

Mechanical Engineering Department

Academic Year – 2020-21	Class: BE
Semester – I	Date : 07/12/2020
CO: CO1,CO3,CO5	PO: PO1,PO2,PO9,PO12,PO5,PO10

Innovative Teaching Methods

Title of Innovation method/activity: Case study and Quiz activity

1. Name of Faculty: Mr. Lokare Nitin V.

2. Subject: Finite Element Analysis

3. Objective of Method:

- I. To understand the basic concepts of FEA
- II. Able to apply material property , appropriate element and boundary condition
- III. To prepared the project report
- IV. Able to read the FEA result like stress, deformation , temperature distribution

4. **Topic Covered through Activity:** Basics of FEA, Element Type, Material, Analysis types.

5. **Description of method with Benefits (8 – 10 lines):**

With the help of Case study, students are first study the FEA report/ Case study (Finite Element analysis of heat exchanger) uploaded on Google class room, with the help of this case study students are able to select any of mechanical component, model it in any of modeling software after modeling import this model in to the simulation software in the simulation software students are performing various activity like to apply material properties, element selection, apply the exact boundary condition.

After completing pre-processor step, in post processor students are able to generate the FEA results like deformation, stress etc. After completing the simulation part students are able to prepare the project report and solve one small quiz.

Benefits of method:

- This will help students to understand the concepts well and their importance.
- It will create interest among students to learn about FEA
- It improves the thinking ability of the students
- Concentration of the students improves
- Improve the reading and writing skill
-

Roles and Responsibilities

- **Teacher**
 - Provide case study in classroom.
 - Explain complete case study to student in class
 - Design the quiz.
 - Assign quiz to the students
 - Do the assessment.
- **Student**
 - Carefully read the case study uploaded on classroom.
 - Solve the Quiz.
 - Preparer the project report

6. Assessment Tools

- Assessment will be done by subject teacher on the basis of MCQ Test.
- MCQ having four question out of four question three question carries 2 marks
- One question base on report preparation and upload it in quiz link having 4 marks.

7. Quiz Link

<https://forms.gle/teaRTmWBhjc7kEK6A>

Roll No.	Name	Marks(6)
16	Yash Rajesh Burad	6
56	Kholamkar Mrunal Manish	6
98	Ganesh Hiranman Patil	4
4	SAGAR JAGANNATH AHIRE	4
103	Prachi Rajendra Patil	6
111	Pranali Rajendra Pawar	4
107	AKASH RAJENDRA PAWAR	4
140	Kunal Suresh Warke	6
28	Pratik Gautam Gaikwad	2
18	Gaurav Vishwas Chaudhari	2
129	Darshan shirsat	2
127	Danish salim shiklikar	2
12	Sunil Vishnu Bodhare	4
134	Vitthal Kondiba Suravase	2
123	Preethesh Sen	4

106	Tushar Suresh Patole	4
106	Tushar Suresh Patole	4
72	Vishwadeep Devanand Daware	4
52	Kandekar Omkar	4
14	Dhananjay Mhasu Borade	2
14	Dhananjay Mhasu Borade	2
19	Chaudhari Prafulla Dattatray	2
19	Chaudhari Prafulla Dattatray	2
20	Rahul Navnath Chaure	2
46	Shubham Rajesh Jagtap	4
44	ViKas Sudam Jadhav	2
11	Satyam Birar	2
34	Gite Saurabh Dnyaneshwar	4
40	Ingle Ajinkya Shantaram	4
132	SONAR ANUJA KAILAS	2
30	Pushpak meghraj gangurde	2
21	Ketab umesh chavan	2
03	Mayur Prakash Ahire	4
35	Bhushan Bapurao Gunjal	6
48	Parimal Sanjay Joshi	2
01	Ahire kishor sanjay	2
25	Ketan Anil Dashpute	6
41	Jadhav Pratik Babaji	2
62	Lolage Jayesh Ghanshyam	0
58	Gaurav anil kothawade	6
17	Rupeshkumar Suresh Burhade	6
39	Chandan Thakursingh Holaria	4
22	Shreyas Dange	2
65	Aditya K Bhamre	6
50	Jayesh Manoj Kalantri	4
53	Kardile Akash Kailas	4
49	KADAM MAYUR RAJENDRA	4
64	Yogesh Waman Bhagat	6
68	sumit bonde	6
71	Rahul Suresh Bagul	6
31	Roshan Rajiv Gangurde	2
67	Siddhant Barhate	6
47	Vishal Anand Jangid	4
70	Pratik Chaudhari	6
110	Meghana Rajendra Pawar	4
51	Sanket Dipak Kale	4
51	Sanket Dipak Kale	4
07	Saurabh Ravindra Bhadane	2
85	Ajay more	2
118	pranav mohan randive	4

87	Dushyant Sanjay Mulmule	4
09	Akash sanjay bhandare	2
144	AVINASH JAIN	6
26	Amol Ramesh Deore	6
33	APURV GAYKHE	2
143	Saurabh Sanjay Deshmukh	6
143	Saurabh Sanjay Deshmukh	6
83	Shriram kailas Mhasane	4
148	Swapnil dholi	6
151	Yash Suryawanshi	6
114	Pradip Bhagwan Payghan	6
136	Abhishek Thorat	2
122	VYOMKESH SANGEWAR	6
126	Abhishek Sunil Shelke	2
113	Pawar Yash Krishna	2
101	Patil Niraj Shridhar	6
90	Tejas Rajendra netawane	2
102	Piyush Sunil Patil	4
91	Nikam Kalpesh Satish	4
84	Darshana Sanjay Mohan	2
144	AVINASH JAIN	6
104	Rutuja Sunil Patil	0
112	Priyanka pawar	0
135	Priya talele	2
95	Patil Akshay Dilip	6
109	Mayur Ravindra Pawar	6
124	Jishan Chandbhai Shaikh	2
119	Aniket Shashikant Rasal	4
129	DARSHAN SHIRSAT	2
129	DARSHAN SHIRSAT	2
104	Rutuja Sunil Patil	0
92	NIKITA BHAUSAHEB NIKAM92	4
104	Rutuja Sunil Patil	0
128	Vaibhav Dnyaneshwar Shinde	2
138	Mansi Bhikan Wable	2
57	Vivek Dilip Koli	6
09	Akash Sanjay bhandare	2
133	Harshali Shivaji Sonawane	4
8	Bhand kartikkumar Rajaram	6
43	Jadhav Tejaswini Tribhuvan	6
13	BODKE PRIYANKA DNYANESHWAR	2
49	Kadam Mayur Rajendra	2

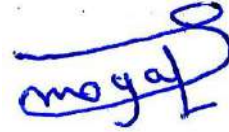
8. Activity Picture

9. For review and critique contact: e-mail address of faculty and HOD

lokare.nitin@kbtcoe.org, hod.mech@kbtcoe.org



Mr. N.V.Lokare
Subject In charge



Dr. S.P. Mogal
Module Coordinator



Dr. A.B.Kakade
NBA Coordinator



Dr. V.C.Shewale
HoD