Question Paper Code : 21246

Reg. No. :

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

(4)

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 — $(5 \times 16 = 80 \text{ marks})$

11. (a) Describe with neat sketches.

(i)	Compacting.	(4)
(ii)	Mixing.	(4)
(iii)	Transporting.	(4)

- (iv) Placing of concrete.

Or

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

12. (a)

(i)

- Compare the English Bond and Flemish Bond.
- (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)

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

(16)

(6)