B 207

B.E./B.Tech. DEGREE EXAMINATION, NOVEMBER/DECEMBER 2005.

Fourth Semester

Civil Engineering

CE 237 — CONCRETE AND CONSTRUCTION TECHNOLOGY

Time : Three hours Maximum : 100 marks

Answer ALL questions.

PART A — (10 × 2 = 20 marks)

1. Classify concrete based on its compressive strength.

2. Explain the procedure of measuring workability of concrete.

3. What do you mean by quality control?

4. What is meant by shoving?

5. Write short notes on slip forms.

6. Explain the procedure of dewatering of concrete.

7. What are the disadvantages of hollow block masonry?

8. Define 'Reservation Time'

9. Define a defect.

10. How do you select a pumping equipment?

PART B — (5 × 16 = 80 marks)

11. (i) Explain any two nondestructive testing techniques of hardened concrete.

(ii) Explain clearly what are concrete chemicals.

12. (a) Explain with neat sketches (i) off shore platforms (ii) Form work for shells.

Or

(b) Explain the method of launching of bridge decks.

13. (a) Explain the step by step procedure of designing of concrete mix as per IS.

Or

(b) With a flow chart explain the sequence of activities of construction.

14. (a) (i) What are the causes of dampness in concrete structures.

(ii) Describe the methods of prevention of dampness.

Or

(b) (i) Discuss clearly the points to be considered in brick masonry. (10)

(ii) Compare brick masonry and stone masonry. (6)

15. (a) Explain with a flow chart the assessment procedure for evaluating a distressed structure.

Or

(b) (i) How do you select an equipment for earth work?

(ii) Explain the process of erection of structures.
