BALASORE SCHOOL OF ENGINEERING, BALASORE

LESSON PLAN-2023 (S) **BRANCH:- CIVIL ENGG.**

Theory-4 **SEMESTER:-6th**

SUBJECT:-Concrete technology **NAME OF THE FACULTY :- Shuchismita Rout**

SL. No.	Month /No .of academic days available for the subject	DATE	TOPICS TO BE COVERED
1	FEB/05	23/2/23	**1.CONCRETE AS A CONSTRUCTION MATERIAL** 1.1-Grade of concrete
2		24/2/23	1.2-Advantages and disadvantages of concrete
3		25/2/23	**2.CEMENT** 2.1 COMPOSITION, HYDRATION OF CEMENT
4		27/2/23	Composition, hydration of cement,
5		28/2/22	Water cement ratio and compressive strength
6	MARCH/22	1/3/23	FinesS of cement, ,setting time ,soundness ,types of cement
7		2/3/23	**3.AGGREGATE,WATER AND ADMIXTURE** 3.1Classification and characteristics of aggregate
8		3/3/23	Fineness modulus ,grading of aggregate
9		4/3/23	3.2 Quality of mixing water AND CURING
10		6/3/23	3.3 Important function, classification of admixture
11		9/3/23	Accelerating admixture ,retarding admixtures
12		10/3/23	Water reducing admixtures, air containing admixture
13		11/3/23	**4.Properties of fresh concrete** 4.1 Concept of fresh concrete,workability
14		13/3/23	Slump test, compacting factor test
15		14/3/23	Vbee consistency test and flow test . Requirement of workability
16		15/3/23	continue
17		16/3/23	**5.Properties of hardened concrete** 5.1 Cube and cylinder compressive strengths
18		17/3/23	flexural strength of concrete stress- strain and elasticity

19		18/3/23	phenomena of creep and shrinkage , permeability
20		20/3/23	,durability of concrete ,sulphate ,Chloride and acid attack on concrete,efflorescence
21		21/3/23	6. **Concrete mix design** 6.1 Introduction ,data Or Input required for mix design ***6.2 nominal mix concrete and design mix concrete***
22		22/3/23	6.3 basic consideration for concrete mix design , method of proportioning concrete mix –is code method of mix design
23		23/3/23	7.**production of concrete** 7.1 Batching of materials, mixing of concrete materials, transportation
24		24/3/23	placing of concrete ,compaction of concrete, curing of concrete
25		25/3/23	***continue***
26		27/3/23	formwork-requirements and types, stripping of forms
27		28/3/23	**8.INSPECTION AND QUALITY CONTROL OF CONCRETE** 8.1 Quality control of conrete
28		29/3/23	Factors causing the variation in quality of concrete
29	APRIL/12	3/4/23	8.2 mixing ,transporting ,placing and curing requirement of concrete.
30		4/4/23	8.3 inspection and testing as per IS456
31		5/4/23	8.4 Durability requirement of concrete as per IS456
32		6/4/23	CONTINUE
33		10/4/23	CONTINUE
34		11/4/23	CONTINUE
35		12/4/23	**9.Special concrete** 9.1 introduction to ready mix concrete silica fume concrete ,high performance concrete
36		13/4/23	Shot crete concrete or guinting
37		24/4/23	continue
38		25/4/23	CONTINUE
39		26/4/23	CONTINUE
40		27/4/23	**10.DETERIATION OF CONCRETE AND ITS PREVENTION**

			10.1Types of deterioration
41		28/4/23	Prevention of concrete deterioration
42	May/11	1/5/23	Corrosion of reinforcement ,effect and prevention
43		2/5/23	continue
44		3/5/23	CONTINUE
45		4/5/23	**11REPAIR TECHNOLOGY FOR CONCRETE** 11.1Symptom,cause and prevention and remedy of defects during construction
46		5/5/23	Cracking of concrete due to different reasons
47		6/5/23	Repair of cracks for different purpose
48		8/5/23	Selection of techniques Polymer based repair, common type repair
49		9/5/23	continue
50		10/5/23	continue
51		11/5/23	continue
52		13/5/23	continue

Brief Summary of the Plan

Slno	Month	Units/Chapter To be Covered	Percentage of Coverage
1	FEB	CH 1,2	10
2	MARCH	CH.2,3,4,5,6,7,8	50
3	APRIL	CH.8,9,10	30
4	MAY	CH.10,11	10

Signature of the Faculty

Date

Signature of the Principal

Date 22/2/23