Lesson Plan

Subject :- Concrete Technology (Code) TH-4

Name of faculty:- Sadeqa khatun

Semester :-6TH

Class allotted 60p

Branch :- Civil engg.

Discipline	Semester:-4 TH	From date:- 16/01/24 To date:26/04/24	
Subject:	No. of days/ per week 4p/w :	Theory/ Practical –Topics/Lesson	Teaching Aid
Week	Date/Period		

1	16/01/24 TO 20/01/24		
1	10/01/24 10 20/01/24	1 Concrete as a construction material:	White board &
		1.1 Grades of concrete. 1.2 Advantages	marker
2	22/01/24 TO 27/04/0	and disadvantages of concrete.	
2	22/01/24 TO 27/01/24	2 Cement:	White board &
		2.1 Composition, hydration of cement,	marker
		water cement ratio and compressive	
		strength, fineness of cement, setting time,	
	20/01/2	soundness, types of cement.	
3	29/01/24 TO 03/02/24	3 Aggregate, Water and Admixtures:	White board &
		3.1 Classification and characteristics of	marker
		aggregate, fineness modulus, grading of	
		aggregate, I.S.383 3.2 Quality of water for	
		mixing and curing.	
4	05/02/24 TO 10/02/24	3.3 Important functions, classification of	White board &
		admixtures, I.S 9103, accelerating	marker
		admixtures, retarding admixtures, water	
	***	reducing admixtures, air containing	
	10	admixtures	
5	12/02/24 TO 17/02/24	4 Properties of fresh concrete:	White board &
		4.1 Concept of fresh concrete,	marker
		workability, slump test, compacting factor	
1		test, V-bee consistency test and flow test,	
		requirement of workability, I.S.1199.	
6	19/02/24 TO 24/02/24	5 Properties of hardened concrete:	White board &
		5.1 Cube and cylinder compressive	marker
		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.	
7	26/02/24 TO 02/03/24	6 Concrete mix Design	White board &
		6.1 a) Introduction b) Data or input	marker
		required for mix design.	
		6.2 Nominal mix concrete &design mix	
		concrete.	
		6.3 Basic consideration for concrete mix	
		design Methods of proportioning	
		design, Methods of proportioning	

		concrete mix – I.S Code method of mix design(I.S.10262)	
8	04/03/24 TO 09/03/24	7 Production of concrete: 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	11/03/24 TO 16/03/24	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 10.2 Mixing, Transporting, Placing &curing requirements of Concrete as per I.S.456.	White board & marker
10	18/03/24 TO 23/03/24	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	27/03/24 TO 30/03/24	11 Special Concrete 11.1 Introduction to ready mix concrete, high performance concrete, silica fume concrete, shot-crete concrete or gunitting (Concepts only).	White board & marker
12	02/04/24 TO 06/04/24	12 Deterioration of concrete and its prevention: 12.1 Types of deterioration, prevention of concrete deterioration	White board & marker & smart board
13	08/04/24 TO 13/04/24	, corrosion of reinforcement, effects and prevention	White board & marker
14	15/04/24 TO 20/04/24	13 Repair technology for concrete structures: 13.1 Symptom, cause and prevention and remedy of defects during construction, cracking of concrete due to different reasons.	White board & marker
15	22/04/24 TO 26/04/24	Repair of cracks for different purposes, selection of techniques, polymer based repairs, common types of repairs.	White board & marker & smart board

Signature of HOD

Sadega Kheelyn. Signature of faculty