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Question Paper Code: 21246

B.E./B.Tech. DEGREE EXAMINATION, NOVEMBER/DECEMBER 2015.

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 — $(10 \times 2 = 20 \text{ marks})$

- 1. What is the necessity for curing of concrete?
- 2. What are the necessary tests to find the quality of fresh concrete?
- 3. Mention the significance of Bond in masonry structures.
- 4. Define "Scaffolding".
- 5. Write a short note on sinking coffer dam.
- 6. Enlist different de-watering techniques.
- 7. List the different types of conveyors.
- 8. What are articulated structures?
- 9. List out the equipments used for dredging and trenching.
- 10. Write a short note on material handling equipment.

PART B - (5 × 16 = 80 marks)

11. (a) Describe with neat sketches.

(i)	Compacting.	(4)
(ii)	Mixing.	(4)
(iii)	Transporting.	(4)
(iv)	Placing of concrete.	(4)

Or

(b) Discuss briefly on different non destructive testing techniques for checking quality of concrete.

(a) (i) Compare the English Bond and Flemish Bond. (6)
(ii) Draw a neat sketch showing the alternative layers for a fill brick masonry in English Bond and Flemish Bond. (10)

Or

- (b) (i) Why expansion joints are required in building construction? (4)
 - (ii) Draw a neat sketch for expansion joint at foundation level and expansion joint at roof level and explain it in detail. (12)
- 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 various techniques used for the construction of heavy decks.

Or

- (b) Explain the support structures required for heavy equipments and conveyors.
- 15. (a) Explain the factors governing the selection of equipment for earthwork. (16)

Or

(b) Mention various types of earthwork equipments and also give their uses. (16)