

## Lesson Plan

Subject :- Concrete Technology (Code) TH-4

Name of faculty:- Sadeqa khatun

Semester :-6<sup>TH</sup>

Class allotted 60p

Branch :- Civil engg.

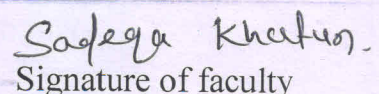
Discipline	Semester:-4 <sup>TH</sup>	From date:- 04/02/25 To date:17/05/25	Teaching Aid
Subject:	No. of days/ per week 4p/w :	Theory/ Practical –Topics/Lesson	
Week	Date/Period		

1	04/02/25 to 08/02/25	<b>1 Concrete as a construction material:</b> 1.1 Grades of concrete. 1.2 Advantages and disadvantages of concrete.	White board & marker
2	10/02/25 to 15/02/25	<b>2 Cement:</b> 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	17/02/25 to 22/02/25	<b>3 Aggregate, Water and Admixtures:</b> 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	24/02/25 to 01/03/25	3.3 Important functions, classification of admixtures, I.S 9103, accelerating admixtures, retarding admixtures, water reducing admixtures, air containing admixtures	White board & marker
5	03/03/25 to 08/03/25	<b>4 Properties of fresh concrete:</b> 4.1 Concept of fresh concrete, workability, slump test, compacting factor test, V-tee consistency test and flow test, requirement of workability, I.S.1199.	White board & marker
6	10/03/25 to 13/03/25	<b>5 Properties of hardened concrete:</b> 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	17/03/25 to 21/03/25	<b>6 Concrete mix Design</b> 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	White board & marker

		concrete mix – I.S Code method of mix design(I.S.10262)	
8	24/03/25 to 29/03/25	<b>7 Production of concrete:</b> 7.1 Batching of materials, mixing of concrete materials, transportation, placing of concrete, compaction of concrete (vibrators), Curing of concrete, Formwork-requirements and types ,stripping of forms. (Concepts only)	White board & marker
9	02/04/25 to 05/04/25	<b>10 Inspection and Quality Control of Concrete</b> 10.1 Quality control of Concrete as per I.S.456, Factors causing the variations in the quality of concrete 10.2 Mixing, Transporting, Placing &curing requirements of Concrete as per I.S.456.	White board & marker
10	07/04/25 to 12/04/25	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
11	15/04/25 to 19/04/25	<b>11 Special Concrete</b> 11.1 Introduction to ready mix concrete, high performance concrete, silica fume concrete, shot-crete concrete or gunniting (Concepts only).	White board & marker
12	21/04/25 to 26/04/25	<b>12 Deterioration of concrete and its prevention:</b> 12.1 Types of deterioration, prevention of concrete deterioration	White board & marker & smart board
13	28/04/25 to 03/05/25	, corrosion of reinforcement, effects and prevention	White board & marker
14	05/05/25 to 10/05/25	<b>13 Repair technology for concrete structures:</b> 13.1 Symptom, cause and prevention and remedy of defects during construction, cracking of concrete due to different reasons.	White board & marker
15	13/05/25 to 17/05/25	Repair of cracks for different purposes, selection of techniques, polymer based repairs, common types of repairs.	White board & marker & smart board



Signature of HOD



Signature of faculty