

# LESSON PLAN

**Academic Session :- 2022-2023**

**Discipline: Civil.Engineering**

**Name of teaching faculty: Anita pradhan**

**Subject: Concrete Technology(TH4)**

**Semester from Date:14th FEB 2023 to 23rd MAY 2023**

**Semester: 6th**

**No. of weeks: 14**

**4P/week**

No. of Days/ week class allotted: 04 period per week( Monday,Tuesday,Thursday, Saturday)

**Total period: 60**

MONTH	Week	DATE	DAYS/PERIOD	Syllabus to be covered	NO. OF PERIODS
				<b>CHAPTER-1: Concrete as a construction material(02)</b>	2
<b>FEB</b>	<b>3rd</b>	14/02/2023	Tuesday	Grades of Concrete	1
		16/02/2023	Thursday	Advantages and disadvantages of concrete	1
				<b>CHAPTER-2: CEMENT(04)</b>	4
	<b>4th</b>	20/02/2023	Monday	Compostion, hydration of cement	1
		21/02/2023	Tuesday	Water cement ratio & compressive strength test	1
		23/02/2023	Thursday	Finess of cement,setting time of cement	1
		25/02/2023	Saturday	Soundness of cement,Types of cement	1
				<b>CHAPTER-3: Aggregate ,Water &amp; admixture(06)</b>	6
	<b>5th</b>	27/02/2023	Monday	Classification and characteristics of aggregate	1
		28/02/2023	Tuesday	Fineness modulus, grading of aggregate	1
<b>March</b>	<b>1st</b>	2/3/2023	Thursday	Quality of water for mixing and curing.	1
		4/3/2022	Saturday	Important functions, classification of admixtures	1
	<b>2nd</b>	6/3/2023	Monday	I.S 9103,accelerating admixtures, retarding admixtures,water reducing admixtures, air containing admixtures	1
		9/3/2023	Thursday	I.S 9103,accelerating admixtures, retarding admixtures,water reducing admixtures, air containing admixtures	1
				<b>CHAPTER -4:Properties of fresh concrete(06)</b>	6
		11/3/2023	Saturday	Concept of fresh concrete	1
		13/3/2023	Monday	Workability,slump test, compacting factor test	1

	3rd	14/3/2023	Tuesday	Workability, slump test, compacting factor test	1
		16/3/2023	Thursday	V-bee consistency test, flow test	1
		18/3/2023	Saturday	V-bee consistency test, flow test	1
	4th	20/3/2023	Monday	Requirement of workability, I.S.1199	1
				<b>CHAPTER-5: Properties of hardened concrete(07)</b>	7
		21/3/2023	Tuesday	Cube and cylinder compressive strengths	1
		23/3/2023	Thursday	Flexural strength of concrete	1
		25/3/2023	Saturday	Stress-strain and elasticity	1
	5th	27/3/2023	Monday	Phenomena of creep and shrinkage	1
		28/3/2023	Tuesday	Permeability, durability of concrete	1
April	2nd	3/4/2023	Monday	Sulphate, chloride and acid attack on concrete	1
		4/4/2023	Tuesday	Efflorescence	1
				<b>CHAPTER-6: Concrete mix Design(05)</b>	5
		6/4/2023	Thursday	Introduction	1
		8/4/2023	Saturday	Data or input required for mix design	1
	3rd	10/4/2023	Monday	Nominal mix concrete	1
		11/4/2023	Tuesday	4.2. Buckling class of cross sections	1
		13/4/2023	Monday	Design mix concrete Basic consideration for concrete mix design, Methods of proportioning concrete	1
				<b>CHAPTER-7: Production of concrete(06)</b>	6
		15/4/2023	Saturday	Batching of materials	1
	4th	17/4/2023	Monday	Mixing of concrete materials	1
		18/4/2023	Tuesday	Transportation, placing of concrete	1
		20/4/2023	Thursday	Compaction of concrete (vibrators)	1
		22/4/2023	Saturday	Curing of concrete	1
		5th	24/4/2023	Monday	Formwork-requirements and types, stripping of forms
				<b>CHAPTER-8: Inspection and Quality Control of Concrete(06)</b>	6
	25/4/2023		Tuesday	Quality control of Concrete as per I.S.456	1
	27/4/2023		Thursday	Factors causing the variations in the qu	1
	29/4/2023		Saturday	Mixing, Transporting of concrete	1
	1st	1/5/2023	Monday	Placing & curing requirements of Concrete as per I.S.456	1
2/5/2023		Tuesday	Inspection and Testing as per Clause 17 of IS:456.	1	

May	1st	4/5/2023	Thursday	Durability requirements of Concrete as per I.S:456	1
				<b>CHAPTER-9:-Special Concrete(06)</b>	6
		6/5/2023	Saturday	Introduction to ready mix concrete	1
	2nd	8/5/2023	Monday	high performance concrete	1
		9/5/2023	Tuesday	silica fume concrete	1
		11/5/2023	Thursday	shot-crete concrete,Guniting	1
		13/5/2023	Saturday	shot-crete concrete,Guniting	1
	3rd	15/5/2023	Monday	shot-crete concrete,Guniting	1
				<b>CHAPTER-10:Deterioration of concrete and its prevention(06)</b>	6
		16/5/2023	Tuesday	Types of deterioration	1
		18/5/2023	Thursday	Prevention of concrete deterioration	1
		20/5/2023	Saturday	corrosion of reinforcement	1
	4th	22/5/2023	Monday	Effects ,prevention	1
		23/5/2023	Tuesday	Effects ,prevention	1
EXTRA CLASSES			Effects ,prevention	1	
			<b>CHAPTER11 :-Repair technology for concrete structures(06)</b>	6	
			Symptom, cause	1	
			Prevention and remedy of defects during construction	1	
			cracking of concrete due to different reasons	1	
			Repair of cracks for different purposes	1	
			Selection of techniques	1	
			Polymer based repairs, common types of repairs.	1	