Lesson Plan

Subject:-SD-II (TH-2) **Name of faculty: - Er. Tina Guru** **Semester:-5TH**

Class allotted: 60 p/w **p** **Branch: - Civil Egg.** **Session: 2025(W)**

Discipline	Semester:-5TH	From date:- 14/07/2025 TO 15/11/2025	Teaching Aid
Subject:	No. of days/ per week 4p/w :	Theory/ Practical –Topics/Lesson	
Week	Date/Period		
1	15/07/2025 TO 19/07/2025	**1. Introduction:** 1.1 common steel structures, Advantages & disadvantages of steel structure. 1.2 Types of steel, properties of structural steel. 1.3 Rolled steel sections, special considerations in steel design	White board & marker
2	21/07/2025 TO 26/07/2025	1.4 Loads and load combination. 1.5 Structural analysis and design philosophy. 1.6 Brief review of principles of limit state design.	White board & marker
3	28/07/2025 TO 02/08/2025	**2. Structural steel fasteners and connections:** 2.1 Bolted connection. 2.1.1 Classification of bolts advantages and disadvantages of bolted connections.	White board & marker
4	04/08/2025 TO 09/08/2025	2.1.2 Different terminology, spacing and edge distance of bolt holes.2.1.3 Types of bolted connections.2.1.4.Types of action of fasteners, assumptions and principles of design	White board & marker
5	11/08/2025 TO 16/08/2025	2.1.5 Strength of plates in a joint, strength of bearing type bolts(shearing capacity & bearing capacity), reduction factor, & shear capacity of HSFG bolts. 2.1.63 Analysis & design of joint using bearing type & HSFG bolts (except eccentric load & prying forces)	White board & marker& smart board
6	18/08/2025 TO 23/08/2025	2.1.7 Efficiency of a joint.2.2 Welded connections: 2.2.1 Advantages & disadvantages of welded connections	White board & marker
7	25/08/2025 TO 30/08/2025	2.2.2 Types of welded joints and specifications for welding 2.2.3 Design stresses in welds. 2.2.4 Strength of welded joint.	White board & marker
8	01/09/2025 TO 06/09/2025	**3. Design of steel tension Members** 3.1 Common shapes of tension members	White board & marker
9	08/09/2025 TO 13/09/2025	3.2 Maximum values of effective slenderness ratio. 3.4 Analysis & Design of tension members. (Considering strength only and concept of block shear failure)	White board & marker
10	15/09/2025 TO 20/09/2025	**4. Design of steel compression member.** 4.1 Common shapes of compression members. 4.2 Buckling class of cross sections, slenderness ratio	White board & marker

	22/09/2025 TO 27/09/2025	4.3 Design compressive stress & strength of compression members. 4.4 Analysis & Design of compression members (axial load only)	White board &marker
12	08/10/2025 TO 11/10/2025	**5 Design of steel beams:** 5.1 Common cross section and their classification. 5.2 deflection limits, web buckling and web crippling.	White board & marker & smart board
13	13/10/2025 TO 18/10/2025	5.3 Design of laterally supported beams against bending and shear. **6. Design of Tubular Steel Structures:** 6.1 Round tubular sections, permissible stresses	White board & marker
14	20/10/2025 TO 25/10/2025	6.2 Tubular compression & Tension members 6.3 joints in tubular trusses.	White board & marker
15	27/10/2025 TO 01/11/2025	**7. Design of Masonry Structures:** 7.1 Design considerations for masonry walls & columns, Load Bearing & Non- load bearing walls, permissible stresses, slenderness ratio, Effective Length, Height & Thickness.	White board & marker& smart board
16	03/11/2025 TO 08/11/2025	**REVISION.....**	White board & marker
17	10/11/2025 TO 15/11/2025	**REVISION.....**	White board & marker

Signature of HOD

Signature of faculty