

**M 2025**

B.E. DEGREE EXAMINATION, MAY/JUNE 2006.

Third Semester

Civil Engineering

CE 1203 — CONSTRUCTION TECHNIQUES, EQUIPMENTS AND PRACTICES

(Common to B.E (PT) Second Semester R 2005 Civil)

(Regulations 2004)

Time : Three hours

Maximum : 100 marks

Answer ALL questions.

PART A — (10 × 2 = 20 marks)

1. When an expansion joint is provided in a building?
2. Distinguish between Flemish bond and English bond in brick masonry.
3. What is a coffer dam? When is it used?
4. What is meant by shoring?
5. Distinguish between a silo and a bunker.
6. What are launching girders?
7. How honey combing can be avoided in column casting?
8. State any two reasons for cracks in a building.
9. What is the equipment used for volume batching of materials for concreting?
10. What is the equipment used for driving a precast pile in a sandy soil?

PART B — (5 × 16 = 80 marks)

11. What is sand blasting technique? When is it adopted? Briefly explain the procedure for rehabilitating a wall of an old building by the use of sand blasting technique. Also explain how you will strengthen it.

12. (a) In a sequential manner explain the various construction activities involved in the construction of a residential building.

Or

- (b) (i) Explain the steps involved in the erection of a steel truss and covering it with asbestos cement sheet roofing. (8)  
(ii) What is damp proof course? Why it is provided? Explain the method of its construction. (8)

13. (a) Describe the box jacking method of construction of a bridge. In what circumstances this technique is adopted.

Or

- (b) Explain the construction activities involved in the construction of bridge piers using caissons.

14. (a) Explain the procedure for erecting light weight components on tall structures. What are the precautions to be taken in load distribution of the components?

Or

- (b) Explain the process of in-situ prestressing of a high raised structure.

15. (a) What is dredging? When it is done? Explain the various equipments used for dredging?

Or

- (b) Briefly explain about the equipments involved in the construction of a multi-storeyed building.