

Enrollment No: \_\_\_\_\_

Exam Seat No: \_\_\_\_\_

# 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.
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**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.
- l) 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 RMC plant.            **(07)**
  - (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)**

