

PC/CE/13-T- Design of Steel Structures - II

Week	Lecture No.	Topic	Remarks
1	1	Introduction to Plastic Analysis	
	2	Scope of Plastic Analysis	
	3	Ultimate Load Carrying Capacity: Tension Members	
2	4	Ultimate Load Carrying Capacity: Compression Members	
	5	Ultimate Load Carrying Capacity: Flexural Members	
	6	Shape Factor	
3	7	Mechanisms in Plastic Analysis	
	8	Plastic Collapse Load	
	9	Plastic Analysis of Beams (I)	
4	10	Plastic Analysis of Beams (II)	
	11	Plastic Analysis of Simple Portal Frames	
	12	Design Considerations in Plastic Analysis	
5	13	Introduction to Water Tank Design	
	14	Permissible Stresses in Water Tanks	
	15	Design of Circular Water Tanks	
6	16	Design of Rectangular Water Tanks	
	17	Design of Pressed Steel Tanks	
	18	Design of Staging for Water Tanks	
7	19	Minor Test	
	20		
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8	22	Introduction to Steel Stack Design	
	23	Loads on Steel Stacks	
	24	Design of Steel Stacks (I)	
9	25	Design of Steel Stacks (II)	
	26	Design of Steel Stack Foundations	
	27	Introduction to Transmission Line Towers	
10	28	Introduction to Microwave Towers	
	29	Design Loads for Towers	
	30	Classification of Towers	
11	31	Design Procedure for Towers	
	32	Specifications for Tower Design	
	33	Introduction to Cold Formed Sections	
12	34	Types of Cold Formed Sections	
	35	Local Buckling in Cold Formed Sections	
	36	Effective Width and Effective Sections	
13	37	Stiffeners in Cold Formed Sections	
	38	Design of Compression Members (Cold Formed)	
	39	Design of Bending Members (Cold Formed)	
14	40	Minor Test	
	41		
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15	43	Loads on Industrial Buildings	
	44	General Arrangement and Stability	
	45	Design Considerations, Purlins, Roof Trusses, Frames, Bracings, Stepped Columns	