

MARATHA VIDYA PRASARAK SAMAJ'S

KARMAVEER ADV. BABURAO GANPATRAO THAKARE COLLEGE OF ENGINEERING www.kbtcoe.org

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 – Model making and presentation

Name of Faculty - Dr. M. P. Kadam

Class - TE

Academic Year-2020-21

Semester II

Name of Subject: Structural Design-II

Objectives of Methodology:

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

Details of Activity/Method:

Activity - Understand concepts of Structural Design -II.

Model based on topics covered in syllabus of Structural Design -II will be prepared by student by using available materials/sources and give a presentation on it.

Benefits of Method: -

- 1. It helps student to better understanding basic concept of topic covered in Structural Design -II
- 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 give presentation of prepared model.
- 4. Teacher examined the presentation of each student and asks questions related to topic and model.

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 presentation and contribute by means of discussion.

Assessment Tools & Rubrics:

Sr. No.	Rubrics	Marks
1	Model preparation	5 M
2	Understanding of concept	5 M
3	Presentation skill	5 M
4	Timely submission	5 M

No. preparation/presentation (5) of concept (5) skill (5) submission (5) 01 AHER TUSHAR PRAFULLA 4 5 5 4 02 BAGAL KULBHUSHAN KAILAS 4 4 5 4 03 BAGUL RIYA RAJESH 4 5 5 4 04 BAGUL RUTUJA CHINTARAM 4 5 5 4 05 BAISANE RAHUL PRAKASH 4 5 5 4 06 BARE KRUSHNA JALINDRANATH 4 5 5 4 07 BARKE PRATIK SHIVAJI 4 5 5 5 08 BHAMARE DEV DINESH 4 5 5 4 09 BHAMARE KANISHKA SANJAY 4 5 5 4 10 BHAMARE SHUBHAM RAJENDRA 4 4 4 4 11 CHAUDHARI ADARSH PRADIP 3 4 7 4 12 CHAUDHARI AVINASH AMBADAS 4 4 5 4	Roll	Students Name	Model	Understanding	Presentation	Timely	Total
01 AHER TUSHAR PRAFULLA 4 5 5 4 02 BAGAL KULBHUSHAN KAILAS 4 4 5 4 03 BAGUL RIYA RAJESH 4 5 5 4 04 BAGUL RUTUJA CHINTARAM 4 5 5 4 05 BAISANE RAHUL PRAKASH 4 5 5 4 06 BARE KRUSHNA JALINDRANATH 4 5 5 4 07 BARKE PRATIK SHIVAJI 4 5 5 5 4 07 BARKE PRATIK SHIVAJI 4 5 5 5 4 08 BHAMARE DEV DINESH 4 5 5 5 4 09 BHAMARE KANISHKA SANJAY 4 5 5 4 10 BHAMARE SHUBHAM RAJENDRA 4 4 4 4 11 CHAUDHARI ADARSH PRADIP 3 4 7 4 12 CHAUDHARI AVINASH AMBADAS 4 4 5	No.		preparation/	of concept	skill	submission	(20)
02 BAGAL KULBHUSHAN KAILAS 4 4 5 4 03 BAGUL RIYA RAJESH 4 5 5 4 04 BAGUL RUTUJA CHINTARAM 4 5 5 4 05 BAISANE RAHUL PRAKASH 4 5 5 4 06 BARE KRUSHNA JALINDRANATH 4 5 5 4 07 BARKE PRATIK SHIVAJI 4 5 5 5 4 07 BARKE PRATIK SHIVAJI 4 5 5 5 4 08 BHAMARE DEV DINESH 4 5 5 5 4 09 BHAMARE SHUBHAM RAJENDRA 4 4 4 4 4 10 BHAMARE SHUBHAM RAJENDRA 4 4 4 4 4 11 CHANDWANI KHUSHBOO DILIP 4 4 4 4 4 12 CHAUDHARI AVINASH AMBADAS 4 4 5 4 14 CHOPADA SAKSHI PRASHANT			presentation (5)	(5)	(5)	(5)	
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11 CHANDWANI KHUSHBOO DILIP 4 4 4 4 12 CHAUDHARI ADARSH PRADIP 3 4 7 4 13 CHAUDHARI AVINASH AMBADAS 4 4 5 4 14 CHOPADA SAKSHI PRASHANT 4 4 5 4 15 DEORE HRUTIK SANJAY 4 5 4 4 16 DHATINGAN ASHWIN KIRAN - - - - 17 DHATRAK PRATIK RAGHUNATH 5 5 5 4 19 GAIKWAD ADITYA KISHOR 4 4 5 4	09	BHAMARE KANISHKA SANJAY	4	5	5	4	18
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13 CHAUDHARI AVINASH AMBADAS 4 4 5 4 14 CHOPADA SAKSHI PRASHANT 4 4 5 4 15 DEORE HRUTIK SANJAY 4 5 4 4 16 DHATINGAN ASHWIN KIRAN - - - - 17 DHATRAK PRATIK RAGHUNATH 5 5 5 4 19 GAIKWAD ADITYA KISHOR 4 4 5 4	11	CHANDWANI KHUSHBOO DILIP	4	4	4	4	16
14 CHOPADA SAKSHI PRASHANT 4 4 5 4 15 DEORE HRUTIK SANJAY 4 5 4 4 16 DHATINGAN ASHWIN KIRAN - - - - 17 DHATRAK PRATIK RAGHUNATH 5 5 5 4 19 GAIKWAD ADITYA KISHOR 4 4 5 4	12	CHAUDHARI ADARSH PRADIP	3	4	7	4	15
15 DEORE HRUTIK SANJAY 4 5 4 4 16 DHATINGAN ASHWIN KIRAN - - - - 17 DHATRAK PRATIK RAGHUNATH 5 5 5 4 19 GAIKWAD ADITYA KISHOR 4 4 5 4	13	CHAUDHARI AVINASH AMBADAS	4	4	5	4	17
16 DHATINGAN ASHWIN KIRAN - - - - 17 DHATRAK PRATIK RAGHUNATH 5 5 5 4 19 GAIKWAD ADITYA KISHOR 4 4 5 4	14	CHOPADA SAKSHI PRASHANT	4	4	5	4	17
17 DHATRAK PRATIK RAGHUNATH 5 5 5 4 19 GAIKWAD ADITYA KISHOR 4 4 5 4	15	DEORE HRUTIK SANJAY	4	5	4	4	17
19 GAIKWAD ADITYA KISHOR 4 4 5 4	16	DHATINGAN ASHWIN KIRAN	-	-	-	-	-
	17	DHATRAK PRATIK RAGHUNATH	5	5	5	4	19
20 GAIKWAD AJAY BHILA 4 4 4 4	19	GAIKWAD ADITYA KISHOR	4	4	5	4	17
	20	GAIKWAD AJAY BHILA	4	4	4	4	16
21 GAIKWAD DIGVIJAY SHRIRAM 4 5 5 4	21	GAIKWAD DIGVIJAY SHRIRAM	4	5	5	4	18
22 GANGURDE SARTHAK SANJAYKUMAR 3 5 4 4	22	GANGURDE SARTHAK SANJAYKUMAR	3	5	4	4	16

23	GHOLAP SEJAL ASHUTOSH	4	5	5	4	18
24	GITE NIKHIL ANNASAHEB	4	4	4	4	16
25	JADHAV KIRAN PUNDLIK	5	5	5	4	19
26	JADHAV SHRADDHA TULSHIRAM	3	4	5	4	15
27	JAIN SANKET MAHAVIR	4	4	4	4	16
28	KADLAG PRANJAL DILIP	3	4	4	3	16
29	KAKAD PRATHAMESH GANGADHAR	4	4	4	4	16
30	KAKAD PRIYA RAJENDRA	4	4	5	4	17
31	KALE ANVAY RAJENDRA	4	4	4	4	16
32	KALE SANIKA SHARAD	4	4	4	4	16
33	KARANJIKAR PRATHMESH RAJESH	4	5	5	5	19
34	KATAD PRATIK KIRAN	4	4	4	5	17
35	KOKANE AMOL SANTOSH	4	4	4	4	16
36	KSHATRIYA VAISHNAVI SAMEER	4	4	5	4	17
37	KUMAWAT SANDIP SANJAY	-	-	-	-	-
38	LONDHE SWAPNIL SURESH	5	5	5	4	19
39	MAHAJAN ANJALI JITENDRA	4	4	4	4	16
40	MALI PRATIK SUBHASH	4	5	5	4	18
41	MATE RUSHIKESH RAMDAS	4	4	4	4	16
42	MATSAGAR GANESH BHARAT	-	-	-	-	-
43	NAHAR MAYANK RUPESH	4	4	4	4	16
44	NAVALE DIPALI AJAY	4	5	5	4	18
45	NAVALE ROHAN RAMNATH	4	4	4	4	16
46	NAVTAKKE AKSHAY ASHOKRAO	4	5	4	4	17
47	PATAIT PIYUSH RAJENDRA	4	5	5	4	18
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48	PATIL ASHUTOSH MADHUKAR	3	4	4	4	15
49	PATIL ROHAN VIJAY	4	4	4	4	16
50	PATIL RUTUJA KAILAS	4	5	5	4	18
51	PAWAR AJINKYA MAHENDRA	4	4	4	4	16
52	PAWAR SANKET RAJENDRA	4	5	5	4	18
53	RAJBHOJ PRATIM AMOL	2	2	2	2	08
54	RAUNDAL ANISHA SUDAM	4	4	4	4	16
55	SAINDANE DARSHANA NAGRAJ	4	4	4	3	15
56	SALUNKE BHAGYASHRI GOKUL	4	4	4	4	16
57	SHAH BHAVYA RAKESH	-	-	-	-	-
58	SHAH DHRUVIL MANISH	4	5	5	4	18
59	SHINDE SHIVANI SUNIL	4	5	4	4	17
60	SOMWANSHI KIRTESH MAHENDRA	-	-	-	-	-
61	SONAR MANGESH RAJENDRA	4	5	5	4	18
62	SONAWANE NILESH DILIP	4	4	4	4	16
63	SONAWANE SAMADHAN VISHNU	3	4	4	4	15
64	THAKARE AKANKSHA DNYANESHWAR	4	5	5	4	18
65	BAVA SEJAL RAVSAHEB	4	5	5	4	18
66	MATALE PRASAD DEVIDAS	4	4	4	4	16
67	PATIL SHUBHAM LAXMAN	-	-	-	-	-
68	CHAUDHARI NIKHIL SUNIL	4	4	5	2	15
69	DEORE ASHUTOSH SUDHIR	-	-	-	-	-
70	LOKHANDE GAURAV SUNIL	-	-		-	-
72	GANGURDE HRISHIKESH RAJENDRA	-	-	-	-	-
73	DALVI DIPESH DAYARAM	4	5	5	4	18

74	SHETE VISHAL BHAUSAHEB	4	4	4	4	16
75	CHAVAN RANVEER HARSHVARDHAN	3	3	3	3	12

Course Outcomes (Related to Methodology)

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

	Course Outcome	BTL
CO1	Differentiate working and limit state method to analyze various sections.	5
CO2	Design various reinforced beam sections and one way slab	6
CO3	Design two-way slabs and staircase for different support conditions.	6
CO4	Design various beam sections for flexure.	6
CO5	Design flexural members for shear, bond, and torsion with redistribution of moments.	6
CO6	Design column and isolated footing for different loading conditions.	6

POs (Related to Methodology)

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

PO1	Engineering knowledge: Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering
	specialization to the solution of complex engineering problems.
PO2	Problem analysis: Identify, formulate, review research literature, and analyze complex engineering problems reaching
	substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.
PO3	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 the public health and safety, and the cultural, societal,
	and environmental considerations.
PO4	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.

PO6	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.
PO9	Individual and team work: Function effectively as an individual, and as a member or leader in diverse teams, and in
	multidisciplinary settings.
PO12	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.

PSOs (Related to Methodology)

After the completion of this activity

PSO1	Graduates will apply fundamental knowledge, problem solving skills, engineering experimental abilities and design
	capabilities necessary for entering civil engineering career.
PSO2	Graduates will demonstrate knowledge and techniques in engineering fields for effective management and professional
	development.
PSO3	Graduates will apply technical and professional skills to be nationally competitive for employment/self-employment
	thereby benefit the society.

Evidences: (Video Link)

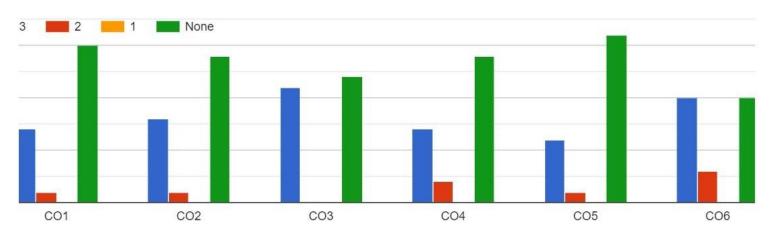
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Impact Analysis for Outcomes (Based on Students Feedback):

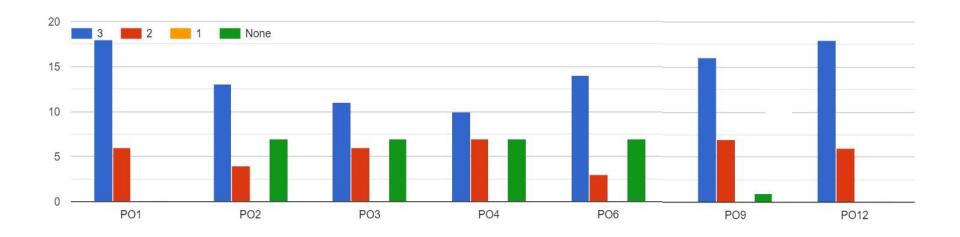
Course Outcome

	Course Outcome	CO1	CO2	CO3	CO4	CO5	CO6
A	No. of Groups/Students Achieving CO	8	9	10	9	7	13
В	Total Rating	23	26	30	25	20	36
С	Average Rating (B/A)	2.87	2.88	3	2.77	2.85	2.77



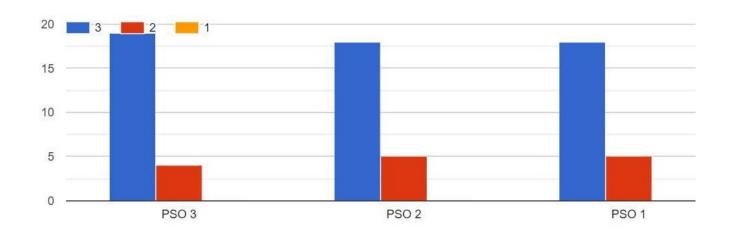
Program Outcome

	Program Outcome	PO1	PO2	PO3	PO4	PO6	PO9	PO12
A	No. of Groups/Students Achieving PO	22	16	16	16	16	21	22
В	Total Rating	61	45	43	42	46	57	61
C	Average Rating (B/A)	2.77	2.81	2.68	2.63	2.87	2.71	2.77



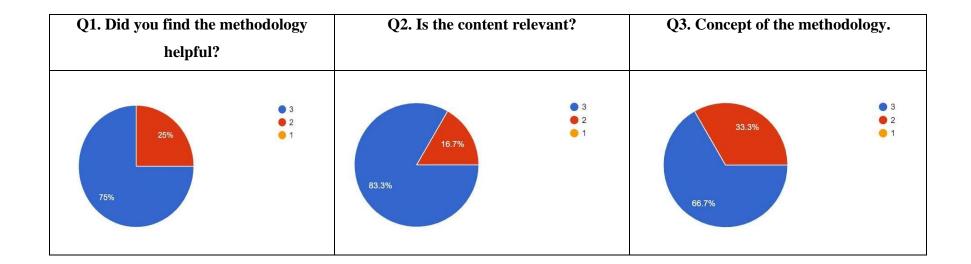
Program Specific Outcome

	Program Specific Outcome	PSO1	PSO2	PSO3
A	No. of Groups/Students Achieving PSO	21	21	21
В	Total Rating	60	59	59
C	Average Rating (B/A)	2.86	2.81	2.81



Impact Analysis for Methodology (Based on Students Feedback):

	Rating	Q1. Did you find the methodology	Q2. Is the content relevant?	Q3. Concept of the
		helpful?		methodology.
A	No. of Students	22	22	22
В	Total Rating	61	63	59
C	Average Rating (B/A)	2.77	2.86	2.68



Link for Review and Critics: https://docs.google.com/forms/d/1-8vHH5iEBr3sRJN8LRGQ2Gv56wS7gxFZIfM6frWM0Gg/edit

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