



**MARATHA VIDYA PRASARAK SAMAJ'S**  
**Karmaveer Adv. Baburao Ganpatrao Thakare**  
**College of Engineering, Nashik**



Permanently Affiliated to Savitribai Phule Pune University Vide Letter No. : CA/1542 & Approved by AICTE New Delhi - Vide Letter No. : 740-89-32 (E) ET/98 AISHE Code - C-41622

**Department of Civil Engineering**

**Innovative Teaching Method – Student Driven Activity (Model Making)**

**Name of Faculty – Mr. R. C. Patil**

**Academic Year– 2021-22**

**Class – SE**

**Semester II**

**Name of Subject: Survey**

**Objectives of Methodology:**

1. To make students get acquainted with fundamental knowledge required in the subject with the help of models/presentation.
2. To prepare students for self-learning.
3. To develop presentation skill

**Details of Activity/Method:**

**Activity** - Understand concepts of bearing systems (WCB to RB and RB to WCB)

Model based on topics covered in syllabus of Survey prepared by student by using available materials/sources and make video for the same model explain it to students (For Students By Students).

**Benefits of Method: -**

1. It helps student to better understanding basic concept of topic covered in Survey.
2. It helps student to share their ideas with classmate and builds oral communication skills.

**Method: -**

Monitor and support students as they work through the following in this method:

1. Ask students to make a model of any topic by using available material
2. Prepared model and present by an individually or in group
3. All students are asked to fill the Google form.



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### Roles and Responsibilities

#### • Teacher: -

1. Suggest available material or resource for development of a model.
2. Provide the study material of different topics and appropriate guide lines at every stage of making models.
3. Remain available during the completion of task.
4. Prepare assessment methodology.

#### • Student: -

1. Go through all the material provided on model.
2. Once model is selected, understand it and discuss individually
3. Actively participate in video presentation and contribute by means of discussion.

### Assessment for the Activity:

<b>Q10.</b>	Representation of Bearing is done by
<b>1</b>	Whole Circle Bearings System
<b>2</b>	Quadrantal (Reduced) Bearings System
<b>3</b>	Both the above
<b>4</b>	None of the above
<b>Correct Option</b>	<b>2</b>
<b>Q11.</b>	Whole Circle Bearings System extends from
<b>1</b>	0° to 360°
<b>2</b>	0° to 90°
<b>3</b>	180° to 360°



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4	$0^\circ$ to $180^\circ$
<b>Correct Option</b>	<b>1</b>
<b>Q12.</b>	he horizontal angle made by a line with the magnetic north or south (whichever is ----- from the line) in the eastward or westward direction is the Quadrantal Bearing or Reduced Bearing of the line
1	Far
2	Closer
3	Bigger
4	Smaller
<b>Correct Option</b>	<b>2</b>
<b>Q13.</b>	$45^\circ$ in WCB system is equal to
1	S $45^\circ$ W
2	N $45^\circ$ W
3	N $45^\circ$ E
4	S $45^\circ$ E
<b>Correct Option</b>	<b>3</b>
<b>Q14.</b>	WCB are measured in? RB are measured in? (Respective answers)*
1	Anticlockwise Clockwise
2	Clockwise and Clockwise
3	Clockwise and Both Clockwise & Anticlockwise
4	None of the above
<b>Correct Option</b>	<b>3</b>



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<b>Sr. No</b>	<b>Name of Student</b>	<b>Marks Obtained</b>
1	AGRAWAL OM SANJAY	4.00
2	AGRAWAL VINIT SURYAKANT	5.00
3	AHER PARTH AHER	4.00
4	AHER PRADNYA BAPU	3.00
5	ARJUN SINGH	4.00
6	BANGAR MANOJ NAVNATH	3.00
7	BHADANE SURAJ NIVRUTTI	4.00
8	BHADANGE AVINASH SANTOSH	4.00
9	BHAMARE YOGITA DILIP	5.00
10	BHUVANESH DHANRAJ SONAWANE	4.00
11	BORAVE VINAY SUNIL	3.00
12	CHAUDHARI PALLAVI BHAGWAN	4.00
13	CHAVAN DIVYA BARKU	5.00
14	DEORE ARJUN PRASHANT	4.00
15	NAGAPURE GAYATRI DNYANESHWAR	5.00
16	PAGAR KALYANI GORAKH	5.00
17	PAGAR YUVRAJ HIREN	4.00
18	PATIL HARSHALI	4.00
19	PATIL MAYURESH SOMNATH	4.00
20	PATIL PRATIK YOGESH	4.00
21	PATIL YASHWARDHAN PRAMOD	4.00
22	PAWAR NIKITA ANIL	5.00
23	RAJOLE OM ANIL	4.00
24	SALUNKE JANAVHI PRAKASH	5.00
25	SANGLE SAKSHI GORAKSHNATH	4.00
26	SHINDE ROHIT SOMNATH	4.00
27	SHIRSATH ROSHANI SURESH	4.00
28	SONAWANE ABHISHEK SHRIRAM	4.00
29	SURYAWANSHI ANIKET RAJESH	4.00



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30	TARLE AKASH BALASAHEB	3.00
31	UGALE VIKAS RAJENDRA	5.00
32	VELIS SIDDHANT DNYANESHWAR	3.00
33	WAGH RUSHIKESH MADAN	3.00
34	WANKHEDE SURAJ SANTOSH	3.00

**Course Outcomes (Related to Methodology)**

After the completion of this activity students will be able to:

	Course Outcome	BTL
CO1	Apply concept of bearing and plane table surveying on field measurements.	3

**POs (Related to Methodology)**

After the completion of this activity students will be able to:

<b>PO1</b>	Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.
<b>PO9</b>	Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.
<b>PO10</b>	Communicate effectively on complex engineering activities with the engineering community and with 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.
<b>PO11</b>	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.
<b>PO12</b>	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.

**PSOs (Related to Methodology)**

After the completion of this activity





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PSO1	Graduates will apply technical knowledge, engineering skills, and competencies necessary for entering civil engineering career.
PSO2	Graduates will demonstrate knowledge and techniques in engineering fields for effective management and professional development.

**Evidences:**

**Photos**





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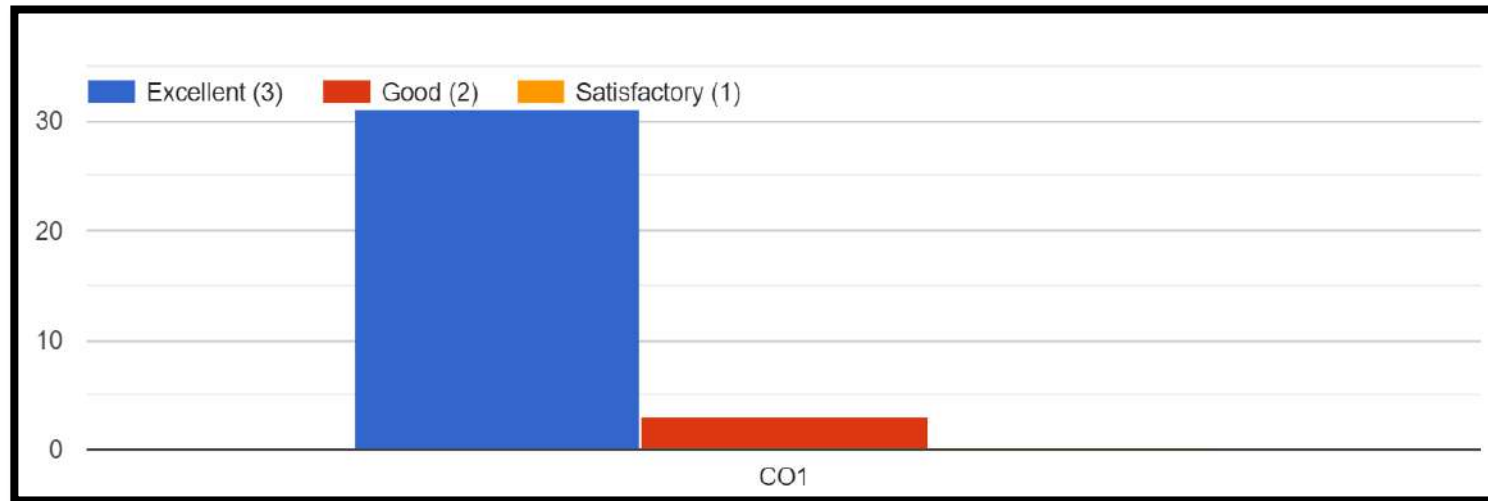


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**Impact Analysis for Outcomes (Based on Students Feedback):**

**Course Outcome**

	Course Outcome	CO1
A	No. of Students Achieving CO	34
B	Total Rating	99
C	Average Rating (B/A)	2.91



**Program Outcome**

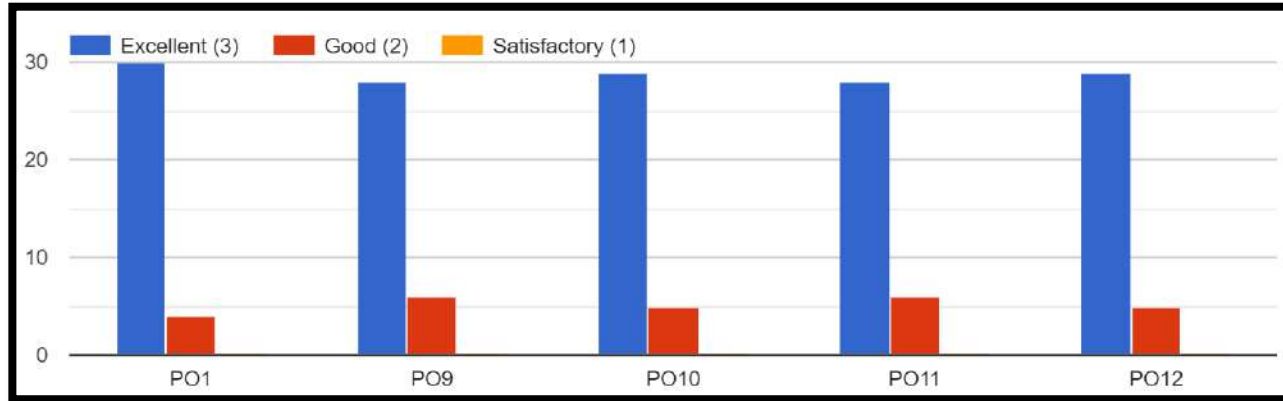
	Program Outcome	PO1	PO9	PO10	PO11	PO12
A	No. of Students Achieving PO	34	34	34	34	34
B	Total Rating	98	96	97	96	97
C	Average Rating (B/A)	2.88	2.82	2.85	2.82	2.85



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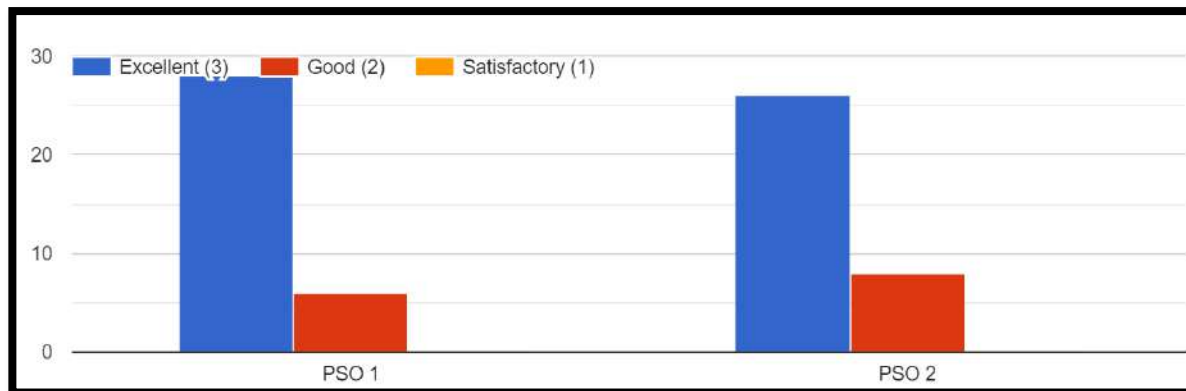


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**Program Specific Outcome**

	Program Specific Outcome	PSO1	PSO2
<b>A</b>	<b>No. of Students Achieving PSO</b>	34	34
<b>B</b>	<b>Total Rating</b>	96	94
<b>C</b>	<b>Average Rating (B/A)</b>	2.82	2.76







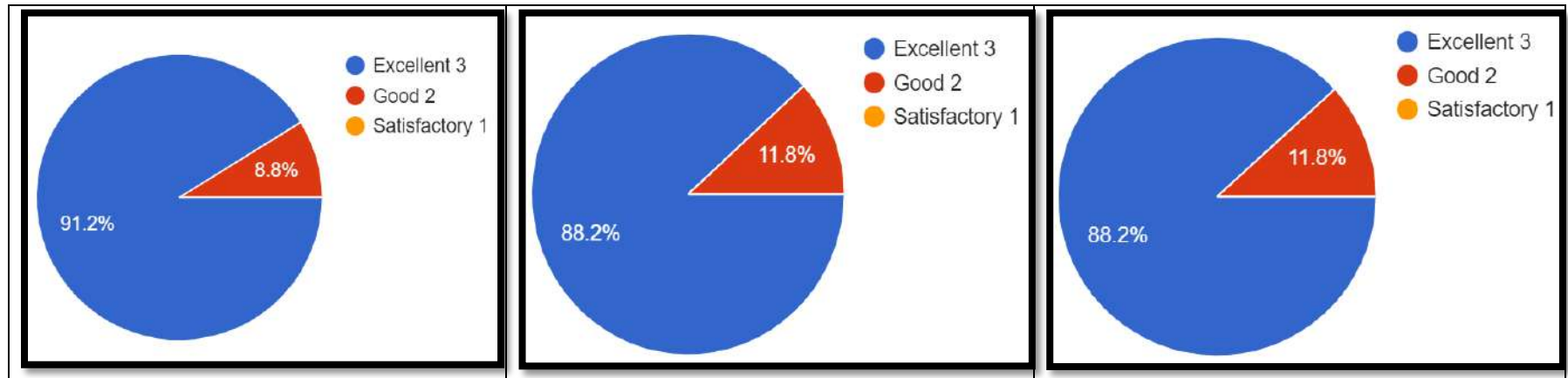
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**Impact Analysis for Methodology (Based on Students Feedback):**

	Rating	Q1. Did you find the methodology helpful?	Q2. Is the content relevant?	Q3. Concept of the methodology.
A	No. of Students	34	34	34
B	Total Rating	99	98	98
C	Average Rating (B/A)	2.91	2.88	2.88



**Link for Review and Critics:** <https://docs.google.com/forms/d/1gq4iZ6ABzgU4evaRW28g2aVSixIm49QQzeWbs2QtTF0/edit>

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