

LESSON PLAN					
Academic Session :- 2023-2024					
Discipline: Civil.Engineering			Name of teaching faculty: BHAGABATA JENA		
Subject: Concrete Technology{ Th.4(a)}			Semester from Date:16th JAN 2024 to 26th APR 2024		
Semester: 6th			No. of weeks: 14		4P/week
No. of Days/ week class allotted: 04 period per week( Monday,Tuesday,Thursday, Friday)					<b>Total period: 60</b>
MONT H	Week	DATE	DAYS/PERIO D	Syllabus to be covered	NO. OF PERIODS AVAILABLE
				<b>CHAPTER-1: Concrete as a construction material(02)</b>	<b>2</b>
JANUAR Y	3rd	16-01-2024	Tue	1.1.Grades of Concrete	1
		18-01-2024	Thu	1.2 Advantages and disadvantages of concrete	1
				<b>CHAPTER-2: CEMENT(04)</b>	<b>4</b>
	4th	22-01-2024	Mon	2.1 Compostion, hydration of cement	1
		25-01-2024	Thu	water cement ratio & compressive strength test	1
	5th	29-01-2024	Mon	finess of cement,setting time	1
30-01-2024		Tue	soundness,types of cement	1	
FEBRUAR Y				<b>CHAPTER-3: Aggregate ,Water &amp; admixture(06)</b>	<b>6</b>
	1st	01-02-2024	Thu	3.1 Classification and characteristics of aggregate,	1
		02-02-2024	Fri	fineness modulus, grading of aggregate	1
		05-02-2024	Mon	3.2 Quality of water for mixing and curing.	1
		06-02-2024	Tue	3.3 Important functions, classification of admixtures, I.S 9103	1
	2nd	08-02-2024	Thu	accelerating admixtures, retarding admixtures	
		09-02-2024	Fri	water reducing admixtures, air containing admixtures	1
				<b>CHAPTER -4:Properties of fresh concrete(06)</b>	
	3rd	12-02-2024	Mon	4.1 Concept of fresh concret	1
		13-02-2024	Tue	workability	1
		15-02-2024	Thu	slump test, compacting factor test	1
		16-02-2024	Fri	V-bee consistency test	1
	4th	19-02-2024	Mon	flow test	1
		20-02-2024	Tue	requirement of workability,I.S.1199	1
				<b>CHAPTER-5: Properties of hardened concrete(07)</b>	<b>7</b>
	5th	22-02-2024	Thu	5.1 Cube and cylinder compressive strengths	1
		23-02-2024	Fri	flexural strength of concrete	1
		26-02-2024	Mon	stress-strain and elasticity	1
		27-02-2024	Tue	phenomena of creep and shrinkage	1
		29-02-2024	Thu	permeability, durability of concrete	1
MARCH	1st	01-03-2024	Fri	sulphate, chloride and acid attack on concrete	1
	2nd	04-03-2024	Mon	efflorescence	1
				<b>CHAPTER-6:Concrete mix Design(05)</b>	<b>5</b>
	3rd	11-03-2024	Mon	6.1 a) Introduction	1
		12-03-2024	Tue	b) Data or input required for mix design	1
		14-03-2024	Thu	6.2 Nominal mix concrete	1
		15-03-2024	Fri	4.2.Buckling class of cross sections	1
	4th	18-03-2024	Mon	design mix concrete	
		19-03-2024	Tue	Basic consideration for concrete mix design, Methods of proportioning concrete	1
				<b>CHAPTER-7:Production of concrete(06)</b>	<b>6</b>
	5th	21-03-2024	Thu	Batching of materials	1
		22-03-2024	Fri	mixing of concrete materials	1
		28-03-2024	Thu	transportation, placing of concrete	1
	APRIL	1st	01-04-2024	Mon	compactionof concrete (vibrators)
02-04-2024			Tue	Curing of concrete	1
04-04-2024			Thu	Formwork-requirements and types ,stripping of forms	1
				<b>CHAPTER-8:Inspection and Quality Control of Concrete(06)</b>	<b>6</b>
		05-04-2024	Fri	Quality control of Concrete as per I.S.456	1
2nd		08-04-2024	Mon	Factors causing the variations in the quality of Concrete	1
		09-04-2024	Tue	Mixing, Transporting of concrete	1
		12-04-2024	Fri	Placing &curing requirements of Concrete as per I.S.456	1
3rd		15-04-2024	Mon	Inspection and Testing as per Clause 17 of IS:456.	1
		16-04-2024	Tue	Durability requirements of Concrete as per I.S:456	1
			<b>CHAPTER-9:-Special Concrete(06)</b>	<b>6</b>	

		18-04-2024	Thu	Introduction to ready mix concrete	1
		19-04-2024	Fri	high performance concrete	1
	4th	22-04-2024	Mon	silica fume concrete	1
		23-04-2024	Tue	shot-crete concrete	
		25-04-2024	Thu	Guniting	1
				<b>CHAPTER-10:Deterioration of concrete and its prevention(06)</b>	6
		26-04-2024	Fri	Types of deterioration	1
				prevention of concrete deterioration	1
			corrosion of reinforcement	1	
			Effects	1	
			prevention		
			<b>CHAPTER11 :-Repair technology for concrete structures(06)</b>	6	
	EXTRA CLASS		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	
			polymerbased repairs, common types of repairs.	1	
			class test	1	
			Revision	1	