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 — $(10 \times 2 = 20 \text{ marks})$

- 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 — $(5 \times 13 = 65 \text{ marks})$

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 —
$$(1 \times 15 = 15 \text{ marks})$$

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

Or

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