Enrollment No:	Exam Seat No:
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C.U.SHAH UNIVERSITY Summer Examination- 2019

Subject Name: Construction Technology

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

Semester: 6 Date: 16/04/2019 Time: 10:30 To 01:30 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 the factors affecting the selection of type of construction equipment.
- **b)** What are the uses of power shovels?
- c) How to determine the efficiency of piles.
- d) Differentiate between standard equipment and special equipment.
- e) Mention the various uses of caisson.
- **f)** What is the purpose of the formwork in construction?
- g) List the advantages floating caisson.
- **h)** Write down the uses of Cofferdam.
- i) Enlist the types of vibrators used for compaction of concrete.
- j) Mention the importance of ground water control during excavation.
- k) List the various types of pumps used for pumping concrete.
- 1) Why it is important to provide fire proofing in buildings?
- m) List the uses of structural steel members in construction.
- **n)** What are the types of scrapers?

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

Q-2 Attempt all questions

- (a) Explain the various types, uses & operation of a bull dozer with neat sketch. (07)
- (b) Discuss various equipments used for compaction in construction with neat sketch. (07)



Q-3		Attempt all questions	
	(a)	Enumerate the various types of coffer dams and explain any two in detail.	(10)
	(b)	Discuss the available techniques to prevent the leakage of cofferdam.	(04)
Q-4		Attempt all questions	
	(a)	Explain in detail about the Ready Mix Concrete (RMC) with a neat sketch of a	(07)
		RMC plant.	
	(b)	Discuss the various types of transporting equipments at the time of concreting.	(07)
Q-5		Attempt all questions	
	(a)	Explain the Role of Construction equipments in Engineering Projects.	(07)
	(b)	Discuss how the records of equipments on worksite are done with a neat chart.	(07)
Q-6		Attempt all questions	
	(a)	Explain the various classification of caisson in detail with neat sketches.	(06)
	(b)	Write short notes on launching and sinking of caissons.	(04)
	(c)	Discuss the construction of a typical formwork for domes with neat sketch.	(04)
Q-7		Attempt all questions	
	(a)	Explain the various methods available for water proofing in buildings.	(06)
	(b)	Describe the systems and the construction features of RCC frames.	(04)
	(c)	Write short note on the purpose of conducting routine building maintenance	(04)
Q-8		Attempt all questions	
	(a)	Enumerate in detail about the materials, equipment and preparation of grouting.	(06)
	(b)	Discuss the various causes for pile failure.	(04)
	(c)	Explain about the various classifications of piles.	(04)

