

LESSON PLAN (WINTER-2026)

Discipline- Civil Engineering Semester-5th (3rd Year)

Semester from Date- 01.07.2026 to 05.11.26 No of weeks-19

No of classes allotted(hours/week)-03 Total Period-49

Subject-DESIGN RCC STRUCTURE Subject Code-Th.02

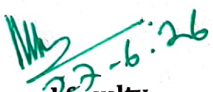
Name of the Teaching Faculty-MANMATHA KUMAR MA|HI

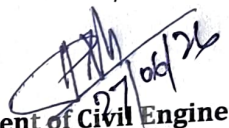
WEEK	DATE	NO OF CLASSES	TOPICS TO BE COVERED
CH 1 :- Introduction			
1ST	01-07-26	01	INTRODUCTION- Briefing about the Syllabus, Introduction to the subject, It's objective and practical application of it, Mark distribution, Reference books, etc
	02-07-26	01	UNIT – I Design Philosophies, Design of Singly Reinforced & Doubly Reinforced beam for Flexure using LSM.
2ND	07.07.26	01	Nominal shear stress in RCC section, Design shear strength of concrete, Design of shear reinforcement
	08.07.26	01	Minimum Shear Reinforcement, Provisions of IS 456 2000, forms of shear reinforcement
	09.07.26	01	Types of bond, Bond stress, check for bond stress
3RD	14.07.26	01	Determination of Development length in tension and compression members and check as per codal provisions, Anchorage value of 90° hook, Lapping of bars.
	15.07.26	01	Simple numerical on: Shear reinforcement, Adequacy of section for shear.
4TH	21.07.26	01	Simple numerical on: Shear reinforcement, Adequacy of section for shear
	22.07.26	01	Simple numerical on: Shear reinforcement, Adequacy of section for shear
	23.07.26	01	Introduction to serviceability limit state check
5TH	28.07.26	01	Topic end, Question answer discussion, Assignment 1
	29.07.26	01	UNIT – II Design of axially loaded RCC Column Definition and classification of column, Limit state of compression members, Effective length of column.
	30.7.26	01	Monthly test 1
	04.08.26	01	Definition and classification of column, Limit state of compression members, Effective length of column.
6TH	05.08.26	01	Provisions of IS 456 2000 for minimum steel, cover, maximum steel, spacing of ties etc
	06.08.26	01	Provisions of IS 456 2000 for minimum steel, cover, maximum steel, spacing of ties etc
	11.08.26	01	Provisions of IS 456 2000 for minimum steel, cover, maximum steel, spacing of ties etc
7TH	12.08.26	01	Provisions of IS 456 2000 for minimum steel, cover, maximum steel, spacing of ties etc
	13.08.26	01	Provisions of IS 456 2000 for minimum steel, cover, maximum steel, spacing of ties etc
	18.08.26	01	Topic end, Question answer discussion, Assignment 2
8TH	19.08.26	01	UNIT – III Design of RC flanged beam

			General features of T and L beams, Advantages, Effective width as per BIS 456 2000
	20.08.26	01	General features of T and L beams, Advantages, Effective width as per BIS 456 2000
9TH	25.08.26	01	Monthly test 2
10TH	01.09.26	01	Design of singly reinforcement T beam, Stress and Strain diagram, Depth of neutral axis, Moment of resistance, T and L beams with neutral axis in flange only.
	02.09.26	01	Design of singly reinforcement T beam, Stress and Strain diagram, Depth of neutral axis, Moment of resistance, T and L beams with neutral axis in flange only.
	03.09.26	01	Simple numerical on location of neutral axis, Effective width of flange.
11TH	8.09.26	01	Simple numerical on location of neutral axis, Effective width of flange. Topic end, Question answer discussion, Assignment 3
	09.09.26	01	UNIT – IV Design of slab Design of simply supported one-way slab for flexure, shear and deflection and checks, as per the provisions of BIS 456
	10.09.26	01	Design of simply supported one-way slab for flexure, shear and deflection and checks, as per the provisions of BIS 456
12TH	17.09.26	01	Design of simply supported one-way slab for flexure, shear and deflection and checks, as per the provisions of BIS 456
13TH	22.09.26	01	Design of one-way cantilever slab, Chajjas, Flexure including checks for Development length and Shear stress
	23.09.26	01	Design of one-way cantilever slab, Chajjas, Flexure including checks for Development length and Shear stress
	24.09.26	01	Design of one-way cantilever slab, Chajjas, Flexure including checks for Development length and Shear stress
14TH	29.09.26	01	Design of two-way simply supported slab,
	30.09.26	01	Monthly test 3
	01.10.26	01	Design of two-way simply supported slab,
15TH	06.10.26	01	Design of two-way simply supported slab,
	07.10.26	01	Introduction to design of dog-legged staircases
	08.10.26	01	Introduction to design of dog-legged staircases Topic end, Question answer discussion, Assignment 4
16TH	13.09.26	01	UNIT – V Design of Footing Design of footing for axially loaded column only
	14.09.26	01	Design of footing for axially loaded column only
	15.09.26	01	Design of footing for axially loaded column only
17TH	21.09.26	01	Minimum Eccentricity, Design of Footing for uni-axial bending, column with uni- axial moment as per IS 456 provisions
	22.09.26	01	Minimum Eccentricity, Design of Footing for uni-axial bending, column with uni- axial moment as per IS 456 provisions
18TH	27.09.26	01	Minimum Eccentricity, Design of Footing for uni-axial bending, column with uni- axial moment as per IS 456 provisions Minimum Eccentricity, Design of Footing for uni-axial bending, column with uni- axial moment as per IS 456 provisions
	28.09.26	01	Minimum Eccentricity, Design of Footing for uni-axial bending, column with uni- axial moment as per IS 456 provisions
	29.09.26	01	Minimum Eccentricity, Design of Footing for uni-axial bending, column with uni- axial moment as per IS 456 provisions Monthly test 4

19TH

03.09.26	01	Topic end, Question answer discussion, Assignment 5
04.09.26	01	Mock test
02.09.26	01	Mock test


Signature of concerned faculty


Department of Civil Engineering
OSME, Keonjhar