

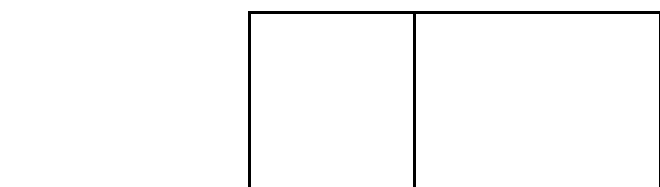
LESSON PLAN FC

DISCIPLINE:- CIVIL ENGG.		SEMESTER:-6TH SEM 2ND SHIFT
SUBJECT:- CONCRETE TECHNOLOGY		NO. OF DAYS/PER WEEK CLASS ALLOTTED:- 4T
WEEK	DATE	CLASS DAY
1ST WEEK		
	3/10/2022	2ND
	3/11/2022	3RD
	3/12/2022	4TH
2ND WEEK	3/16/2022	1ST
	3/17/2022	2ND
3RD WEEK	3/23/2022	1ST
	3/24/2022	2ND
	3/25/2022	3RD
	3/26/2022	4TH
4TH WEEK	3/30/2022	1ST
	3/31/2022	2ND
	4/2/2022	4TH
5TH WEEK	4/6/2022	1ST
	4/7/2022	2nd

5TH WEEK	4/8/2022	3rd
	4/9/2022	4th
6TH WEEK	4/13/2022	1ST
	4/16/2022	4TH
7TH WEEK	4/20/2022	1ST
	4/21/2022	2nd
	4/22/2022	3rd
	4/23/2022	4th
8TH WEEK	4/27/2022	1ST
	4/28/2022	2nd
	4/29/2022	3rd

	4/30/2022	4th
9TH WEEK	5/4/2022	1ST
	5/5/2022	2nd
	5/6/2022	3rd
	5/7/2022	4th
10TH WEEK	5/11/2022	1ST
	5/12/2022	2nd
	5/13/2022	3rd
	5/14/2022	4th
11TH WEEK	5/18/2022	1ST
	5/19/2022	2nd
	5/20/2022	3rd
	5/21/2022	4th

12TH WEEK	5/25/2022	1ST
	5/26/2022	2nd
	5/27/2022	3rd
	5/28/2022	4th
13TH WEEK	6/1/2022	1ST
	6/2/2022	2nd
	6/3/2022	3rd
	6/4/2022	4th
14TH WEEK	6/8/2022	1ST
	6/9/2022	2nd
	6/10/2022	3rd
EXTRA CLASSES REQUIRED		



DR SUMMER 2022

NAME OF THE TEACHING FACULTY:- JASODHARA SAHOO (PTGF)
SEMESTER - 6TH SEM 2ND SHIFT
FROM DATE-10/03/2022 TO DATE- 10/06/2022
NO. OF WEEKS-14 WEEKS
THEORY TOPICS
1. Concrete as a construction material(2P)
1.1 Grades of concrete.
1.2 Advantages and disadvantages of concrete.
2. Cement(4P)
2.1 Composition, hydration of cement, water cement ratio and compressive strength, fineness of cement, setting time, soundness, types of cement.
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3.Aggregate, Water and Admixtures(6P)
3.1 Classification and characteristics of aggregate, fineness modulus, grading of aggregate,I.S.383
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3.2 Quality of water for mixing and curing.
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3.3 Important functions, classification of admixtures, I.S 9103, accelerating admixtures, retarding admixtures, water
3.3 Important functions, classification of admixtures, I.S 9103, accelerating admixtures, retarding admixtures, water reducing admixtures, air containing admixtures
4. Properties of fresh concrete(6P)
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.
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5. Properties of hardened concrete (7P)

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.

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6. Concrete mix Design (5P)

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.SCode method of mix design(I.S.10262)
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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)
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8. Inspection and Quality Control of Concrete (6P)
8.1 Quality control of Concrete as per I.S.456, Factors causing the variations in the quality of concrete
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8.2 Mixing, Transporting, Placing &curing requirements of Concrete as per I.S.456.
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8.3 Inspection and Testing as per Clause 17 of IS:456.
8.4 Durability requirements of Concrete as per I.S:456.
9. Special Concrete (6P)
9.1 Introduction to ready mix concrete, high performance concrete, silica fume concrete, shot-crete concrete or
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10. Deterioration of concrete and its prevention (6P)
10.1 Types of deterioration, prevention of concrete deterioration, corrosion of reinforcement, effects and prevention
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11. Repair technology for concrete structures

11.1 Symptom, cause and prevention and remedy of defects during construction, cracking of concrete due to different reasons. Repair of cracks for different purposes, selection of techniques, polymer based repairs, common types of repairs.