Lesson Plan

Subject- Design of Steel Structure (Code) – CEPC204C

Name of faculty- Soumyashree das, Semester- 4th Class, allotted- 45hr Branch -Civil Engg.

Discipline	Semester	From date:22/12/2025 To date:10/04/2026	Teaching Aid
Subject:	No. of days/ per week: 3p	Theory/ Practical –Topics/Lesson	
Week	Date/Period		
1	22/12/2025 To 12/01//2026	**Design of connections in steel structures** **1.1** Types of connection, bolted connection, Strength of bolted joints, **1.2** Design of bolted joints for axially loaded members. **1.3** Types of weld, welded connections, Permissible stresses in weld, Strength of weld. **1.4** Advantages and disadvantages of weld, Design of fillet weld and butt weld for axial load.	White board&marker
2	16/01/2026 To 09/02/2026	**Design of Steel Tension (Limit State Method)** **2.1** Types of sections used for Tension members. **2.2** Strength of tension member by-yielding of section, rupture of net cross-section and block shear. **2.3** Design of axially loaded single angle and double angle tension members with bolted and welded connections.	White board&marker
3	13/02/2026 To 16/03/2026	**Design of Steel Compression Members (Limit State Method)** **3.1** Types of sections used as compression member, Calculation of effective length, Radius of gyration and slenderness ratio, Permissible values of slenderness ratio as per IS 800-2007, Design compressive stress, Design of column bases for axially loaded columns only. **3.2** Introduction to built up sections, lacing and battening (Meaning and purpose), Diagrams of single and double lacing and battening system. (No numerical problems). **3.3** Design of axially loaded single and double angle struts connected by bolted and welded connections with gusset plate.	White board&marker

4	20/03/2026 To 10/04/2026	**Design of Steel beams (Limit State Method)** **4.1** Standard beam sections, Bending stress calculations. **4.2** Design of simple I and channel section. **4.3** Check for shear as per IS 800 2007 **4.4** Simple and built up sections, **4.5** Introduction to plate girder: Components and functions (no numerical	White board&marker

Signature of HOD

Soumyashree Das.
Signature of faculty