

III B. TECH I SEMESTER REGULAR EXAMINATIONS, FEB - 2022
REPAIR AND REHABILITATION OF BUILDINGS
(Civil Engineering)

Time: 3 Hours**Max. Marks: 60**

Note: Answer ONE question from each unit (5 × 12 = 60 Marks)

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UNIT-I

1. a) Explain about Wetting and Drying physical process. [6M]
- b) Explain the Chemical Processing of deterioration due to Sulphate attack, its effects and preventive measures [6M]

(OR)

2. Explain in detail about Preventive measures and repairs of cracks in concrete [12M]

UNIT-II

3. Explain in detail about [12M]
  - i) Rebound hammer
  - ii) Corrosion meter and
  - iii) Pull out test

(OR)

4. Describe about [12M]
  - i) Resistivity meter
  - ii) Core cutting method

UNIT-III

5. Explain in detail about the various diagnostic testing methods and equipments for structural failure. [12M]

(OR)

6. Explain in detail about causes of structural failure with examples. [12M]

UNIT-IV

7. a) Briefly explain about natural admixtures. [6M]
- b) Describe the Carbon fiber wraps. [6M]

(OR)

8. Briefly describe about purpose of chemical, mineral admixtures, Glass fibers and Steel fibers. [12M]

UNIT-V

9. Explain about Grouting and Shotcreting. [12M]

(OR)

10. a) Describe in detailed about underpinning with process and [6M]  
Precautions.

b) Describe in detailed about underwater repair with process and [6M]  
Precautions.

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