------|
| PG to Ph.D  |                               | Nil                |         |
| Ph.D. to Po | st-Doctoral                   | Nil                |         |
| Employed    | Campus selection              | Nil                | 2015-16 |
|             |                               | 1.31%              | 2014-15 |
|             |                               | Nil                | 2013-14 |
|             | Other than campus Recruitment | 12.98%             | 2015-16 |
|             |                               | 19.73%             | 2014-15 |
|             |                               | 5.66%              | 2013-14 |
| Entrepreneu | urship/Self-employment        | 4.09%              |         |

### **30.** Details of Infrastructural facilities(Department Library)

- **a.** Library: 01
- **b.** No. of Volumes Available- 270
- c. No. of Titles Available -124
- **d.** Internet facilities for Staff & Student: Avilable
- e. Class rooms with ICT facility: 01
- **f.** Laboratories :- 01

## 31. Number of students receiving financial assistance from college, university, government or other agencies, scholarships, earn & learn

| Academic Year | State/ Central Government |
|---------------|---------------------------|
| 2016-17       |                           |
| 2015-16       | 58                        |
| 2014-15       | 77                        |
| 2013-14       | 88                        |

## **32.** Details on student enrichment programmes (special lectures/workshops/ seminar) with external experts

### 2016-17:

| Sr. No. | Name of expert       | Name of event    | Lecture/Workshop/<br>Seminar |
|---------|----------------------|------------------|------------------------------|
| 1       | Mr. Swapnil Kulkarni | HQL & Spring MVC | Workshop                     |
| 2       | Mr. Rajiv Shirsalkar | Software Testing | Seminar                      |
| 3       | Mr. Chaitanya Dhomse | UI Designing     | Seminar                      |

#### 2015-16

| Sr. No. | Name of expert      | Name of event          | Lecture/Workshop/<br>Seminar |
|---------|---------------------|------------------------|------------------------------|
| 1       | Mr. Prakash Ekhande | IOT                    | Seminar                      |
| 2       | Mr. Manas Gajare    | Virtual Reality        | Seminar                      |
| 3       | Mr. Rakesh Pawar    | Web Development in PHP | Workshop                     |

#### 2014-15

| Sr. No. | Name of expert     | Name of event                           | Lecture/Workshop<br>/Seminar |
|---------|--------------------|---|------------------------------|
| 1       | Mr. Sudhir Gorade  | .net                                    | Lecture                      |
| 2       | Mr. Yogita Shewale | Career Opportunities in Web Development | Seminar                      |

#### 2013-14

| Sr. No. | Name of expert      | Name of event | Lecture/Workshop/Seminar |
|---------|---------------------|---------------|--------------------------|
| 1       | Mr. Shashank Todwal | Google Apps   | Seminar                  |
| 2       | Mr. Yoman Patil     | Mozilla       | Workshop                 |

### 33. Teaching methods adopted to improve student learning

- **a.** Classroom with Modern Teaching aids like LCD Projectors.
- **b.** For easy understanding of the subject with the help of Power point presentation.
- c. Guest Lectures, workshops, Seminars delivered by Specialized Faculties.
- d. High Speed Internet, Models etc.
- **e.** Industrial visits, Expert lectures, Field Visit, Mini-projects, Projects, and Assignments.
- **f.** Various Technical CD's & reference books are available in the departmental library.

## 34. Participation in Institutional Social Responsibility (ISR) and Extension activities

- a. Clean Godavari Project.
- **b.** MVP Marathon.
- **c.** Blood Donation Camp.
- **d.** Tree Plantation.

## **35.** SWOC analysis of the department and Future plans Strength

- **a.** Well qualified experienced and dedicated faculty.
- **b.** Well-maintained state of art equipment's, laboratories and infrastructure.
- **c.** Student mentoring and teacher's feedback system.
- **d.** Monthly monitoring of student attendance.
- e. Faculty is young, energetic, hardworking and committed.
- **f.** Constant encouragement given for faculty members in pursuing research projects and higher education (M.E./M.Tech., Ph.D.)

#### Weakness

- **a.** Research, publication and consultancy work needs improvement.
- **b.** Industry-Institute association is weaker.
- **c.** Communication skills among rural based students' needs improvement.
- **d.** Professional skills needs to be further improved among students.

#### **Opportunities**

- **a.** Strengthen the Industry-Institution interaction for better placements of students.
- **b.** To improve the soft skills of the students to make them ready to face interviews, appear for different competitive exams.

#### **Challenges**

- **a.** To improve the merit ranking of low merit students admitted to the department.
- **b.** Improving the soft skills and to develop the communication skills of students.
- **c.** To improve the Industry-Institute interaction for providing opportunities to the students in experience based learning.
- **d.** Development of the state-of-the-art facility in the department.
- **e.** Rapid changes in technology and time bound learning and training skills for faculty.

#### **Future Plans**

- **a.** To conduct International Conferences and Workshops.
- **b.** Involve more faculty members in quality research activities hence publications and patents.
- **c.** Try to achieve 100% placements.

#### ANNEXURE -A

#### **DECLARATION**



NASHIK DISTRICT MARATHA VIDYA PRASARAK SAMAJ'S

Karmaveer Adv. Baburao Ganpatrao Thakare

## **COLLEGE OF ENGINEERING**

Udoji Maratha Boarding Campus, Near Pumping Station Road, Gangapur Road, Nashik-422 013, Maharashtra - India

Phone: + 91 253-2571439, 2582891, 2314319, Fax: 0253-2317016 email: principal@kbtcoe.org website:www.kbtcoe.org

REF: NDMVPS/KBTCOE/OFFICE/ 1562 ./2016-17

DATE: 3/1/2017

### Declaration by the Head of the Institution

I certify that, the data included in this Self Study Report (SSR) are true to the best of my knowledge.

This SSR is prepared by the institution after internal discussions and no part thereof has been outsourced.

I am aware that, the Peer team will validate the information provided in this SSR during the peer team visit.

Date: 03/01/2017

Place: Nashik

MASIK 422 013

Dr. K. S. Holkar

Principal Principal M.V.P. Samaj's K.B.G.T. College of Engineering Udoji Maratha Boarding Compound Gangapur Road, Nashik- 422 013

#### AFFILIATION LETTER OF UNIVERSITY

## Savitribai Phule Pune University

(Formerly University of Pune)

Telephone Nos.: 020 - 25691233 25601258 25601259

25601257



ACADEMIC SECTION Ganeshkhind, Pune – 411007, INDIA

Telegraph: 'UNIPUNE' Fax: 020-25691233

Website: www.unipune.ac.in
E-mail: dyracademic@unipune.ac.in

Ref. No.: CA/3882

Date: 08/12/2016

#### TO WHOMSOEVER IT MAY CONCERN

This is to certify that Nashik District Maratha Vidya Prasarak Samaja's Karmaveer Adv. Baburao Ganpatrao Thakare College of Engineering, Udoji Maratha Boarding Campus, Near Pumping Station Road, Gangapur Road, Nashik-422 013 is affiliated to the Savitribai Phule Pune University, since 1999-2000 (PU/NS/ENGG/58/1999) and the following courses are taught in the said college as per approval.

| Courses Under Graduate                         | Duration of the<br>Course | Affiliation<br>(Permanent /<br>Temporary) | Validity<br>Period |  |
|--|---------------------------|---|--------------------|--|
| Information Technology                         | 04 Years                  | Temporary                                 | Upto 2016-17       |  |
| Instrumentation and Control                    | 04 Years                  | Temporary                                 | Upto 2016-17       |  |
| Electronics & Telecommunication<br>Engineering | 04 Years                  | Temporary                                 | Upto 2016-17       |  |
| Computer Engineering                           | 04 Years                  | Temporary                                 | Upto 2016-17       |  |
| Mechanical Engineering                         | 04 Years                  | Temporary                                 | Upto 2016-17       |  |
| Civil Engineering                              | 04 Years                  | Temporary                                 | Upto 2016-17       |  |

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N.D.M.V.P. Samaj's,
KBT COLLEGE OF ENGINEERING
INWARD NO 932/16-17
DATE 05/12/26/16

| Courses .  Post Graduate                       | Duration of the<br>Course | Affiliation<br>(Permanent /<br>Temporary) | Validity<br>Period |  |
|--|---------------------------|---|--------------------|--|
| Mechanical Engineering (Design)                | 02 Years                  | Temporary                                 | Upto 2016-17       |  |
| Civil Engineering (Construction<br>Management) | 02 Years                  | Temporary                                 | Upto 2016-17       |  |
| M.B.A.   | 02 Years                  | Temporary                                 | Upto 2016-17       |  |
| M.C.A.   | 03 Years                  | Temporary                                 | Upto 2016-17       |  |

The said certificate is issued as per the request application received from the Principal of the college Ref. No. NDMVP/KBTCOE/OFFICE/1318/2016-17, dated 30<sup>th</sup> Nov, 2016 so as to submit it to the National Assessment and Accreditation Council (NAAC), Banglore.

Dr. V. B. Gaikwad Director, B.C.U.D.

NASIK 422 013

M.V.P. Samaj's K.B.G.T. College of Engineering Udoji Maratha Boarding Compound Gangapur Road, Nashik- 422 013

2

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### AICTE APPROVAL



All India Council for Technical Education (A Statutory body under Ministry of HRD, Govt. of India)

7th Floor, Chandralok Building, Janpath, New Delhi- 110 001 PHONE: 23724151/52/53/54/55/56/57 FAX: 011-23724183 <a href="https://www.aicte-India.org">www.aicte-India.org</a>

F.No. Western/1-2809346761/2016/EOA

Date: 25-Apr-2016

To

The Secretary, Tech. & Higher Education Deptt. Govt. of Maharashta, Mantralaya, Annexe Building, Mumbai-400032

Sub: Extension of approval for the academic year 2016-17

Ref: Application of the Institution for Extension of approval for the academic year 2016-17

Sir/Madam

In terms of the provisions under the All India Council for Technical Education (Grant of Approvals for Technical Institutions) Regulations 2012 notified by the Council vide notification number F-No.37-3/Legal/2012 dated 27/09/2012 and norms standards, procedures and conditions prescribed by the Council from time to time, I am directed to convey the approval to

| Regional Office           | Western  | Application Id        | 1-2809346761 1-3565901  |  |  |
|---------------------------|--|-----------------------|---|--|--|
| Name of the Institute     | NASHIK DISTRICT MARATHA<br>VIDYA PRASARAK SAMAJ'S<br>KARMAVEER BABURAO<br>GANPATRAO THAKARE<br>COLLEGE OF ENGINEERING,<br>NASHIK | Permanent Id          |   |  |  |
| Name of the Society/Trust | MARATHA VIDYA PRASARAK<br>SAMAJ  | Institute Address     | UDOJI MARATHA BOARDING CAMPUS, NEAR<br>PUMPING STATION, GANGAPUR ROAD, NASHIK-<br>422013, MAHARASHTRA, NASHIK, NASHIK,<br>Maharashtra, 422013 |  |  |
| Institute Type            | Unaided - Private  | Society/Trust Address | MARATHA VIDYA PRASARAK SAMAJ CENTRAL<br>OFFICE, SHIVAJI NAGAR, GANGAPUR ROAD,<br>NASHIK,NASHIK,NASHIK,Maharashtra,422002                      |  |  |

| Opted for change from<br>Women to Co-ed and<br>Vice versa | No             | Opted for change of name   | No             | Opted for change of site   | No             |
|---|----------------|----------------------------|----------------|----------------------------|----------------|
| Change from Women to Co-ed approved and Vice versa        | Not Applicable | Change of name<br>Approved | Not Applicable | Change of site<br>Approved | Not Applicable |

To conduct following courses with the intake indicated below for the academic year 2016-17

Application ld: 1-2809346761

Program. Shift Level Program. Shift Level I Shif

Application Number: 1-2809346761 Note: This is a Computer generated Report No signature is required.

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All India Council for Technical Education (A Statutory body under Ministry of HRD, Govt. of India)

7th Floor, Chandralok Building, Janpath, New Delhi- 110 001 PHONE: 23724151/52/53/54/55/56/57 FAX: 011-23724183 <a href="https://www.aicte-India.org">www.aicte-India.org</a>

| ENGINEERIN<br>G AND<br>TECHNOLO<br>GY | Shift        | GRA<br>DUA<br>TE              | N<br>MANAGEMENT   | TIME         | Pune, Pune                  |     |     |       |      |       |
|---------------------------------------|--------------|-------------------------------|---|--------------|-----------------------------|-----|-----|-------|------|-------|
| ENGINEERIN<br>G AND<br>TECHNOLO<br>GY | 1st<br>Shift | POS<br>T<br>GRA<br>DUA<br>TE  | MECHANICAL<br>ENGINEERING<br>DESIGN                         | FULL<br>TIME | University of<br>Pune, Pune | 24  | 24  | NA    | NA . | NA NA |
| ENGINEERIN<br>G AND<br>TECHNOLO<br>GY | 1st<br>Shift | UND<br>ER<br>GRA<br>DUA<br>TE | CIVIL<br>ENGINEERING  | FULL<br>TIME | University of<br>Pune, Pune | 60  | 60  | NA    | NA   | NA    |
| ENGINEERIN<br>G AND<br>TECHNOLO<br>GY | 1st<br>Shift | UND<br>ER<br>GRA<br>DUA<br>TE | COMPUTER<br>ENGINEERING                                     | FULL<br>TIME | University of<br>Pune, Pune | 60  | 60  | NA    | NA   | NA    |
| ENGINEERIN<br>G AND<br>TECHNOLO<br>GY | 1st<br>Shift | UND<br>ER<br>GRA<br>DUA<br>TE | ELECTRONICS<br>AND<br>TELECOMMUNI<br>CATIONS<br>ENGINEERING | FULL<br>TIME | University of<br>Pune, Pune | 60  | 60  | NA    | NA   | NA    |
| ENGINEERIN<br>G AND<br>TECHNOLO<br>GY | 1st<br>Shift | UND<br>ER<br>GRA<br>DUA<br>TE | INFORMATION<br>TECHNOLOGY                                   | FULL<br>TIME | University of<br>Pune, Pune | 60  | 60  | NA    | NA   | NA    |
| ENGINEERIN<br>G AND<br>TECHNOLO<br>GY | 1st<br>Shift | UND<br>ER<br>GRA<br>DUA<br>TE | INSTRUMENTA<br>TION AND<br>CONTROL<br>ENGINEERING           | FULL<br>TIME | University of<br>Pune, Pune | 40  | 40  | NA    | NA   | NA    |
| ENGINEERIN<br>G AND<br>TECHNOLO<br>GY | 1st<br>Shift | UND<br>ER<br>GRA<br>DUA<br>TE | MECHANICAL<br>ENGINEERING                                   | FULL<br>TIME | University of<br>Pune, Pune | 120 | 120 | NA    | NA   | NA    |
| MANAGEME<br>NT                        | 1st<br>Shift | POS<br>T<br>GRA<br>DUA<br>TE  | MASTERS IN<br>BUSINESS<br>ADMINISTRATI<br>ON                | FULL<br>TIME | University of<br>Pune, Pune | 60  | 60  | NA NA | NA   | NA .  |

The above mentioned approval is subject to the condition that NASHIK DISTRICT MARATHA VIDYA PRASARAK SAMA,"S KARMAVEER BABURAO GANPATRAO THAKARE COLLEGE OF ENGINEERING, NASHIK shall follow and adhere to the Regulations, guidelines and directions issued by AICTE from time to time and the undertaking / affidavit given by the institution along with the application submitted by the institution on portal.

Application Number: 1-2809346761 Note: This is a Computer generated Report.No signature is required.

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## All India Council for Technical Education (A Statutory body under Ministry of HRD, Govt. of India)

7th Floor, Chandralok Building, Janpath, New Delhi- 110 001 PHONE: 23724151/52/53/54/55/56/57 FAX: 011-23724183 <a href="https://www.aicte-India.org">www.aicte-India.org</a>

| Application Id: 1-2809346761 |              | Name of the<br>Course | Full/Part Time   | Affiliating Body | Course Closure Status       |                      |
|------------------------------|--------------|-----------------------|--|------------------|-----------------------------|----------------------|
| Program                      | Shift        | Level                 |  |                  |                             |                      |
| MCA                          | 1st<br>Shift | POST<br>GRADUAT<br>E  | MASTERS IN<br>COMPUTER<br>APPLICATIONS<br>: (Last Approved<br>Intake 60) | FULL TIME        | University of<br>Pune, Pune | Pending <sup>‡</sup> |

In case of any differences in content in this Computer generated Extension of Approval Letter, the content/information as approved by the Executive Council / General Council as available on the record of AICTE shall be final and binding.

Strict compliance of Anti-Ragging Regulation:- Approval is subject to strict compliance of provisions made in AICTE Regulation notified vide F. No. 37-3/Legal/AICTE/2009 dated July 1, 2009 for Prevention and Prohibition of Ragging in Technical Institutions. In case Institution fails to take adequate steps to Prevent Ragging or fails to act in accordance with AICTE Regulation or fails to punish perpetrators or incidents of Ragging, it will be liable to take any action as defined under clause 9(4) of the said Regulation.

Note: Validity of the course details may be verified at www.aicte-india.org

Dr. Avinash S Pant Vice - Chairman, AICTE

Copy to:
1. The Regional Officer,

All India Council for Technical Education Industrial Assurance Building 2nd Floor, Nariman Road Mumbai - 400 020, Maharashtra

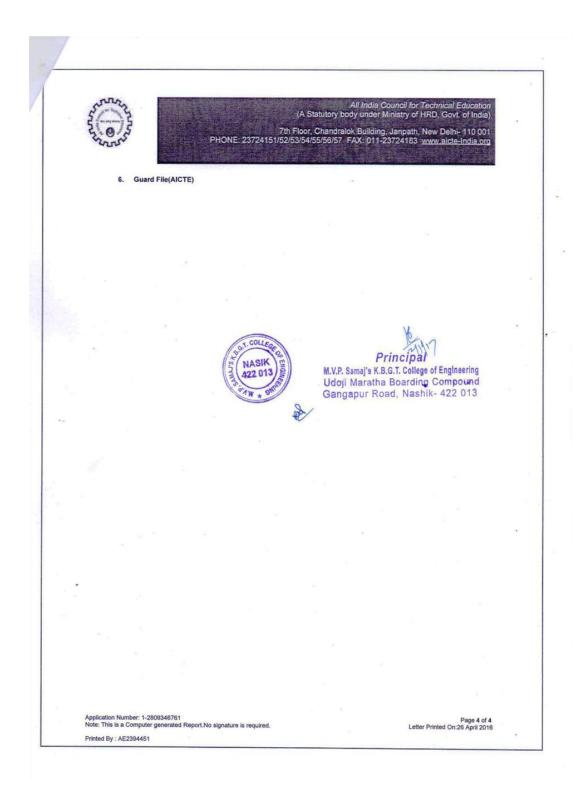
- 2. The Director Of Technical Education, Maharashtra
- The Registrar, University of Pune, Pune

NASHIK DISTRICT MARATHA VIDYA PRASARAK SAMAJ'S KARMAVEER BABURAO GANPATRAO THAKARE COLLEGE OF ENGINEERING, NASHIK UDOJI MARATHA BOARDING CAMPUS, NEAR PUMPING STATION, GANGAPUR ROAD, NASHIK-422013, MAHARASHTRA NASHIK,NASHIK, Maharashtra,422013

5. The Secretary / Chairman, MARATHA VIDYA PRASARAK SAMAJ MARATHA VIDYA PRASARAK SAMAJ CENTRAL OFFICE, SHIVAJI NAGAR, GANGAPUR ROAD, NASHIK, NASHIK,NASHIK, Maharashtra,422002

Application Number: 1-2809346761 Note: This is a Computer generated Report.No signature is required.

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#### CERTIFICATE OF COMPLIANCE



#### NASHIK DISTRICT MARATHA VIDYA PRASARAK SAMAJ'S

Karmaveer Adv. Baburao Ganpatrao Thakare

## **COLLEGE OF ENGINEERING**

Udoji Maratha Boarding Campus, Near Pumping Station Road, Gangapur Road, Nashik-422 013, Maharashtra - India

Phone: + 91 253-2571439, 2582891, 2314319, Fax: 0253-2317016 email: principal@kbtcoe.org website:www.kbtcoe.org

REF: NDMVPS/KBTCOE/OFFICE/ 1377 /2016-17

DATE: 05/01/2017

### Certificate of Compliance

This is to certify that NDMVPS Karmaveer Adv. Baburao Ganpatrao Thakare College of Engineering, Gangapur road, Nashik-422013 fulfils all norms

- 1. Stipulated by the affiliating University and/ or
- 2. Regulatory Council/ Body [such as UGC, NCTE, AICTE, MCI, DCI, BCI, etc.] and
- 3. The affiliation and recognition [if applicable] is valid as on date.

In case the affiliation/ recognition is conditional, then a detailed enclosure with regard to compliance of conditions by the institution will be sent.

It is noted that NAAC's accreditation, if granted, shall stand cancelled automatically, once the institution loses its University affiliation or Recognition by the Regulatory Council, as the case may be.

In case the undertaking submitted by the institution is found to be false then the accreditation given by NAAC is liable to be withdrawn. It is also agreeable that the undertaking given to NAAC will be displayed on the college website.

Date: 05/01/2017

Place: Nashik

COLLEGE OF THE SAME SAME

Dr. K. S. Holkar

Principal Principal M.V.P. Samaj's K.B.G.T. College of Englneering Udoji Maratha Boarding Compound Gangapur Road, Nashik- 422 013