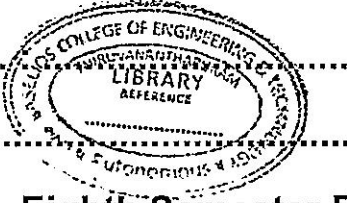


Reg. No. ....

Name : .....



**Eighth Semester B.Tech. Degree Examination, May 2022**

**(2008 Scheme)**

**Elective IV**

**08.806.8 - REPAIR AND REHABILITATION OF STRUCTURES (C)**

Time : 3 Hours

Max. Marks : 100

Instructions : Answer **ALL** questions from Part A and one **FULL** question from **Each** module of Part B

**PART – A**

1. List out any five causes for the deterioration in Steel structures.
2. What are the aspects of inspection of a structure?
3. Define Durability of concrete.
4. Define the purpose of NDT?
5. What are the methods for crack detection?
6. Explain spalling of concrete.
7. What are the different chemicals used for repair.
8. What is meant by grouting.

**(8 × 5 = 40 Marks)**

**PART – B**

**MODULE I**

9. Explain in detail the various causes of deterioration in concrete structures with example.

Or

10. Explain in detail the possible failure modes of a concrete structure due to earthquake.

P.T.O.



## MODULE II

11. Explain in detail the non destructive test using Ultra Sonic Pulse Velocity method.

Or

12. Explain the following tests in detail (a) PULL out Test (b) Crack detection Test.

## MODULE III

13. Explain different methods of repair of Cracks with neat sketches.

Or

14. Explain different methods of strengthening of existing structures with neat figures.

(3 × 20 = 60 Marks)

