

GOVT. POLYTECHNIC MAYURBHANJ LESSON PLAN-2026-27 (WINTER)

Discipline : CIVIL ENGG.		Semester: 5th		Name of the Teaching Faculty : AMAN MOHANTY	
Subject : RCC		No. of Days / per week class allotted : 03		Semester From date : 01.07.2026 To Date : 05.11.2026	
MONTH	Week	Day	Unit	Topics	
JULY	1st	4th	UNIT-I	Design Philosophies	
		5th		Design of Singly Reinforced & Doubly Reinforced beam for Flexure using LSM	
		2nd		Nominal shear stress in RCC section	
		4th		Design shear strength of concrete,	
		5th		Design of shear reinforcement	
	2nd	2nd		Minimum Shear Reinforcement, Provisions of IS 456 2000	
		4th		RATH YATRA	
		5th		forms of shear reinforcement Types of bond, Bond stress, check for bond stress	
		2nd		Determination of Development length in tension and compression members and check as per codal provisions, Anchorage value of 90o hook,	
		4th		Simple numerical on: Shear reinforcement	
	3rd	5th		Adequacy of section for shear	
		2nd		Numericals	
		4th		Introduction to serviceability limit state check	
		5th		Introduction to limit state of collapse	
		2nd		Design of axially loaded RCC Column	
AUGUST	1st	3rd	UNIT-II	Definition and classification of column	
		5th		Limit state of compression members,	
		2nd		Effective length of column.	
		4th		Provisions of IS 456 2000 for minimum steel, cover, maximum steel, spacing of ties	
		5th		Design of axially loaded short column - Square, Rectangular, and Circular only	
	2nd	2nd		Design of RC flanged beam	
		4th		General features of T and L beams	
		5th		Problems	
		2nd		Design of singly reinforcement T beam	
		4th		Numericals	
	3rd	5th		Stress and Strain diagram	
		2nd		Depth of neutral axis	
		4th		Moment of resistance, T and L beams with neutral axis in flange only	
		5th		Simple numerical on location of neutral axis	
		2nd		Simple numerical on location of neutral axis	
AUGUST	1st	2nd	UNIT-III	1st Internal Assessment	
		4th			
		5th			

SEPTEMBER			UNIT-IV	Effective width of flange. Problems Introduction to slab Shear and deflection and checks, as per the provisions of BIS 456 Shear and deflection and checks, as per the provisions of BIS 456 PROBLEMS Design of simply supported one-way slab for flexure Design of one-way cantilever slab Problems Chajjas, Flexure including checks for Development length and Shear stress Design of two-way simply supported slab Introduction to design of dog-legged staircases
2nd	4th			
	5th			
3rd	2nd			
	4th			
4th	5th		UNIT-V	Design of Footing 2nd Internal Assessment Design of Footing for uni-axial bending column with uni- axial moment as per IS 456 provisions. question discussion Problems Revision and Previous Year Question Discussion Revision and Previous Year Question Discussion
5th	2nd			
	4th			
1st	5th			
2nd	2nd			
	4th			
3rd	5th			
4th	2nd			
	4th			
5th	5th			
OCTOBER			UNIT-V	Design of Footing for uni-axial bending column with uni- axial moment as per IS 456 provisions. question discussion Problems Revision and Previous Year Question Discussion Revision and Previous Year Question Discussion
	2nd			
	4th			
1st	5th			
2nd	2nd			
	4th		UNIT-V	Design of Footing for uni-axial bending column with uni- axial moment as per IS 456 provisions. question discussion Problems Revision and Previous Year Question Discussion Revision and Previous Year Question Discussion
3rd	5th			
4th	2nd			
	4th			
5th	5th			
NOVEMBER			UNIT-V	Design of Footing for uni-axial bending column with uni- axial moment as per IS 456 provisions. question discussion Problems Revision and Previous Year Question Discussion Revision and Previous Year Question Discussion
	2nd			
	4th			
1st	5th			
2nd	2nd			

Subject Expert
(Civil Engg.)

HOD, Civil Engg.

Academic Co-ordinator