

NDHI SCHOOL OF ENGINEERING

BHABANDHA, BERHAMPUR

BRANCH- CIVIL ENGINEERING

SEMESTER- 6th

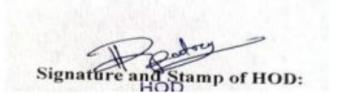
SUBJECT- Th 4(a). CONCRETE TECHNOLOGY

Name of the Faculty- Er. MANJULA BHUYAN

			Topic to be taken			Actual topic taken		
SI. No	Topic/ Module	No. of period	Details of the topics	Date	Topic No.	Topic Name	Date	Remarks
1	Concrete as a construction material	2	1.1 Grades of concrete. 1.2 Advantages and disadvantages of concrete	14.02.2023 15.02.2023	1.1 1.2	1.1 Grades of concrete. 1.2 Advantages and disadvantages of concrete	14.02.2023 15.02.2023	
2	Cement	4	2.1 Composition, hydration of cement, water cement ratio and compressive strength, fineness of cement, setting time, soundness, types of cement.	17.02.2023 24.02.2023		Composition, hydration of cement, water cement ratio and compressive	17.02.2023 21.02.2023 24.02.2023 25.02.2023	
3	Aggregate, Water and Admixtures	6	 3.1 Classification and characteristics of aggregate, fineness modulus, grading of aggregate, I.S.383 3.2 Quality of water for mixing and curing. 3.3 Important functions, classification of admixtures, I.S 9103, accelerating admixtures, water reducing admixtures, air containing 	25.02.2023 03.03.2023	3.3	3.2 Quality of water for mixing and curing.	28.02.2023 01.03.2023 03.03.2023 04.03.2023 08.03.2023 10.03.2023	

4	Properties of fresh concrete	6	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.	04.03.2023 11.03.2023	4.1	slump test, compacting factor test, V-bee consistency test and flow test, requirement of workability,I.S.1199.	11.03.2023 14.03.2023 15.03.2023 17.03.2023	
5	Properties of hardened concrete		5.1 Cube and cylinder compressive strengths, flexural strength of concrete, stress-strain and elasticity, phenomena	14.03.2023 18.03.2023	2000000	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	21.03.2023 22.03.2023 24.03.2023	
6	Concrete mix Design	5	ACCUSATION AND AND ARCHARGE PARK ARCHARGE BY		6.3	for mix design. Nominal mix concrete &design mix concrete. Basic consideration for concrete mix design, Methods of proportioning	31.03.2023 04.04.2023 05.04.2023 11.04.2023	
7	Production of concrete	6	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)	25.03.2023 31.03.2023	7.1	materials, transportation, placing of concrete, compaction of concrete (vibrators), Curing of concrete, Formwork-requirements and types, stripping of forms. (Concepts only)	12.04.2023 18.04.2023 19.04.2023 21.04.2023	

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			10.1 Quality control of Concrete as per		10.1	Quality control of Concrete as per		
	Inspection and Quality Control of Concrete	6	I.S.456, Factors causing the variations in			I.S.456, Factors causing the variations in	25.04.2023	
			the quality of concrete		10.2	the quality of concrete		
			10.2 Mixing, Transporting, Placing			Mixing, Transporting, Placing &curing	26.04.2023	
8			&curing requirements of Concrete as per	04.04.2023	10.3	requirements of Concrete as per I.S.456.		
			I.S.456.	12.04.2023	10.4	Inspection and Testing as per Clause 17	28.04.2023	
			10.3 Inspection and Testing as per Clause			of IS:456.		
			17 of IS:456.			Durability requirements of Concrete as	29.04.2023	
			10.4 Durability requirements of Concrete			per I.S:456		
			as per I.S:456					
	Special Concrete	6	11 1 Introduction to read, rein concrete		11.1	11.1 Introduction to ready mix concrete,		
9			11.1 Introduction to ready mix concrete,	10.04.2022		high performance concrete, silica fume	02.05.2023	
				18.04.2023		concrete, shot-crete concrete or	02.05.2023	
			concrete, shot-crete concrete or	26.04.2023		gunitting (Concepts only).	03.05.2023	
			gunitting (Concepts only).					
	Deterioration				12.1	Types of deterioration, prevention of	09.05.2023	
10			12.1 Types of deterioration, prevention	20 04 2022		concrete deterioration, corrosion of	10.05.2023	
	of concrete	6	lof concrete deterioration, corrosion of	28.04.2023		reinforcement, effects and prevention	12.05.2023	
	and its		reinforcement, effects and prevention	09.05.2023				
8	prevention	2		× ×				
	Repair technology for concrete	6	12.1 Symptom, cause and provention and		13.1	Symptom, cause and prevention and	13.05.2023	
11			13.1 Symptom, cause and prevention and remedy of defects during construction,			remedy of defects during construction,		
			cracking of concrete due to different reasons. Repair of cracks for different	10.05.2023 - 17.05.2023		cracking of concrete due to different	16.05.2023	
						reasons. Repair of cracks for different		
11						purposes, selection of techniques,	17.05.2023	
	structures		purposes, selection of techniques,			polymer based repairs, common types of		
			polymer based repairs, common types of			repairs.		
			repairs.	y .				



Civil Engg. Gandhi School of Engg. Berhampur (Gm.)

Signature & Stamp of HOD