

Subject-Theory of Structure - III Subject Teacher: Er. Jadhav A.V.

Sub. Code: BS & AE-305

Sem: III

AY: 2021-22

Course Outcomes: At the end of the course, students will be able to:

BS & AE-305	Theory of Structure - III			
CO 305.1	Understand the Theory of simple bending			
CO 305.2	Understand Concept of shear stress in beams			
CO 305.3	Analyse Deflection of beams			
CO 305.4 Understand concept of Composite beam				
CO 305.5	Apply concepts of Simple Tension and Compression members			

CO-PO Mapping						
POs	CO to PO Mapping	CO 305.1	CO 305.2	CO 305.3	CO 305.4	CO 305.5
Architectural knowledge	PO1	1	1	3	1	1
Problem analysis	PO2	2	2	3	2	2
Design/ development of solutions	PO3			3	3	
Conduct investigations of complex problems	PO4			2		
Modern tool usage	PO5					
Social responsibility of an architect	P06					
Environment and sustainability	P07					
Ethics	P08					
Individual and team work	P09					
Communication	PO10					
Project management and finance	PO11					
Life-long learning	PO12	1	1	3	1	1
Professional Skills	PSO1					12
Collaborative Skills	PSO2					
Problem-Solving Skills	PSO3	2	2	3		2

CO Number	со	PO
CO 305.1	Understand the Theory of simple bending	1,2,12
CO 305.2	Understand Concept of shear stress in beams	1,2,12
CO 305.3	Analyse Deflection of beams	1,2,3,4,12
CO 305.4	Understand concept of Composite beam	1,2,3,12
CO 305.5	Apply concepts of Simple Tension and Confiresson members	1,2,12

Test	Marks	co	Based on	Remark	
CA	20	CO 1 to CO 5	Assignments, Midterm exam, Viva, attendance and student performance	Subject teacher will decide evaluation mode	
University Exam	80	CO 1 to CO 5	As per Ar. Curriculum structure		
Total	100				

CO Attainment process: Continous assessment, University Exam

- a. Attainment Level 1: 45% students scoring more than the average marks
- b. Attainment Level 2: 50% students scoring more than the average marks
- c. Attainment Level 3: 55% students scoring more than the average marks

(Note: Faculty can decide the increment in levels considering the complexity of the subject)

Attainment is measured in terms of actual percentage of students getting set percentage of marks.

			CA			Un. Exam
Name of Student CO Mapped →	COs					CO 1 to 5
	CO1 to 5	CO1 to 3			Total	
Marks	10	5	2.5	2.5	20	80
Bartakke Poonam Rajesh	7.4	3.0	2.5	2.50	15	80
Chothe Mayur Hanmant	8.2	3.0	2.5	2.50	16	42
Deshmukh Sayali Vilas	8.2	3.0	2.5	2.12	16	67
Deshmukh Shivanjali Sunil	7.8	3.0	2.5	2.32	16	80
Ghanwat Aditya Maruti	7.6	2.0	2.5	2.50	15	80
Jadhav Abhinay Abhay	7.8	2.0	2.5	2.50	15	80
Khodke Aditya Santosh	6.8	2.0	1.0	1.31	11	42
Mandhare Snehal Deepak	8.8	4.0	2.5	2.50	18	80
Mulik Vaishnavi Sharad	8.6	3.0	2.5	2.32	16	80
Nangare Vrushali Sandeep	8.6	3.0	2.5	2.50	17	80
Nikam Saurabh Rajesh	9.6	4.0	2.5	2.50	19	74
atil Akanksha Ravindra	8	3.0	2.5	2.12	16	45
Average Marks	8.12	2.92	2.38	2.31	15.72	69.17
No. of students above avg Marks	6	9	11	9	6	8
6 of Students above avg Marks	50.00	75.00	91.67	75.00	50.00	66.67
evel	2	3	3	3	2	3

	CO	Attainn	nent for	Course		
55.69 (791)	CO-					
Sr. No.	Assesment Method:	CO305.1	CO305,2	CO305.3	CO305.4	CO305.5
		Direct	methods (80	1%)		
	Internal Asses	ment (20%	of Direct)			
1	CA	2.0	2.0	2.0	2.0	2.0
	Avg of Internal Assessment (A)	2.0	2.0	2.0	2.0	2.0
	External Asses	sment (80%	of Direct)			41
1	Un. Exam	3.0	3.0	3.0	3.0	3.0
	Avg of Ext. Assessment (B)	3.0	3.0	3.0	3.0	3.0
		Indirect	methods (20	0%)		
1	Course Exit Survey	2.8	2.7	2.8	2.5	2.8
Ave	erage attainment	2.80	2.78	2.80	2.74	2.80

	POs	CO to PO Mapping	CO 305.1	CO 305.2	CO 305.3	CO 305.4	CO 305.5
	Architectural knowledge	PO1	1	1	3	1	1
	Problem analysis	PO2	2	2	3	2	2
	Design/ development of solutions	PO3			3	3	
	Conduct investigations of complex problems	PO4			2		
	Modern tool usage	PO5					
	Social responsibility of an architect	P06					
	Environment and sustainability	P07					
	Ethics	P08					
	Individual and team work	P09					
	Communication	PO10					
	Project management and finance	PO11					
	Life-long learning	PO12	1	1	3	1	1
	Professional Skills	PSO1					
	Collaborative Skills	PSO2					
	Problem-Solving Skills	PSO3	2	2	3		2



PO/PSO Attainment

CO to PO Mapping	CO 305.1	CO 305.2	CO 305.3	CO 305.4	CO 305.5	BS&AE30
PO1	0.93	0.93	2.80	0.91	0.93	1.30
PO2	1.87	1.85	2.80	1.83	1.87	2.04
PO3			2.80	2.74		2.77
PO4			1.87			1.87
PO5						1.07
PO6						
P07						
PO8						
PO9						
PO10						
PO11						
PO12	0.93	0.93	2.80	0.91	0.93	400
PSO1					0.55	1.30
PSO2						
PSO3	1.87	1.85	2.80		1.87	2.10

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Subject-Building construction and material - III Subject Teacher: Ar. Vrushali pawar.
Sem: III

Sub. Code: BS & AE-304

AY: 2021-22

Course Outcomes: At the end of the course, students will be able to:

BS & AE-304	Building construction and material - III
CO 304.1	Understand building components and construction methods
CO 304.2	Design specifications for various building and construction components.
CO 304.3	Prepare design of buildings with due consideration to construction technology & materials.
CO 304.4	Understanding of structural typology of building & knowledge of basic building materials

CO-PO Mapping						
POs	CO to PO Mapping	CO 304.1	CO 304.2	CO 304.3	CO 304.4	
Architectural knowledge	PO1	1	1	3	1	
Problem analysis	PO2	2	2	3	2	
Design/ development of solutions	PO3		17.00	3	3	
Conduct investigations of complex problems	PO4			2		
Modern tool usage	PO5	ANT.				100
Social responsibility of an architect	P06					
Environment and sustainability	PO7					
Ethics	PO8					
Individual and team work	PO9					
Communication	PO10					
Project management and finance	PO11					
Life-long learning	PO12	2	2	3	1	
Professional Skills	PSO1	3	3	3	3	
Collaborative Skills	PSO2	2	2	2	2	
Problem-Solving Skills	PSO3	2	2	2	2	

CO Number	CO	PO
CO 304.1	Understand building components and construction methods.	1,2,12
CO 304.2	Design specifications for various building and construction components.	1,2,12
CO 304.3	Prepare design of buildings with due consideration to construction technology & mat	1,2,3,4,12
CO 304.4	Understanding of structural typology of building & knowledge of basic building mater	1,2,3,12



Test	Marks	со	Based on	Remark 😞
CA	20	5	Assignments, Midterm exam, Viva, attendance and student performance	Subject teacher will decide evaluation mode
University Exam	80	CO 1 to CO 5	As per Ar. Curriculum structure	
Total	100			

CO Attainment process: Continous assessment, University Exam

- a. Attainment Level 1:45% students scoring more than the average marks
- b. Attainment Level 2:50% students scoring more than the average marks
- c. Attainment Level 3: 55% students scoring more than the average marks

(Note: Faculty can decide the increment in levels considering the complexity of the subject)

Attainment is measured in terms of actual percentage of students getting set percentage of marks.

	- 14 J. L.	115100	CA			
Name of Student	COs	2 4			Un. Viva	Un. Exam
CO Mapped →	CO1 to 5	CO1 to 5	CO1 to 5	Total	CO 1 to 5	CO 1 to 5
Marks	40	10	20	630	100	
Bartakke Poonam Rajesh	33	7.0	12.0			80
Chothe Mayur Hanmant	34	7.0		52	55	42
Deshmukh Sayali Vilas	33		14.0	55	62	66
Deshmukh Shivanjali Sunil		8.0	11.0	52	55	46
Shanwat Aditya Maruti	35	8.0	10.0	53	48	42
adhav Abhinay Abhay	33	8.0	11.0	52	52	48
hodke Aditya Santosh	32	7.0	10.0	49	54 .	51
	20	5.0	10.0	35	50	13
fandhare Snehal Deepak	32	8.0	12.0	52	62	
fulik Vaishnavi Sharad	31	8.0	12.0			50
angare Vrushali Sandeep	30	7.0		51	57	54
ikam Saurabh Rajesh	34		10.0	47	53	43
itil Akanksha Ravindra	7.7	8.0	12.0	54	60	46
verage Marks	34	6.0	13.0	53	57	45
	31.75	7.25	11.42	50.4	55.4	45.50
o. of students above avg Marks	7	6	6	9	5	7
of Students above avg Marks	58.33	50.00	50.00	75.00	41.67	58.33
rel	3	2	2	3	0	3



	CO A	tainme	nt for C	ourse	<u> </u>	
	CO→	44.02.00				
Sr. No.	Assesment Method↓	CO305.1	CO305.2	CO305.3	CO305.4	
		Direct met	thods (80%)		0	
	Internal Assesi	ment (20% o	f Direct)			
1	CA	2.0	2.0	2.0	2.0	
	Avg of Internal Assessment (A)	3.0	3.0	3.0	3.0	
	External Asses	ment (80% d	of Direct)			
1	Un. Exam	3.0	3.0	3.0	3.0	
2	viva	0.0	0.0	0.0	0.0	
	Avg of External	1.5	1.5	1.5	1.5	-
(-d)-n.		Indirect me	thods (20%)			
1	Course Exit Survey	2.8	2.7	2.8	2.5	4.
Av	verage attainment	2.00	1.98	2.00	1.94	

POs	CO to PO Mapping	CO 304.1	CO 304.2	CO 304.3	CO 304.4	
Architectural knowledge	PO1	1	1	3	1	
Problem analysis	PO2	2	2	3	2	
Design/ development of solutions	PO3			3	3	
Conduct investigations of complex problems	PO4			2		
Modern tool usage	PO5				14.77	
Social responsibility of an architect	PO6			1 666		77
Environment and sustainability	P07		G. T			
Ethics	PO8					
ndividual and team work	P09					
Communication	PO10					
Project management and finance	PO11		7-77			e X
Life-long learning	PO12	2	2	3	1	
Professional Skills	PSO1	3	3	3	3	
Collaborative Skills	PSO2	2,	2	2	2	
Problem-Solving Skills	PSO3	2	2	2	2	



PO/PSO Attainment

CO to PO Mapping	CO 304.1	CO 304.2	CO 304.3	CO 304.4	DS 8 A F20F
PO1	0.67	0.66	2.00	0.65	BS&AE305
PO2	1.33	1.32	2.00		0.99
PO3				1.29	1.49
PO4			2.00	1.94	1.97
PO5			1.33		* 1.33
PO6					
PO7					V S
P08					
P09					3 12 10 10 10 10 10 10 10 10 10 10 10 10 10
PO10					
PO11			-		
PO12	1.33	1.32	2.00	0.65	Service (
PSO1	2.00	1.98	2.00		1.33
PSO2	1.33			1.94	1.98
PSO3		1.32	1.33	1.29	1.32
1303	1.33	1.32	1.33	1.29	1.32

Ar. Vrushali pavar

Satara Ar. S. Smodge.



Subject-Architectural Design V	Sub. Code: PC- 501	
Subject Teacher: Ar.Swarali D. Sagare	AY: 2021-22	
Sem: V		

Course Outcomes: At the end of the course, students will be able to:

BS & AE-305	Theory of Structure - III
CO 501.1	Understanding and analysis of design requirements
	Analysis of proposed site
CO 501.2	Case study/ Book study/ Net study/ Site visits of similar design problem
	Analysis and presentation of case studies
CO 501.3	Data collection of the proposed design problem
	Site visits and site analysis i.e. Topography, Vegetation, etc
CO 501.4	Conceptual design with understanding of circulation within functional spaces, structural systems, study of forms and spaces, building materials and techniques, etc
CO 501.5	Final design presentation with supporting sketches, models and views
CO 501.6	Time bond problem - Conceptual design development and final drawings

CO-PO Mapping								
POs	CO to PO Mapping	CO 501.1	CO 501.2	CO 501.3	CO 501.4	CO 501.5	CO 501.6	
Architectural knowledge	PO1	3	3	3	3	3	3	
Problem analysis	P02	3	3	3	3	3	3	
Design/ development of solutions	P03			3	3	3	3	
Conduct investigations of complex problems	PO4	3		3	3	3	3	
Modern tool usage	P05	2	3	2	3	3	3	
Social responsibility of an architect	P06	3	3	3	2	2	2	
Environment and sustainability	P07				3	2	3	
Ethics	P08							
Individual and team work	P09	3	3	3	3	3	3	
Communication	PO10	2	3	2	3	2	0.75	
Project management and finance	PO11							
Life-long learning	PO12	3	3	3	3	3	3	
Professional Skills	PSO1	2	2	1	3	3	3	
Collaborative Skills	PSO2	3	3	3	1	1	1	
Problem-Solving Skills	PSO3		3	3	3			



CO Number	CO	PO	
CO 501.1	Understanding and analysis of design requirements	1,2,4,5,6,9,10,12	
	Analysis of proposed site	1,2,4,5,6,5,10,12	
CO 501,2	Case study/ Book study/ Net study/ Site visits of similar design problem	1,2,5,6,9,10,12	
	Analysis and presentation of case studies	1,2,3,6,3,10,12	
CO 501.3	Data collection of the proposed design problem	1.2.3.4.5.6.9.10.12	
	Site visits and site analysis i.e. Topography, Vegetation, etc	1,2,3,4,3,6,5,10,12	
CO 501.4	Conceptual design with understanding of circulation within functional spaces, structural systems, study of forms and spaces, building materials and techniques, etc	1,2,3,4,5,6,7,9,10	
CO 501.5	Final design presentation with supporting sketches, models and views	1,2,3,4,5,6,7,9,10	
CO 501.6	Time bond problem – Conceptual design development and final drawings	1,2,3,4,5,6,7,9	

Test	Marks	со	Based on	Remark
CA	100	CO 1 to CO 6	Assignments, Midterm exam, Viva, attendance and student performance	Subject teacher will decide evaluation mode
University Exam	100	CO 1 to CO 6	As per Ar. Curriculum structure	
Total	200			

CO Attainment process: Continous assessment, University Exam

- a. Attainment Level 1: 30% students scoring more than the average marks
- b. Attainment Level 2: 40% students scoring more than the average marks
- c. Attainment Level 3: 50% students scoring more than the average marks

(Note: Faculty can decide the increment in levels considering the complexity of the subject)

Attainment is measured in terms of actual percentage of students getting set percentage of marks.

			CA			Un. Exam
Name of Student	COs				7.61	CO 1 to 6
CO Mapped →	CO1 to 6	CO1 to 4			Total	Viva
Marks	20	60	10	10	100	100
Chavan Aishwarya Kiran	12	30.6	3.0	9.00	55	56
Deokar Akshay Sanjay	12	25.0	5.0	8.00	50	55
Chakankar Tanvi Manoj	17	38.1	2.0	8.00	65	62
Gandas Rutuja Sandeep	17	44.7	4.0	8.00	74	78
Gosavi Shubham Vijay	17	41.7	4.0	8.00	71	67
Jagtap Omkar Rajendra	17	49.2	3.0	8.00	77	80
Mane Tamanna Ashok	19	27.3	4.0	8.00	58	69
Rainak Manisha Ananda	17	28.8	4.0	8.00	58	64
Shinde Anuja Rajendra	18	40.5	7.0	7.22	73	83
Suryawanshi Apurva Sury	14	29,4	6.0	8.00	57	68
Thorat Sayali Sharad	19	46.5	6.0	8.00	79	77
Velhal Vaishnavi Nitin	19	28.8	7.0	6.67	61	70
Average Marks	16.38	35.88	4.58	7.91	64.75	89.08
No. of students above avg Marks	9	6	5	10	6	5
% of Students above avg Marks	75.00	50.00 20	2/43:67	83.33	50.00	41.67
Level	3	// 3	2	3	3	2

	CO→						
Sr. No.	Assesment Method i	CO 501.1	CO 501.2	CO 501.3	CO 501.4	CO 501.5	CO 501.
		C	Direct method	s (80%)			
	Internal Assesm	ent (20% of	Direct)				
1	CA	3.0	3.0	3.0	3.0	3.0	3.0
Avg of Internal Assessment (A)	3.0	3.0	3.0	3.0	3.0	3.0	
	External Assesm	nent (80% of	Direct)				
	viva	2.0	2.0	2.0	2.0	2.0	2.0
	Avg of External Assessment (B)	2.0	2.0	2.0	2.0	2.0	2.0
		In	direct method	ds (20%)			
1	Course Exit Survey	2.67	2.67	2.75	2.58	2.83	2.92
Ave	erage attainment	2.29	2.29	2.31	2.28	2.33	2.34

		CC	to PO M	lapping			
POs	CO to PO Mapping	CO 501.1	CO 501.2	CO 501.3	CO 501.4	CO 501.5	CO 501.6
Architectural knowledge	PO1	3	3	3	3	3	3
Problem analysis	PO2	3	3	3	3	3	3
Design/ development of solutions	PO3			3	3	3	3
Conduct investigations of complex problems	PO4	3		3	3	3	3
Modern tool usage	PO5	2	3	2	3	3	3
Social responsibility of an architect	PO6	3	3	3	2	2	2
Environment and sustainability	PO7				3	2	3
Ethics	PO8						
Individual and team work	PO9	3	3	3	3	3	3
Communication	PO10	2	3	2	3	2	
Project management and finance	PO11						
Life-long learning	PO12	3	3	3	3	3	3
Professional Skills	PS01	2	2	1	3	3	3
Collaborative Skills	PSO2	3	3	College	1	1	1
Problem-Solving Skills	PSO3		3		3		

PO/PSO Attainment							
CO to PO Mapping	CO 501.1	CO 501.2	CO 501.3	CO 501.4	CO 501.5	CO 501.6	PC-50
PO1	2.29	2.29	2.31	2.28	2.33	2.34	2.31
PO2	2.29	2.29	2.31	2.28	2.33	2.34	2.31
PO3			2.31	2.28	2.33	2.34	2.32
PO4	2.29		2.31	2.28	2.33	2.34	2.31
PO5	1.53	2.29	1.54	2.28	2.33	2.34	2.05
PO6	2.29	2.29	2.31	1.52	1.55	1.56	1.92
PO7				2.28	1.55	2.34	2.06
PO8							
PO9	2.29	2.29	2.31	2.28	2.33	2.34	2.31
PO10	1.53	2.29	1.54	2.28	1.55		1.84
PO11							
PO12	2.29	2.29	2.31	2.28	2.33	2.34	2.31
PSO1	1.53	1.53	0.77	2.28	2.33	2.34	1.80
PSO2	2.29	2.29	2.31	0.76	0.78	0.78	1.53
PSO3		2.29	2.31	2.28			2.29

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