CBCS SCHEME

21CV72 renth Semester B.E./B.Tech. Degree Examination, Dec.2024/Jan.2025 truction Technology for Substructures and Super **Structures** BANGALIME: hrs. Max. Marks: 100 Note: Answer any FIVE full questions, choosing ONE full question from each module. 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. Module-1 Write a note on Micro Tunnelling. (10 Marks) Write a note on TBM. (10 Marks) What is bedding of conduits explain its significance. 2 (10 Marks) a. Explain different methods of compaction technology. (10 Marks) Module-2 What is underwater drilling and blasting give one case study. (10 Marks) 3 Explain Jet grouting with a neat sketch. (10 Marks) What is the role of dewatering in shallow and deep excavation and list various method. (10 Marks) Explain well point system with a neat sketch. (10 Marks) Module-3 Write a note on operation and erection of R.M.C plant. (10 Marks) Write a note on Concrete mix design. (10 Marks) OR Explain underwater concrete and its significance and also list the various methods used. 6 (10 Marks) Write a note on Self-Compacting Concrete. (10 Marks) Write a note on piles in land and marine structures. (10 Marks) Explain initial and routine tests on piles as per codal specifications. (10 Marks) Write a note on pile driving by vibration and construction of micro piles. (10 Marks) Write a note on Diaphragm walls. (10 Marks) **CMRIT LIBRARY** BANGALORE - 560 037 Module-5 What are cofferdams and explain the construction of a double wall cofferdam? (10 Marks) State the uses of cofferdams and explain concrete wall movable cofferdams. (10 Marks)

10

a.

(10 Marks)

(10 Marks)

What are the differences between pneumatic and open caissons?

Write a note on Well foundations.