

## Lesson Plan

Subject Structural Design-II (Code) Th-2 Name of faculty SAMAR SINGH BEHERA  
 Semester 5<sup>th</sup> Class allotted 4P/week (54/60) Branch Civil Engg.


Discipline	Semester	From date: 15/09/22 To date: 22/12/22	Teaching Aid
Subject:	No. of days/ per week	Theory/ Practical - Topics/Lesson	
Week	Date/Period		
1	15/09/22 to 16/09/22	<u>Ch-1</u> - common steel structures. Advantages, disadvantages, Types of steel, Properties of structural steel. Rolled steel sections, special considerations in steel design. Load & load combinations.	White Board & Marker
	(2P/W)		
	19/09/22 to 24/09/22	Structural analysis & design philosophy. Review of principles of Limit State design.	"
	(4P/W)		
3	26/09/22 to 01/10/22	<u>Ch-2</u> Bolted connections, Classification of bolts, advantages & disadvantages of bolted connections. Different terminology. Types of bolted connections.	"
	(4P/W)		
	10/10/22 to 15/10/22	Types of action of fasteners, Assumptions & principles of design. Strength of plates in a joint. Strength of bearing type bolts. Efficiency of a joint.	"
(4P/W)			
5	17/10/22 to 22/10/22	Welded connections, Advantages & disadvantages. Types of welded joints & specifications for welding. Design stresses in welds & welded joints.	"
	(4P/W)		
	25/10/22 to 29/10/22	<u>Ch-3</u> common shapes of tension members. "Max" values of effective slenderness ratio. Analysis & design of tension members.	"
(4P/W)			
7	31/10/22 to 05/11/22	Concept of block shear failure.	"
	(4P/W)	<u>Ch-4</u> common shapes of compression members. Buckling class of cross-section. Slenderness ratio.	"

  
 Signature of HOD

SAMAR SINGH BEHERA  
 Signature of faculty



Week	Date/Period	Theory/ Practical - Topics/Lesson	Teaching Aid
8	07/11/22 to 12/11/22 (4P/W)	Design compressive stress & strength of compression member. Analysis & design of compression member.	White Board & Marker
9	14/11/22 to 19/11/22 (4P/W)	Ch-5 common cross-sections & their classification. Deflection limits, web buckling & web crippling.	"
10	21/11/22 to 26/11/22 (4P/W)	Design of laterally supported beams against bending & shear.	"
11	28/11/22 to 03/12/22 (4P/W)	Ch-6 Round Tubular sections, Permissible stress.	"
12	05/12/22 to 10/12/22 (4P/W)	Tubular compression & Tension Members. joints in tubular trusses.	"
13	12/12/22 to 17/12/22 (4P/W)	Ch-7 Design considerations for Masonry walls & columns. Load Bearing & Non-Load Bearing walls.	"
14	19/12/22 to 22/12/22 (4P/W)	Permissible stress, Slenderness ratio, Effective length, Height & thickness.	"
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Signature of HOD

Samraj Singh Behera  
Signature of faculty