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Question Paper Code : 40301

B.E./B.Tech. DEGREE EXAMINATIONS, NOVEMBER/DECEMBER 2021.

Fourth Semester

Civil Engineering

CE 8401 – CONSTRUCTION TECHNIQUES AND PRACTICES

(Regulations 2017)

Time : Three hours

Maximum : 100 marks

Answer ALL questions.

PART A — (10 × 2 = 20 marks)

1. List the types of forces in Structural system.
2. How the life cycle of building materials can be considered?
3. Why construction joints required?
4. List the causes of dampness.
5. What is meant by Cofferdam? When it is used in construction?
6. List the uses of Sheet piles.
7. Highlight the advantages of Prestressed concrete.
8. What are shells? Why special forms are used in constructing shells?
9. List the methods used for compacting concrete.
10. What are the equipments used for tall building construction?

PART B — (5 × 3 = 15 marks)

11. (a) Discuss the load bearing structure and framed structure.

Or

- (b) Explain about environmental impact of construction material.

12. (a) Explain the classification of Stone masonry.

Or

(b) What is meant by Scaffolding? Name the different types of scaffolding and describe any two with neat sketches which are most commonly used.

13. (a) Explain different Tunneling techniques in detail.

Or

(b) Explain the methods of dewatering the foundation trenches.

14. (a) Describe the procedure involved in the erection of braced domes and spaced decks.

Or

(b) Explain about electing light weight components of Tall Structures.

15. (a) Explain the factors governing the selecting of equipments for earth work.

Or

(b) Discuss about motor graders and scrapers.

PART C — (1 × 15 = 15 marks)

16. (a) Arrive the materials and method of construction of natural building.

Or

(b) Explain the different types of Caisson techniques with suitable sketches.
