

**Question Paper Code : 91219**

B.E./B.Tech. DEGREE EXAMINATION, NOVEMBER/DECEMBER 2014

Third/Sixth Semester

Civil Engineering

CE 2203/CE 36/CE 1204 A/080100011/10111 CE 601 - CONSTRUCTION  
TECHNIQUES, EQUIPMENT AND PRACTICES

(Regulation 2008/2010)

Time : Three hours

Maximum : 100 marks

Answer ALL questions.

PART A — (10 × 2 = 20 marks)

1. Name some admixtures used in concrete.
2. List any two non destructive tests used for testing the quality of concrete.
3. Enumerate the advantages of concrete hollow block masonry.
4. What are the advantages of slip forms?
5. Mention the uses of pipe jacking.
6. What are caissons?
7. List the different types of conveyors.
8. What are articulated structures?
9. List the types of tunneling equipments.
10. Name some equipments used for compaction.

PART B — (5 × 16 = 80 marks)

11. (a) Discuss the basic concepts of concrete mix design. Explain any two methods of concrete mix design.

Or

- (b) Describe in detail any two tests for testing the quality of fresh concrete.

12. (a) Explain with neat sketches any four types of Bonds in brick masonry.

Or

(b) Write detailed notes on (2 × 8 = 16)

- (i) Types of scaffoldings
- (ii) Acoustics and fire protection

13. (a) Explain the construction techniques involved in underwater construction with neat sketches.

Or

(b) Explain the construction techniques applied for driving diaphragm walls and sheet piles with neat sketches.

14. (a) Discuss in detail the construction techniques and equipments used for constructing heavy decks.

Or

(b) Describe the construction procedure and equipments used for erecting light weight structural components on tall structures.

15. (a) What are the factors that influence the selection of equipments for earthwork. Explain the types of earthwork equipments.

Or

(b) Explain the following (2 × 8 = 16)

- (i) Equipments for compaction and batching of concrete.
  - (ii) Equipments for dredging and trenching.
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