



# CBCS SCHEME

21CV72

Seventh Semester B.E./B.Tech. Degree Examination, Dec.2024/Jan.2025

## Construction Technology for Substructures and Super Structures

Time: 3 hrs.

Max. Marks: 100

*Note: Answer any FIVE full questions, choosing ONE full question from each module.*

### Module-1

- 1 a. Write a note on Micro Tunnelling. (10 Marks)  
b. Write a note on TBM. (10 Marks)

OR

- 2 a. What is bedding of conduits explain its significance. (10 Marks)  
b. Explain different methods of compaction technology. (10 Marks)

### Module-2

- 3 a. What is underwater drilling and blasting give one case study. (10 Marks)  
b. Explain Jet grouting with a neat sketch. (10 Marks)

OR

- 4 a. What is the role of dewatering in shallow and deep excavation and list various method. (10 Marks)  
b. Explain well point system with a neat sketch. (10 Marks)

### Module-3

- 5 a. Write a note on operation and erection of R.M.C plant. (10 Marks)  
b. Write a note on Concrete mix design. (10 Marks)

OR

- 6 a. Explain underwater concrete and its significance and also list the various methods used. (10 Marks)  
b. Write a note on Self-Compacting Concrete. (10 Marks)

### Module-4

- 7 a. Write a note on piles in land and marine structures. (10 Marks)  
b. Explain initial and routine tests on piles as per codal specifications. (10 Marks)

OR

- 8 a. Write a note on pile driving by vibration and construction of micro piles. (10 Marks)  
b. Write a note on Diaphragm walls. (10 Marks)

### Module-5

- 9 a. What are cofferdams and explain the construction of a double wall cofferdam? (10 Marks)  
b. State the uses of cofferdams and explain concrete wall movable cofferdams. (10 Marks)

OR

- 10 a. What are the differences between pneumatic and open caissons? (10 Marks)  
b. Write a note on Well foundations. (10 Marks)

\*\*\*\*\*

Important Note : 1. On completing your answers, compulsorily draw diagonal cross lines on the remaining blank pages.  
2. Any revealing of identification, appeal to evaluator and /or equations written eg. 42+8 = 50, will be treated as malpractice.