Enrollment No:	Exam Seat No:
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C. U. SHAH UNIVERSITY

Winter Examination-2022

Subject Name: Construction Technology

Subject Code: 4TE06CNT1 Branch: B.Tech (Civil)

Semester: 6 Date: 19/09/2022 Time: 11:00 To 02:00 Marks: 70

Instructions:

- (1) Use of Programmable calculator & any other electronic instrument is prohibited.
- (2) Instructions written on main answer book are strictly to be obeyed.
- (3) Draw neat diagrams and figures (if necessary) at right places.
- (4) Assume suitable data if needed.

Q-1 Attempt the following questions:

(14)

- a) Mention the uses of power shovels.
- **b)** What are the different types of vibrators used for compaction of concrete?
- c) List the factors affecting the selection of type of construction equipment.
- **d)** Enlist the various types of transporting equipments at the time of concreting.
- e) How the anti-termite treatments done in buildings?
- **f**) Give the forms of structural steel frames.
- g) Define RMC.
- **h**) Enlist the requirements of a good formwork.
- i) What are the materials used for pile construction?
- j) Define Grout.
- **k)** Mention the various load tests on piles.
- 1) State the various materials required for construction of caissons.
- **m**) How the leakage of cofferdam is prevented?
- n) Define caisson.

Attempt any four questions from Q-2 to Q-8

Q-2		Attempt all questions	(14)
	A	Discuss the main factors affecting selection of type of pile.	07
	В	Describe the method of constructing a double wall coffer dam.	07
Q-3		Attempt all questions	(14)
	A	Write short notes on modern construction of typical formwork.	07
	В	What is scaffolding? Give purposes of scaffolding.	07
Q-4		Attempt all questions	(14)
	A	Write comparison of precast and cast- in-situ concrete.	07



	В	Write necessity of dewatering of foundations and techniques used in it, like well point system.	07
Q-5		Attempt all questions	(14)
	A	Explain the various safety measures to avoid the tilting of caissons.	07
	В	Describe various types of vibrators used for compaction of concrete.	07
Q-6		Attempt all questions	(14)
	A	What are the uses of power shovels? Describe with neat sketch basic parts and Operation of power shovel.	07
	В	Describe the different methods of field compaction of soil.	07
Q-7		Attempt all questions	(14)
	A	Write short note on Ready Mix Concrete with a neat sketch of RMC plant.	07
	В	Describe the timber form work.	07
Q-8		Attempt all questions	(14)
	\mathbf{A}	Explain the Guniting procedure in detail.	07
	В	What is group action of piles? Give the requirements for construction of pile foundations.	07

