

Lesson Plan

2026(s)

Subject :- Concrete technology

Name of faculty:- -Rajashree sahuo

Semester : 6th

Class allotted- 60

Branch :- Civil engg.

Discipline	Semester:-	From date:-22/12/2025 To date:18/04/2026	Teaching Aid
Subject:	No. of days/ per week 4p/w :	Theory/ Practical –Topics/Lesson	
Week	Date/Period		
1	22/12/2025 to 27/12/2025	1. Concrete as a construction material 1.1 Grades of concrete. 1.2 Advantages and disadvantages of concrete.	White board, marker
2	29/12/2025 to 03/01/2026	2. Cement: 2.1 Composition, hydration of cement, water cement ratio and compressive strength, fineness of cement, setting time, soundness, types of cement.	White board, marker
3	05/01/2026 to 10/01/2026	3. Aggregate, Water and Admixtures: 3.1 Classification and characteristics of aggregate, fineness modulus, grading of aggregate, I.S.383 3.2 Quality of water for mixing and curing.	White board, marker
4	12/01/2026 to 17/01/2026	3.3 Important functions, classification of admixtures, I.S 9103, accelerating admixtures, retarding admixtures, water reducing admixtures, air containing admixtures	White board, marker
5	19/01/2026 To 24/01/2026	4. Properties of fresh concrete: 4.1 Concept of fresh concrete, workability, slump test, compacting factor test, V-bee consistency test and flow test, requirement of workability, I.S.1199.	White board, marker
6	26/01/2026 To 31/01/2026	5. Properties of hardened concrete: 5.1 Cube and cylinder compressive strengths, flexural strength of concrete, stress-strain and elasticity, phenomena of creep and shrinkage, permeability, durability of concrete, sulphate, chloride and acid attack on concrete, efflorescence.	White board, marker
7	02/02/2026 To 07/02/2026	6. Concrete mix Design 6.1 a) Introduction b) Data or input required for mix design. 6.2 Nominal mix concrete & design mix concrete. 6.3 Basic consideration for concrete mix design, Methods of proportioning concrete mix – I.S Code method of mix design(I.S.10262)	White board, marker
8	09/02/2026 To 14/02/2026	7. Production of concrete 7.1 Batching of materials, mixing of concrete materials, transportation	White board, marker
9	16/02/2026 To 21/02/2026	placing of concrete, compaction of concrete (vibrators), Curing of concrete, Formwork-requirements and types ,stripping of forms. (Concepts only)	White board, marker
10	23/02/2026 To 28/02/2026	10. Inspection and Quality Control of Concrete 10.1 Quality control of Concrete as per I.S.456, Factors causing the variations in the quality of concrete	White board, marker

	02/03/2026 To 07/03/2026	10.2 Mixing, Transporting, Placing & curing requirements of Concrete as per I.S.456	White board, marker
12	09/03/2026 To 14/03/2026	10.3 Inspection and Testing as per Clause 17 of IS:456. 10.4 Durability requirements of Concrete as per I.S:456.	White board, marker
13	16/03/2026 To 21/03/2026	11. Special Concrete 11.1 Introduction to ready mix concrete, high performance concrete, silica fume concrete, shot-concrete concrete or gunniting (Concepts only).	White board, marker
14	23/03/2026 To 28/03/2026	12. Deterioration of concrete and its prevention: 12.1 Types of deterioration,	White board, marker
15	30/03/2026 ,to 04/04/2026	prevention of concrete deterioration, corrosion of reinforcement, effects and prevention	White board, marker
16	06/04/2026 to 11/04/2026	13. Repair technology for concrete structures: 13.1 Symptom, cause and prevention and remedy of defects during construction,	White board, marker
17	13/04/2026 To 18/04/2026	cracking of concrete due to different reasons. Repair of cracks for different purposes. selection of techniques, polymer based repairs, common types of repairs.	White board, marker

T. G. Jena

Signature of HOD

Rajashree Sahoo

Signature of faculty