

Theory			
Week	Lecture-Day	Topic (Including Assignment/Test)	Date
1 st	1	Influence Line (I.L.): Introduction, influence lines for three hinged, two hinged arches	
	2	two hinged arches, load position for Maximum S.F. and B.M. at a section in the span.	
	3	Influence Line for statically indeterminate Beams: Muller-Breslau Principle	
2 nd	4	I.L. for B.M. & S.F. for continuous Beams.	
	5	Fixed Arches: Expression for H and B.M. at a section	
	6	Elastic Centre and its examples	
3 rd	7	Rolling Loads: Introduction, Single concentrated load.	
	8	uniformly distributed load longer than span, shorter than span	
	9	two-point loads, several point loads, Max. B.M.	
4 th	10	S.F. Absolute, Max. B.M	
	11	Kani's Method: Analysis of continuous beams	
	12	Kani's Method: Analysis of continuous beams	
5 th	13	Kani's Method: Analysis of continuous beams	
	14	Kani's Method: Analysis of simple frames	
	15	Kani's Method: Analysis of simple frames	
6 th	16	Kani's Method: Analysis of simple frames	
	17	analysis of frames with different column lengths and end conditions of the bottom story.	
	18	analysis of frames with different column lengths and end conditions of the bottom story.	
7 th		Minor Test 1	
8 th	19	analysis of frames with different column lengths and end conditions of the bottom story.	
	20	analysis of frames with different column lengths and end conditions of the bottom story.	
	21	Approximate Analysis of frames by Portal method	
9 th	22	Approximate Analysis of frames by Portal method	
	23	Approximate Analysis of frames by Portal method	
	24	Cantilever method for: (i) Vertical loads, (ii) Lateral loads.	
10 th	25	Cantilever method for: (i) Vertical loads, (ii) Lateral loads.	
	26	Cantilever method for: (i) Vertical loads, (ii) Lateral loads.	
	27	Cantilever method for: (i) Vertical loads, (ii) Lateral loads.	
11 th	28	Matrix Methods: Introduction, Stiffness Coefficients, , ,	
	29	Matrix Methods: Introduction, Stiffness Coefficients, , ,	
	30	Flexibility Coefficients	
12 th	31	Flexibility Coefficients	
	32	Development of Flexibility and Stiffness matrices for plane frame	
	33	Development of Flexibility and Stiffness matrices for plane frame	
13 th	34	Development of Flexibility and Stiffness matrices for plane frame	
	35	Development of Flexibility and Stiffness matrices for plane frame	
	36	Global axis and local axis,.	
14 th		Minor Test 2	
15 th	37	Analysis of plane, pin jointed and rigid jointed frames	
	38	Analysis of plane, pin jointed and rigid jointed frames	
	39	Analysis of plane, pin jointed and rigid jointed frames	