Name of Faculty	**Mohanlal**
Discipline	**CIVIL Engineering**
Semester	**6**
Subject	**SSD&D**
Lesson Plan Duration	**From 15 Feb 2024 to 14 June 2024**
Work load [Theory + Practical] Per Week	**[04+03]**

Week	Day	Theory Topic/ Assignment/ Test	No.	Practical
1st	1	**Properties of structural steel as per IS Code**	1	Drawing No. 1: Roof Truss – Drawing of Fink Roof Truss with details of joints, fixing details of purlins and roof sheets
	2	Designation of structural steel sections as per IS handbook and IS:800		
	3	Types of Rivet, Permissible stresses in rivets		
	4	Types of riveted joints, specifications as per IS800, Failure of riveted joint		
2nd	1	axially loaded number	2	Drawing No. 1: Roof Truss – Drawing of Fink Roof Truss with details of joints, fixing details of purlins and roof sheets.
	2	Numerical problem		
	3	Numerical problem		
	4	Numerical problem		
3rd	1	Numerical problem	3	Drawing No.2 : Column and Column Bases - Drawing of splicing of steel columns. Drawings of slab base, gusseted base and grillage base for single section steel columns
	2	Numerical problem		
	3	Numerical problem		
	4	Types of bolt		
4th	1	permissible stresses in bolt	4	Revision/File checking
	2	Types of bolted joints		
	3	Specifications for bolted joints as per IS 800		
	4	Failure of a bolted joint		
5th	1	Assumptions in the theory of bolted joints	5	Drawing No.2 : Column and Column Bases - Drawing of splicing of steel columns. Drawings of slab base, gusseted base and grillage base for single section steel columns
	2	Strength and efficiency of a bolted joint.		
	3	Design of bolted joints for axially loaded members		
	4	Types of welds and welded joints,		
6th	1	advantages and disadvantages of welded joint	6	Drawing No.3 : Column Beam Connections (a) Sealed and Framed Beam to Beam Connections (b) Sealed and Framed Beam o Column Connections
	2	design of fillet and butt weld for axially loaded members		
	3	Numerical problem		
	4	Numerical problem		
7th	1	Analysis and design of single and double section tension members	7	Mid- term viva-voice/file checking
	2			
	3	Numerical problem		
	4	Numerical problem		
8th	1	Numerical problem	8	Drawing No. 4 : Plate Girder (Bolted) Plan and Elevation of Plate Girder with details at supports and connection of stiffness, flange angles and cover plate with web highlighting curtailment of plates
	2	Analysis and design of single and double angle sections compression members		
	3	Numerical problem		
	4	Numerical problem		
9	1	Numerical problem	9	Drawing No. 4 : Plate Girder (Bolted) Plan and Elevation of Plate Girder with details at supports and connection of stiffness, flange angles and cover plate with web highlighting curtailment of plates)
	2	Numerical problem		
	3	Numerical problem		
	4	Numerical problem		

10th	1	Form of trusses	10	REVIsion/File checking
	2	pitch of roof truss,		
	3	spacing of trusses		
	4	Test		
11	1	Revision	11	Revision/File checking
	2	Revision		
	3	spacing of purlins, connection between purlin		
	4	roof covering		
12th	1	Connection between purlin and principal rafter	12	Revision/File checking
	2	Revision		
	3	Types of column bases i.e. slab base, gusseted base.		
	4	Concept of buckling		
13th	1	effective length, slenderness ratio	13	Drawing No. 5 : Draw atleast one sheet using CAD software
	2	Design of axially loaded single section column		
	3	Design of axially loaded single section column		
	4	Design of axially loaded single section column		
14th	1	Analysis and design of single section simply supported laterally restrained steel	14	Drawing No. 5 : Draw atleast one sheet using CAD software
	2	Numerical problem		
	3	Numerical problem		
	4	Introduction to plate girder		
15	1	Functions of various elements of a plate girder	15	Checking File
	2	Fabrication and erection of steel structures like trusses, columns and girders		
	3	Revision		
	4	Revision		