

PADMASHREE KRUTARTHA ACHARYA INSTITUTE OF
ENGINEERING & TECHNOLOGY, BARGARH



PROGRESS REGISTER
Session-2022-2023

Discipline: Civil Engg.

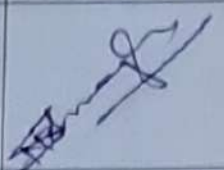
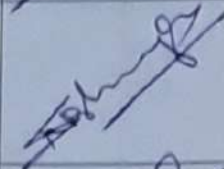
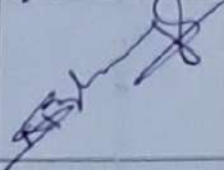
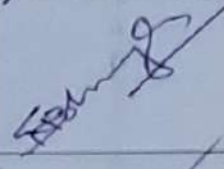
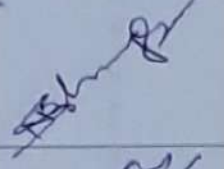
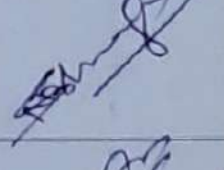
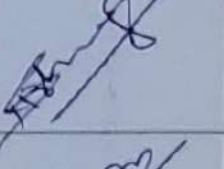
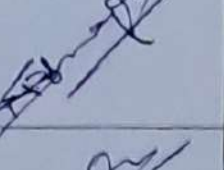
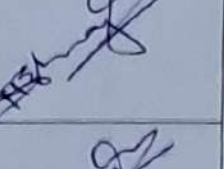

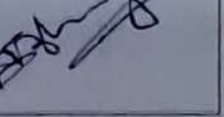
Semester: 6th

Subject: Concrete Technology

Name of the Teaching Faculty: Satyamurayan Bhulagar

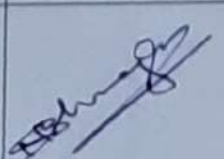
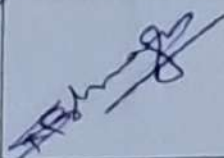
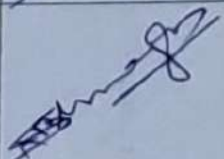
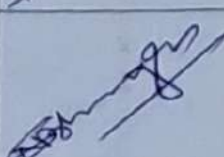
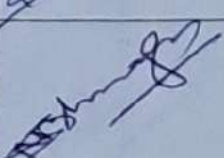
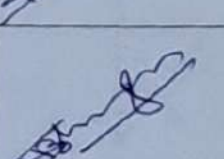
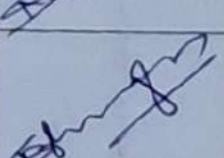
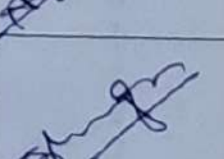
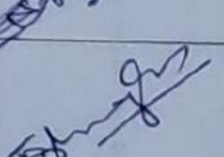
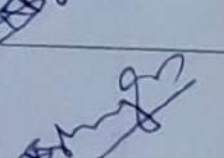
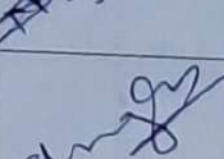
Subject: Concrete Technology No. of Days/per week class allotted 04

Semester From Date: 15/2/23 To Date: 2/6/23 No. of Weeks: 15

Date	Topics to be covered as per Lesson Plan	Topics actually covered	Points/contents Discussed (in brief)	Signature of Teacher
15/2/23	Grade of concrete	Different grades of concrete	Grade 33 Grade 43 Grade 53	
17/2/23	Advantages & disadvantages of concrete	Advantages & disadvantages of concrete	Advantages & disadvantages.	
20/2/23	composition hydration of cement	composition hydration of cement	hydration process ingredients.	
22/2/23	w/c ratio compressive strength of cement	w/c ratio compressive strength of cement	w/c ratio proportion compressive strength	
24/2/23	Fineness & setting time of cement	Fineness & setting time of cement	Fineness modulus, standard setting time, final setting time	
25/2/23	Soundness of cement, type of cement	Soundness test, cement types of cement	Soundness test portland cement ordinary cement Acid resistant cement	
28/2/23	classification & characteristics of aggregate	classification & characteristics of aggregate	Fine aggregate coarse aggregate quality of aggregate.	
3/3/23	Fineness modulus grading of aggregate IS 383	Fineness modulus grading of aggregate	Fineness rupture size of agg. 10mm, 12mm, 20mm	
4/3/23	Quality of water for mixing & curing	Quality of water mixing & curing in concrete	pH value Temp of water mixing process.	
6/3/23	Importance functions classification of admixture	Functions & classification of admixture	Functions, characteristics Super-plasticizer Retarder	
10/3/23	accelerating & retarding admixture	accelerating & retarding admixture	Retarder air entrainment accelerator function.	

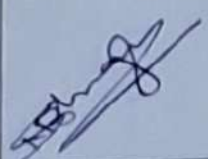
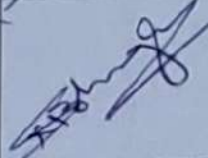

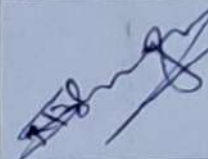
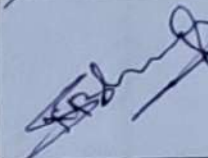
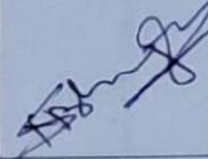
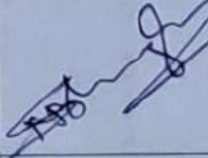
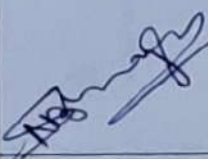
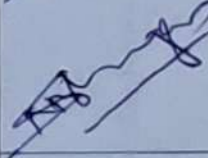
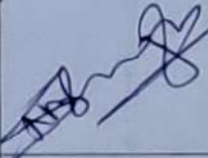
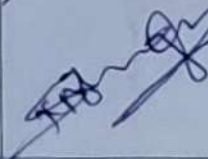
Subject: Concrete Technology No. of Days/per week class allotted 04

Semester From Date: 15/2/23 To Date: 7/6/23 No. of Weeks: 15

Date	Topics to be covered as per Lesson Plan	Topics actually covered	Points/contents Discussed (in brief)	Signature of Teacher
11/8/23	water reducing admixture, air containing admixture	water reducing admixture	water reducing admixture	
13/8/23	concept of fresh concrete, workability of concrete	concept of fresh concrete & workability of concrete	fresh concrete preparation workability test.	
15/8/23	Slump test compacting factor test of concrete	Slump & compacting factor test of concrete	Slump value compacting factor value.	
17/3/23	v-bee consistency test of concrete Flow test of concrete	v-bee consistency & flow test of concrete	v-bee parameter flow table test.	
18/3/23	Requirement of workability of concrete IS-1199	Requirement of workability of concrete	workability for slab beam, column Slump value	
20/3/23	Revision of workability Slump test compacting Factor test	Revise about Slump compacting factor workability test	slump value compacting value workability	
22/3/23	Revision of v-bee consistency test Flow test requirement of workability	Revise about flow workability requirement, v-bee consistency	flow table workability v-bee parameter.	
24/3/23	cube & cylinder compressive strength of concrete.	cube & cylinder compressive strength test of concrete.	cube test cylinder compressive test, value.	
25/3/23	flexural strength of concrete	flexural strength of concrete	flexural rupture value effect.	
27/3/23	stress-strain & elasticity of concrete	stress-strain & elasticity of concrete	stress-strain relationship graph.	
29/3/23	phenomena of creep & shrinkage of concrete	phenomena of creep & shrinkage of concrete	creep, shrinkage value, phenomenon of concrete.	

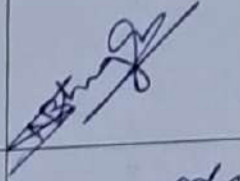
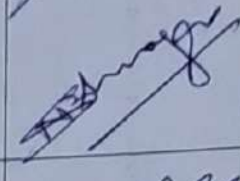
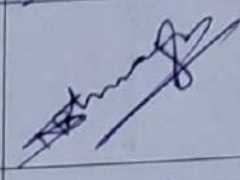
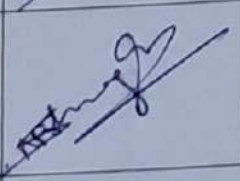
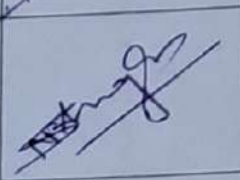
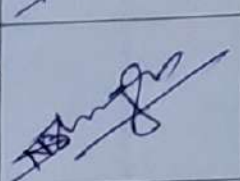
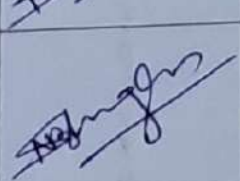
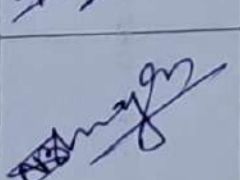
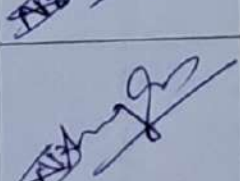
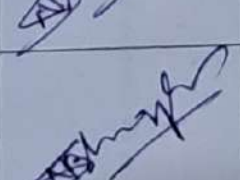
Subject: Concrete Technology No. of Days/per week class allotted 04

Semester From Date: 15/2/23 To Date: 7/6/23 No. of Weeks: 15

Date	Topics to be covered as per Lesson Plan	Topics actually covered	Points/contents Discussed (in brief)	Signature of Teacher
31/3/23	Permeability & durability of concrete	permeability & durability of concrete	factors of durability compressive value.	
3/4/23	Chloride & acid attack on concrete efflorescence	Chloride & acid attack on concrete efflorescence	chloride attack acid attack efflorescence effect.	
5/4/23	Revision about compressive strength, flexural, stress-strain, creep shrinkage	Revision about compressive strength, creep shrinkage durability	creep shrinkage durability stress-strain compressive strength	
7/4/23	Introduction, data or input required for mix design	Introduction data or input required for mix design	mix design physical & chemical characteristics stress of ingredients.	
8/4/23	Nominal mix concrete & design mix concrete	Nominal mix & design mix concrete	difference advantages disadvantages mix parameter	
10/4/23	Basic considerations for concrete mix design	Basic considerations for concrete mix design	physical & chemical properties of cement, agg & water	
12/4/23	Methods of proportioning concrete mix IS code method of mix design	IS code method of mix design	IS-10262 Design considerations.	
14/4/23	Revision about nominal mix & design mix concrete	Revision about nominal mix Design mix	Basic concepts like, compacting factor workability	
15/4/23	Batching of materials of concrete	Batching of materials of concrete	fine Agg, coarse Agg, cement ratio & proportion.	
17/4/23	Mixing of concrete materials	Mixing of concrete materials	method hand mixing machine mixing.	
19/4/23	Transportation & placing of concrete	Transportation & placing of concrete	Belt conveyor truck, placing through pipe.	

Subject: Concrete Technology No. of Days/per week class allotted 04

Semester From Date: 15/2/23 To Date: 9/6/23 No. of Weeks: 15

Date	Topics to be covered as per Lesson Plan	Topics actually covered	Points/contents Discussed (in brief)	Signature of Teacher
12/5/23	High performance concrete	High performance concrete	procedure necessity production function.	
13/5/23	Silica fume concrete	Silica fume concrete	production function necessity	
15/5/23	short crete concrete quantity	short crete concrete quantity	procedure necessity function.	
17/5/23	Revision about special concrete	Revise about special concrete	Silica fume concrete short crete concrete HPC concrete	
19/5/23	Types of deterioration of concrete	types of deterioration of concrete	cracking efflorescence delimiting	
20/5/23	Prevention of concrete deterioration	prevention of concrete deterioration	proper curing proper mixing transporting	
22/5/23	corrosion of reinforcement	corrosion of reinforcement	deterioration mechanism.	
24/5/23	Effect of deterioration of concrete	effect of deterioration of concrete	cracking loss of strength fatigue	
26/5/23	Prevention of deterioration of concrete	Prevention of deterioration of concrete	w/c ratio concrete compacted concrete.	
27/5/23	Revision about deterioration of concrete & its prevention.	Revision about deterioration of concrete & its prevention.	cracking concrete fatigue compaction.	
29/5/23	Symptoms, cause & prevention of repair technology	Symptoms, cause & prevention of repair technology.	spalling damage cracking.	