Centurion University of Technology & Management

Department of Civil Engineering, Paralakhemundi

Summer Technical Training – A part of Summer Placement Training, 2022

Brief about the Summer Technical Training

The Department of Civil Engineering has conducted "**Summer Technical Training**", which is a part of "**Summer Placement Training – 2022**" organized by Training & Placement Cell of Centurion University of Technology & Management. The **Summer Technical Training** was conducted for final year students (2019 – 23 Batch) from 09th May 2022 to 28th May 2022., Dr. Rajib Kumar Majhi, Career Coordinator, Civil Engineering, in consultation of other faculty members of the department prepared a special curriculum for the Technical Training. The curriculum of the technical training program was designed for 3 weeks with 12.5 hours for training and 3 hours for assessment. So, the time table and session plan for weekly 3 training sessions of 1.5 hours (4.5 hours) and 1 assessment session were prepared.

Objective and outcome of the Summer Technical Training

The objective of the training was to train the students with all the technical knowledge/skill required for the upcoming placements/job opportunities during 2022-23. As an outcome, the students will be refreshed with all the technical necessities before the Campus Drive.

Facilitators/ Trainers

Following faculty members of Civil Engineering Department have provided training to the students.

1. Dr. Rajib Kumar Majhi, Assistant Professor in Civil Engineering, CUTM, Paralakhemundi
2. Dr. Prafulla Kumar Panda, Associate Professor in Civil Engineering, CUTM, Paralakhemundi
3. Prof. Sovan Sankalp, Assistant Professor in Civil Engineering, CUTM, Paralakhemundi

Curriculum, Time table and Session plan

Subjects:

(1) Building Materials (BM)
(2) Concrete Technology (CT)
(3) Building Construction (BC)
(4) RCC Design (RCC)
(5) Prestressed Concrete (PSC)
(6) Steel Structure (SS)
(7) Highway Engineering (HE)
(8) Traffic Engineering (TE)
(9) Surveying Techniques (ST)
(9) Assessment (A)

Time Table:

WEEK/ DAY		1:45PM-3:15PM	3:30PM-5:00PM	CLASS ROOM	TRAINER	DATE
1ST	MON	BM		TE LAB	Dr. RK Majhi	09.05.2022
	TUE		CT	TE LAB	Dr. RK Majhi	10.05.2022
	WED		BC	TE LAB	Dr. RK Majhi	11.05.2022
	SAT	A-1				14.05.2022
2ND	MON	RCC		TE LAB	Dr. RK Majhi	16.05.2022
	TUE		PSC	TE LAB	Dr. RK Majhi	17.05.2022
	WED		SS	TE LAB	Dr. RK Majhi	18.05.2022
	SAT	A-2				21.05.2022
3RD	MON	HE		TE LAB	Prof. S. Sankalp	23.05.2022
	TUE		TE	TE LAB	Prof. S. Sankalp	24.05.2022
	WED		ST	TE LAB	Dr. PK Panda	25.05.2022
	SAT	A-3				28.05.2022

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Session Plan:

Session	Date	Subject	Topic
1	09.05.2022	BUILDING MATERIALS	MANUFACTURING PROCESS, PROPERTIES AND TESTS RELATED TO THE BUILDING MATERIALS LIKE BRICK, CEMENT, AGGREGATES AND REIFORCEMENT
2	10.05.2022	CONCRETE TECHNOLOGY	GRADES, MIX DESIGN USING IS CODE, PROPERTIES, FACTORS AFFECTING PROPERTIES AND DIFFERENT FIELD AND LAB TESTS IN CONCRETE
3	11.05.2022	BUILDING CONSTRUCTION	COMPONENTS OF BUILDING, TYPES OF FOUNDATION, BRICK MASONRY, PLASTERING AND SCAFFOLDING
A1	**14.05.2022**	**TECHNICAL ASSESSMENT-1**	
4	16.05.2022	RCC DESIGN	BASICS OF RCC, WSM & LSM METHOD, DESIGNING AND DETAILING OF RCC BEAM, COLUMN AND SLAB AS PER IS 456 (2000)
5	17.05.2022	PRESTRESSED CONCRETE	BASICS OF PSC, METHODS OF PSC, ANALYSIS OF PSC MEMBERS
6	18.05.2022	STEEL STRUCTURE	BASIC LOADS ON SS, DESIGN OF TENSION AND COMPRESSION MEMBERS USING IS 800 (2007), BOLT, RIVET AND WELDING CONNECTIONS
A2	**21.05.2022**	**TECHNICAL ASSESSMENT-2**	
4	**23.05.2022**	TRANSPORTATION ENGINEERING	GEOMETRIC DESIGN OF HIGHWAY, BITUMINOUS MIX DESIGN, PAVEMENT DESIGN, FILELD TESTS ON PAVEMENT MATERIAL, MARSHALL MIX DESIGN
5	**24.05.2022**	TRAFFIC ENGINEERING	TRAFFIC SIGNS/SIGNALS, COLLISION DIAGRAM, ROTARY INTERSECTION
6	**25.05.2022**	SURVEYING & LEVELLING	BASICS OF CHAIN, COMPASS, THEDOLITE, PLANE TABLE SURVEY, PHOTOGRMETY SURVEY, LEVELLING, REMOTE SENSING AND GIS
A3	**28.05.2022**	**TECHNICAL ASSESSMENT-3**	

Student Participation and Attendance

Attendance Monitoring Report Student wise

Department : Civil Engineering **Academic Year :**2021-2022 **Semester :**Even

Year : B.Tech Civil Engg. Sem 6 **Div :** All **Date :** 28/05/2022

Report Type : Report based on term date

Attendance Status Report from date 09-May-2022 to date 28-May-2022

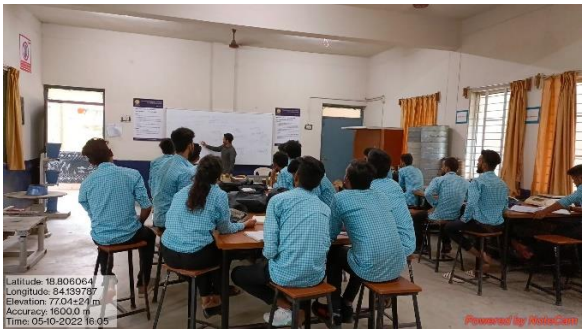
Sr. No	Roll No	Student Name	TECHNICAL TRAINING (TW)	Total %
1	190101110001	BANDI PURANDHAR REDDY	(0/18)	0
2	190101110002	SWASTIK KUMAR GOUDA	(18/18)	100
3	190101110003	BISHWAJIT SINGH	(18/18)	100
4	190101110011	ARVIND KUMAR	(18/18)	100
5	190101110012	CHITRANJAN KUMAR	(18/18)	100
6	190101110016	KANHAIYA KUMAR	(0/18)	0

7	190101110018	PRADIP KUMAR SHARMA	(18/18)	100
8	190101110019	NITESH KUMAR PATEL	(18/18)	100
9	190101110020	ANIL KUMAR	(18/18)	100
10	190101110022	ROHIT MALLICK	(18/18)	100
11	190101110023	KUNDAN KUMAR	(14/18)	78
12	190101110024	ALOK KUMAR	(16/18)	89
13	190101110030	ARUN KUMAR	(18/18)	100
14	190101110032	GAUTAM KUMAR	(18/18)	100
15	190101110033	SABAWOON AKABARI	(10/18)	55
16	190101110034	MDGULAM RAZA	(10/18)	55
17	190101110035	RAHUL KUMAR	(16/18)	89
18	190101110036	MANISH KUMAR CHOURASIA	(18/18)	100
19	190101110037	LOKESH KUMAR	(14/18)	78
20	190101110038	BABLU KUMAR PASWAN	(18/18)	100
21	190101110039	AVIJEET RAJ	(18/18)	100
22	190101110040	SUHAILA GHULAMI	(16/18)	89
23	190101110042	SUDHIR KUMAR	(0/18)	0
24	190101110043	MD PERWEZ ALAM	(18/18)	100
25	190101110044	MDZAID HUSSAIN	(18/18)	100
26	190101110046	DIGAMBAR RAY	(16/18)	89

Photographs of the sessions

SESSION – 1

SESSION – 2

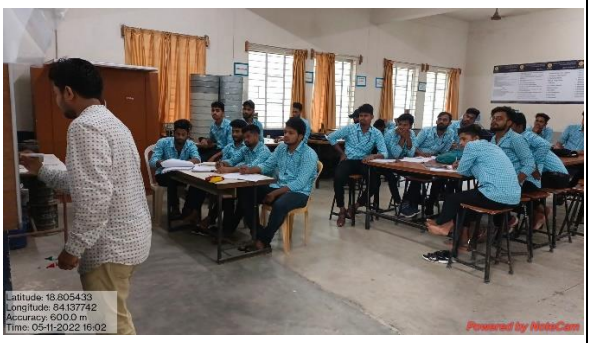


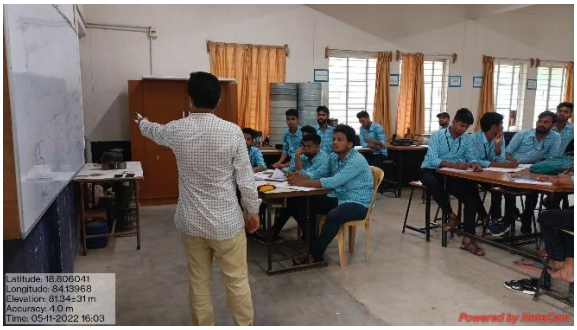
Centurion University of Technology & Management

Department of Civil Engineering, Paralakhemundi

Summer Technical Training – A part of Summer Placement Training, 2022

SESSION – 3





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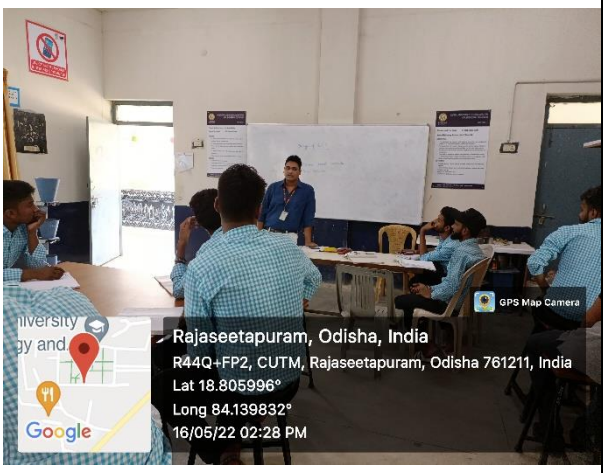
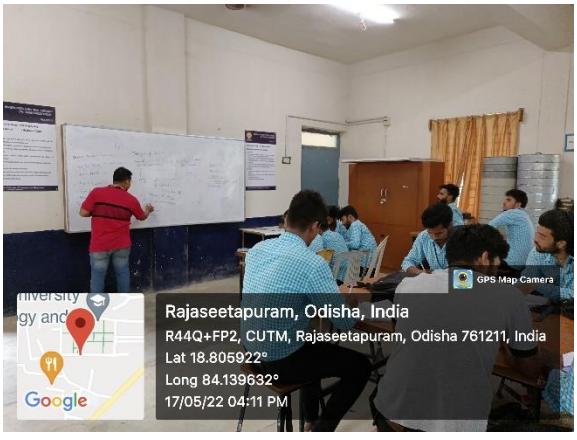
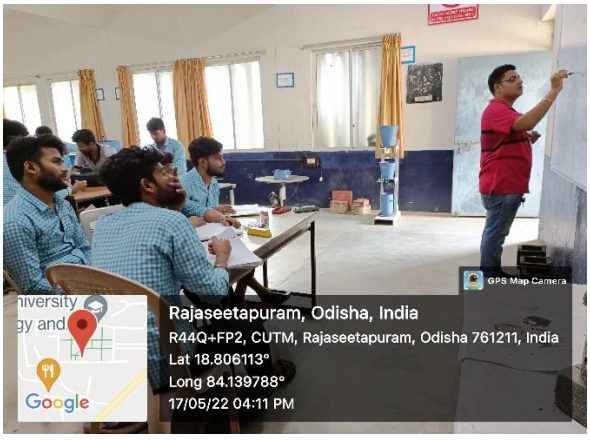


SESSION – 5



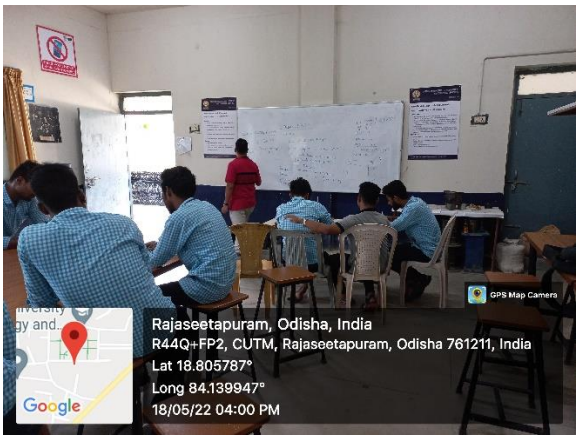


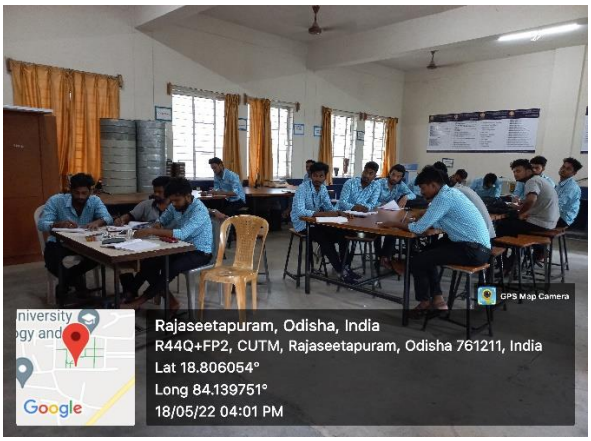
Centurion University of Technology & Management

Department of Civil Engineering, Paralakhemundi

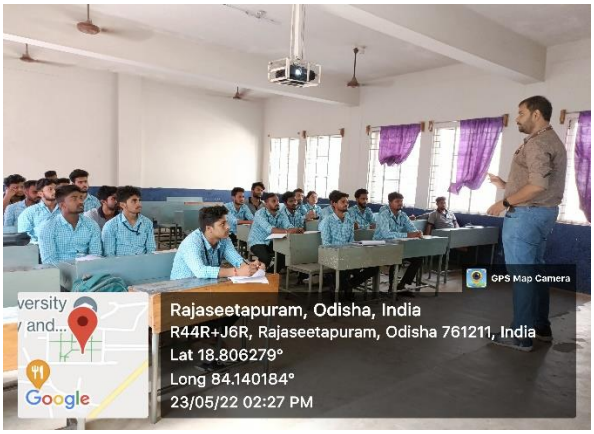
Summer Technical Training – A part of Summer Placement Training, 2022

SESSION – 6

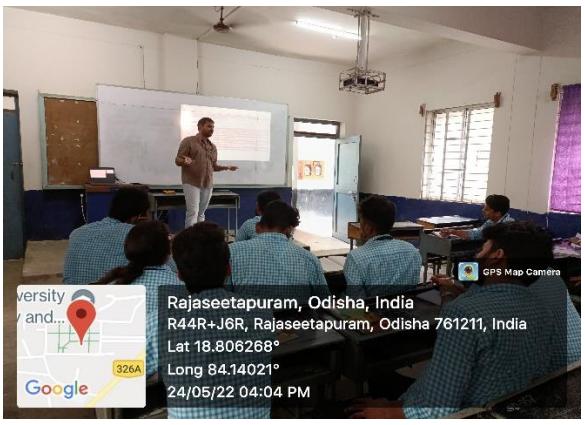


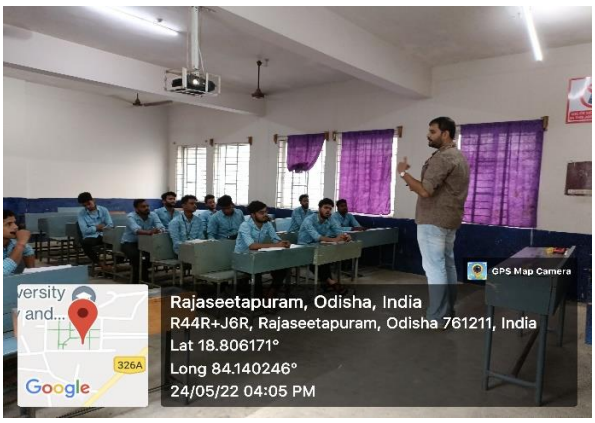


SESSION – 7



SESSION – 8





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	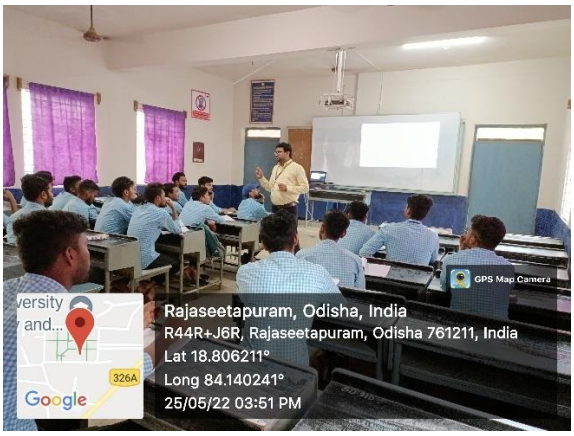

Technical Assessments

Question Bank:

Technical Assessment was conducted in every weekend (Saturday) physically as per the time table to evaluate the students' ability and technical skill. The assessment was for 1 hour and consisted of 50 MCQs of 1 mark each. The question bank was combinedly prepared by the Trainers of the Department. The sample copy of the question bank for each assessment has been attached.

Evaluation:

The evaluation was done by the respective subject faculty and the results of the same was announced 2 days after the assessment. There was no negative marking in the evaluation. The scanned sample copy of the evaluation sheet for each assessment has been attached.

Photographs of the Assessment

ASSESSMENT – 1	
	

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Department of Civil Engineering, Paralakhemundi

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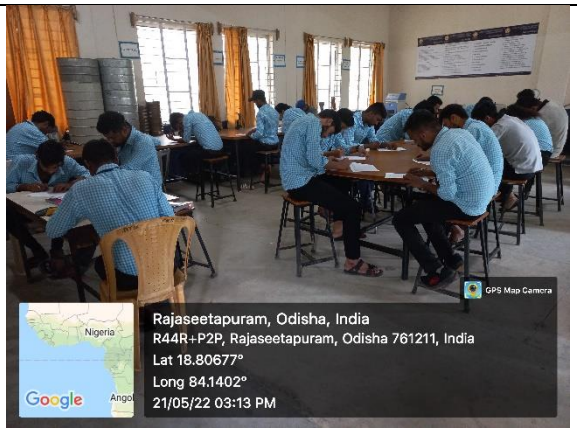
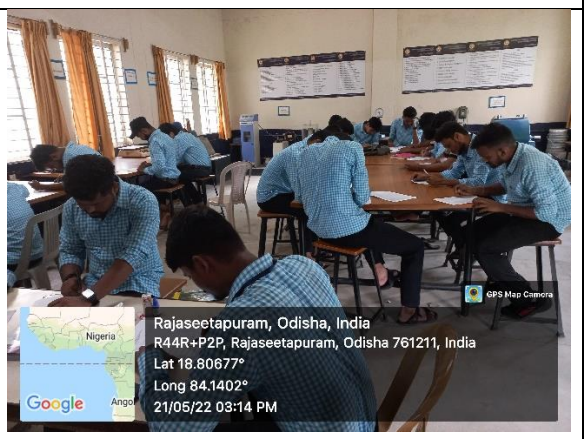
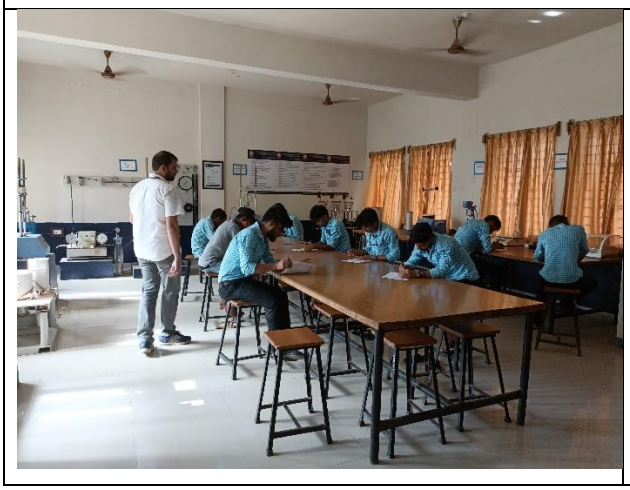
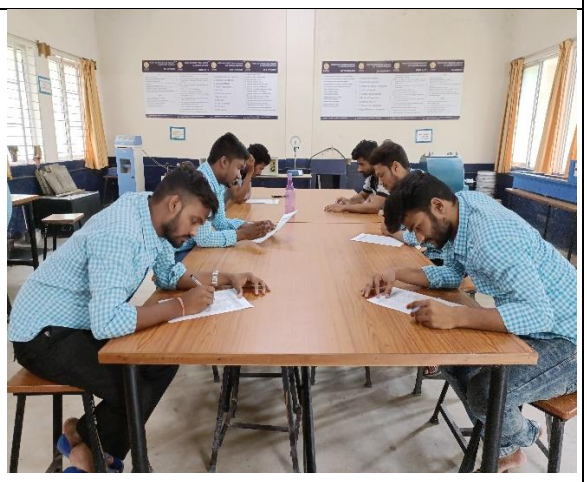
ASSESSMENT – 2	
	
ASSESSMENT – 3	
	

38+1 = 39
50

CENTURION UNIVERSITY OF TECHNOLOGY AND MANAGEMENT, PARLAKHUMNDI
Department of Civil Engineering
Assessment of Technical Training Sessions
Subject: BMBC

Name: Avijeet Ray
Regd. no: 1901011100039

Time- 1 Hr.
Full Mark-50

1. Plaster of Paris is obtained by calcining
(A) bauxite
(B) gypsum
(C) Kankar
(D) Lime stone

2. For the manufacture of Portland cement the proportion of raw material used are
(A) Lime 63%; silica 22%; other ingredients 15%
(B) Silica 22%; Lime 63%; other ingredients 15%
(C) Silica 40%; Lime 40%; other ingredients 40%
(D) Silica 70%; Lime 20%; other ingredients 20%

3. To retard the initial setting time of cement, the compound responsible is
(A) Tri-calcium silicate
(B) Gypsum
(C) Di-calcium silicate
(D) Tri-calcium aluminate

4. Quick setting cement is produced by adding.
(A) Less amount of gypsum in very fine powdered form
(B) More amount of gypsum in very fine powdered form
(C) Aluminium sulphate in very fine powdered form
(D) Pozzolana in very fine powdered form

5. If P is the percentage of water required for normal consistency, water to be added fordetermination of initial setting time is
(A) 0.70 P
(B) 0.75 P
(C) 0.80 P
(D) 0.85 P

6. Strength of cement concrete primarily depends upon.
(A) quality of water
(B) quantity of aggregate
(C) quantity of cement
(D) water-cement ratio

7. To obtain cement dry powder lime stones and shales or their slurry is burnt in arotary kiln at a temperature between
(A) 1100°c
(B) 1200°c
(C) 1300°c
(D) 1450°c

8. The minimum percentage of chemical ingredient of cement is that of
(A) magnesium oxide
(B) iron oxide
(C) alumina
(D) lime

9. The standard size of brick as per Indian standards is.
(A) 20 cm x 10 cm x 10 cm
(B) 23 cm x 12 cm x 8 cm
(C) 19 cm x 9 cm x 9 cm
(D) 18 cm x 9 cm X x cm

10. Plaster of Paris can be obtained from the calcination of
(A) Lime stone
(B) Gypsum
(C) Dolomite
(D) Bauxite

11. Workability of concrete is directly proportional to.
(A) sand content
(B) water-cement ratio
(C) aggregate ratio
(D) Cement –aggregate ratio

12. The test most suitable for concrete of very low workability is.
(A) Slump test
(B) Compaction factor test
(C) Vee-Bee test
(D) All options are correct

13. Strength of concrete increases with.
(A) Increases in water cement ratio
(B) Decreases in water cement ratio
(C) Decreases in size of aggregate
(D) Decreases in curing time

14. Density of concrete.
(A) Increases with a decrease in size of aggregate
(B) In independent of the size of aggregate
(C) Increases with increases in size of aggregate
(D) All options are correct

15. Workability of concrete mix with low water cement ratio is determined by.
(A) Slump test
(B) Tensile strength test
(C) Compaction factor test
(D) Flexural strength test

16. Which of the following proportion of the ingredients of concrete mix, is not correct proportion to arbitrary method of proportioning
(A) 1: 1: 2
(B) 1: 2: 4
(C) 1: 3: 6
(D) 1: 4: 10

16/50

CENTURION UNIVERSITY OF TECHNOLOGY AND MANAGEMENT
DEPARTMENT OF CIVIL ENGINEERING
TECHNICAL ASSESSMENT – 2

DATE: 21.05.2022 MARK – 50 TIME – 1 Hr.

NAME: Chitranjan Kumar Regd. No. 190100100012

SL	Questions	Answer
1.	IS code used to design RCC structural members is	
	IS 875	✓
	IS 10262	
	IS 456	
	IS 1983	
2.	IS code used to calculate the live load on a structure is	
	IS 1983	✓
	IS 875-part 1	
	IS 875-part 2	
	IS 875-part 3	
3.	M 20 grade of concrete approximates	✓
	1:1:2	
	1:1.5:3	
	1:2:4	
	1:5:10	
4.	Which of these is the grade for mild steel	✓
	Fe 250	
	Fe 415	
	Fe 500	
	None of these	
5.	The IS code for Wind load is	
	IS 1983	
	IS 875-part 1	✓
	IS 875-part 2	
	IS 875-part 3	
6.	The IS code for seismic load is	
	IS 1983	
	IS 875-part 1	✓
	IS 875-part 2	
	IS 875-part 3	
7.	The size of the specimen used to determine flexural strength of concrete is	
	150 ×150 ×300 mm	
	100 ×150 ×500 mm	✓
	150 ×150 ×700 mm	
	150 ×150 ×150 mm	
8.	As per Table 2 of IS 456, M50 grade concrete is categorized as	✓
	Ordinary concrete	
	Standard concrete	
	High strength concrete	
	None of these	
9.	Exposure condition where cconcrete surfaces protected against weather or aggressive conditions, except costal area is	
	Mild environment	✓
	Moderate environment	
	Sever environment	
	Extreme environment	
10.	The relation between modulus of rupture f_{cr} and characteristic strength of concrete f_{ck} is given by	
	$fcr = 0.35\sqrt{fck}$	✓
	$fcr = 0.45\sqrt{fck}$	
	$fcr = 0.70\sqrt{fck}$	
	$fcr = 0.55\sqrt{fck}$	
11.	According to IS: 456 (2000), the modulus of elasticity of concrete Ec (in N/mm²) can be taken as	✓
	$Ec = 5700\sqrt{fck}$	
	$Ec = 5000\sqrt{fck}$	
	$Ec = 4500\sqrt{fck}$	
	None of these	✓
12.	Poisson's ratio for concrete is taken	
	0.1	