

Reg. No. :

**Question Paper Code : 20325**

B.E./B.Tech. DEGREE EXAMINATIONS, APRIL/MAY 2022.

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 characteristics of natural buildings.
2. State the Seismic effects on structures.
3. Write short notes on construction joints.
4. Define scaffolding.
5. List the functions of sheet piles.
6. Classify various methods to dewater deep excavations.
7. Explain the term launching Girders.
8. List the special forms of shell structures.
9. State the factors influencing compaction.
10. Define Dredging.

PART B — (5 × 13 = 65 marks)

11. (a) Explain structural system and its types in detail.

Or

- (b) Discuss different green building materials in detail.

12. (a) Explain different types of bonds in brick masonry.

Or

(b) Explain about the general principles to be observed while laying Damp Proof Course (DPC). And also write about the materials used for DPC and their properties.

13. (a) Explain tunnel construction and its techniques.

Or

(b) Describe the Construction procedure of Diaphragm Wall.

14. (a) Explain Prestressing Method in detail.

Or

(b) Explain about support structure for heavy equipment and conveyors.

15. (a) Explain in detail about earth moving equipment.

Or

(b) Explain in detail about different types of cranes.

PART C — (1 × 15 = 15 marks)

16. (a) Explain the construction techniques for bridge decks.

Or

(b) Prepare a framework for Energy efficient residential building.