

PARUL UNIVERSITY
FACULTY OF ENGINEERING & TECHNOLOGY
B.Tech. Summer 2023 Examination

Semester: 4th
Subject Code: 203104287
Subject Name: Construction Technology

Date: 27/03/2023
Time: 2:00 pm to 4:30 pm
Total Marks: 60

Instructions:

1. All questions are compulsory.
2. Figures to the right indicate full marks.
3. Make suitable assumptions wherever necessary.
4. Start new question on new page.

Q.1 Objective Type Questions - (Each of one mark) (15)

1. A _____ is defined as a structure which is sunk through ground or water to exclude water and semi fluid material during the process of excavation of foundations.
 - a) Cofferdam
 - b) Caisson
 - c) Well
 - d) Pit
2. To Support the trench cutting _____ is used
 - a) Bentonite slurry
 - b) Cement slurry
 - c) Lime slurry
 - d) All the given
3. The _____ is used for formwork when it is desired to reuse the formwork several.
 - a) Stone
 - b) Steel
 - c) Timber
 - d) Bamboo
4. Which one of the following methods can be used to lower water table, using gravity flow?
 - a) Well point system
 - b) Dewatering
 - c) Water suction method
 - d) Dehydration
5. A _____ caisson is open at top and closed at bottom.
 - a) Wells
 - b) Pneumatic caissons
 - c) Cylinders
 - d) Box caissons
6. What is Demolition?
7. What is the minimum depth of water that can be brought to the surface in well point system?
8. What is stretcher bond in Masonry?
9. Enlist loads act on the Foundation.
10. What is Dewatering?
11. Define Stone Masonry
12. Standard Size of Brick _____
13. Temporary casing in construction is known as _____
14. Definition: Cofferdam
15. Box caisson is used up to depth _____ m

Q.2 Answer the following questions. (Attempt any three) (15)

- A) Explain Diaphragm wall of construction.
- B) Enlist different types of foundation and explain anyone in brief.
- C) What is Formwork and explain anyone type of formwork.
- D) Difference between Shallow Foundation and Deep Foundation.

Q.3 A) Enlist different types of cofferdams and explain any one with neat sketch. (07)
B) What are the qualities of good formwork. (08)

OR

- B) Explain Sinking of Caisson with sketch. (08)
- Q.4** A) Explain Pumping method for dewatering. (07)
- OR**
- A) Give the classification of Equipments and explain anyone type of equipment. (07)
- B) Enlist different types of Caissons and explain Box Caisson with neat sketch. (08)