

LESSON PLAN

Academic Session :- 2025-2026(S)

Civil.Engineering Name of teaching faculty:**JYOTIRMAYEE SAMAL**

TechnologyTh.4 Semester from Date:**22-12-2025 to 18-04-2026**

Semester: 6th No. of weeks: **14** **4P/week**

No. of Days/ week class allotted: 04 period per week(Monday,Tuesday,Wednesday Thursday) **Total period: 60**

Mon th	Week	Date	Days/ Perio d	Syllabus to be covered	NO. OF PERIODS AVAILAB LE	
DEC	4TH			CHAPTER-1: Concrete as a construction material(02)	2	
		22-12-2025	Mon	1.1.Grades of Concrete	1	
		23-12-2025	Tue	1.2 Advantages and disadvantages of concrete	1	
				CHAPTER-2: CEMENT(04)	4	
	5TH	24-12-2025	Wed	2.1 Compostion, hydration of cement	1	
		29-12-2025	Mon	water cement ratio & compressive strength test	1	
		30-12-2025	Tue	finess of cement,setting time	1	
		31-12-2025	Wed	soundness,types of cement	1	
		1ST	01-01-2025	Thu	CHAPTER-3: Aggregate ,Water & admixture(06)	6
			05-06-2026	Mon	3.1 Classification and characteristics of aggregate,	1
	06-06-2026		Tue	fineness modulus, grading of aggregate	1	
	2ND	06-06-2026	Tue	3.2 Quality of water for mixing and curing.	1	
		07-01-2026	Wed	3.3 Important functions, classification of admixtures, I.S 9103	1	
		08-01-2026	Thu	accelerating admixtures, retarding admixtures		
12-01-2026		Mon	water reducing admixtures, air containing admixtures	1		
3RD		13-01-2026	Tue	CHAPTER -4:Properties of fresh concrete(06)		
		15-01-2026	Thu	4.1 Concept of fresh concret	1	
	19-01-2026	Mon	workability	1		
	20-01-2026	Tue	slump test, compacting factor test	1		
4TH	21-01-2026	Wed	V-bee consistency test	1		
	22-01-2026	Thu	flow test	1		
	27-01-2026	Tue	requirement of workability,I.S.1199	1		
			CHAPTER-5: Properties of hardened concrete(07)	7		
	5TH	28-01-2026	Wed	5.1 Cube and cylinder compressive strengths	1	
		29-01-2026	Thu	flexural strength of concrete	1	
02-02-2026		Mon	stress-strain and elasticity	1		
1ST		03-02-2026	Tue	phenomena of creep and shrinkage	1	
		04-02-2026	Wed	permeability, durability of concrete	1	
		05-02-2026	Thu	sulphate, chloride and acid attack on concrete	1	
09-02-2026	Mon	efflorescence	1			
2ND			CHAPTER-6:Concrete mix Design(05)	5		
	10-02-2026	Tue	6.1 a) Introduction	1		
	11-02-2026	Wed	b) Data or input required for mix design	1		
	12-02-2026	Thu	6.2 Nominal mix concrete	1		
	3RD	16-02-2026	Mon	4.2.Buckling class of cross sections	1	
		17-02-2026	Tue	design mix concrete		
18-02-2026		Wed	Basic consideration for concrete mix design, Methods of proportioning concrete	1		

		CHAPTER-7:Production of concrete(06)	6	
4TH	19-02-2026	Thu	Batching of materials	1
	23-02-2026	Mon	mixing of concrete materials	1
	24-02-2026	Tue	transportation, placing of concrete	1
	25-02-2026	Wed	compactionof concrete (vibrators)	1
	26-02-2026	Thu	Curing of concrete	1
	02-03-2026	Mon	Formwork-requirements and types ,stripping of forms	1
1ST		CHAPTER-8:Inspection and Quality Control of Concrete(06)	6	
2ND	05-03-2026	Thu	Quality control of Concrete as per I.S.456	1
	09-03-2026	Mon	Factors causing the variations in the quality of Concrete	1
	10-03-2026	Tue	Mixing, Transporting of concrete	1
	11-03-2026	Wed	Placing &curing requirements of Concrete as per I.S.456	1
	12-03-2026	Thu	Inspection and Testing as per Clause 17 of IS:456.	1
	16-03-2026	Mon	Durability requirements of Concrete as per I.S:456	1
3RD			CHAPTER-9:-Special Concrete(06)	6
	17-03-2026	Tue	Introduction to ready mix concrete	1
	18-03-2026	Wed	high performance concrete	1
	19-03-2026	Thu	silica fume concrete	1
	23-03-2026	Mon	shot-crete concrete	
	24-03-2026	Tue	Guniting	1
4TH		CHAPTER-10:Deterioration of concrete and its prevention(06)	6	
5TH	25-03-2026	Wed	Types of deterioration	1
	26-03-2026	Thu	prevention of concrete deterioration	1
	30-03-2026	Mon	corrosion of reinforcement	1
	31-03-2026	Tue	Effects	1
	02-04-2026	Thu	prevention	
APR			CHAPTER11 :-Repair technology for concrete structures(06)	6
	06-04-2026	Thu	Symptom, cause	1
	07-04-2026	Mon	prevention and remedy of defects during construction	1
	08-04-2026	Tue	cracking of concretedue to different reasons	1
	09-04-2026	Wed	Repair of cracks for different purposes	1
	13-04-2026	Thu	selection of techniques	1
	15-04-2026	Wed	polymerbased repairs, common types of repairs.	1
3RD	16-04-2026	Thu	class test	1