

**E 082**

B.E./B.Tech. DEGREE EXAMINATIONS, NOVEMBER/DECEMBER 2009.

THIRD SEMESTER

CIVIL ENGINEERING

CE 36 — CONSTRUCTION TECHNIQUES, EQUIPMENT AND PRACTICE

(REGULATIONS 2008)

Time : Three hours

Maximum : 100 marks

Answer ALL questions.

PART A — (10 × 2 = 20 marks)

1. Enumerate the various types of methods adopted for compacting concrete.
2. List out any four methods of Non destructive testing of concrete.
3. What are the ill effects of dampness in buildings?
4. What is reinforced brick masonry?
5. What are the functions of sheet piles?
6. Enumerate the various types of Dewatering for underground open excavation.
7. What is an offshore platform?
8. Define in situ pre stressing.
9. What are the points to be considered in the selection of construction equipment?
10. What are the different types of concrete mixers used for construction works?

PART B — (5 × 16 = 80 marks)

11. (a) Describe with flow diagrams the Dry process and Wet process of manufacture of cement.

Or

- (b) Briefly discuss about the various stages of manufacture concrete.



12. (a) Explain the modern method of laying the bricks. What special gadgets do you use?

Or

(b) (i) What do you understand by scaffolding? Explain shortly about different types of scaffolding. (8)

(ii) Explain in brief about the various types of flooring. (8)

13. (a) What do you mean by shoring? Describe in brief various types of shores.

Or

(b) With the help of a neat sketch, explain the method of sinking a pneumatic Caisson.

14. (a) What are launching girders? Where are they used? Explain their features in detail

Or

(b) Briefly explain

(i) In situ pre stressing in high rise structures. (8)

(ii) Erecting light weight components on tall structures. (8)

15. (a) Discuss any two types of excavating and earth moving equipment in detail.

Or

(b) (i) What are pile hammers? Name the principal types of hammers. (8)

(ii) What are the different types of tunnelling and rock drilling equipment explain, briefly? (8)