## C. U. SHAH UNIVERSITY

## **Summer Examination-2022**

**Subject Name: Construction Technology** 

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

Semester: 6 Date: 02/05/2022 Time: 02:30 To 05:30 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)	Enlist Various types of Cofferdam	(1)
	<b>b</b> )	What are the anti-termite treatments done in building construction.	(1)
	<b>c</b> )	What are the uses of power shovels?	(1)
	<b>d</b> )	What is Grouting?	(1)
	<b>e</b> )	Enlist various types of Caisson.	(1)
	<b>f</b> )	Define Shallow foundation.	(1)
	g)	What is Dragline?	(1)
	<b>h</b> )	Enlist Various types of form work.	(1)
	i)	What is scaffolding?	(1)
	<b>j</b> )	What is centering?	(1)
		Enlist various types of Pile foundation.	(1)
	1)	Enlist equipments required in R.M.C.	(1)
	m)	Define needle Vibrator.	(1)
	n)	Enlist Various types of Connection used in steel structure.	(1)
Atter	npt any	four questions from Q-2 to Q-8	
Q-2		Attempt all questions	(14)
	(a)	Explain Rock-filled cofferdam with a neat sketch.	<b>(7)</b>
	<b>(b)</b>	Enlist the factors affecting the selection of type of construction equipment.	(7)
Q-3		Attempt all questions	(14)
	(a)	Write short notes on single walled and Double walled cofferdams with a neat sketch.	(7)
	<b>(b)</b>	Discuss the various types of transporting equipments during the time of concreting.	<b>(7)</b>
Q-4		Attempt all questions	(14)
	(a)	Explain the various safety measures to avoid the tilting of caissons.	(7)
	<b>(b)</b>	Describe various types of vibrators used for compaction of concrete.	<b>(7)</b>



Q-5		Attempt all questions	(14)
	(a)	What are the uses of power shovels? Describe with neat sketch basic	<b>(7</b> )
		parts and Operation of power shovel.	
	<b>(b)</b>	Describe the different methods of field compaction of soil.	<b>(7</b> )
Q-6		Attempt all questions	(14)
	(a)	Write short notes on modern construction of typical formwork.	<b>(7)</b>
	<b>(b)</b>	What is scaffolding? Give purposes of scaffolding.	<b>(7</b> )
Q-7		Attempt all questions	(14)
	(a)	Write the major objectives considered in formwork. Mention the three stages of forming.	<b>(7</b> )
	<b>(b)</b>	Explain the equipments used for construction of pile foundation in detail.	<b>(7)</b>
Q-8		Attempt all questions	(14)
	a)	What is group action of piles? Give the requirements for construction of	<b>(7)</b>
		pile foundations.	
	b)	Explain the Guniting procedure in detail.	<b>(7)</b>

