

Roll No.....

Total No. of Printed Pages: 1

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**B. Tech (Civil Engg.) (Semester – 5<sup>th</sup>)**  
**REPAIR AND REHABILITATION OF STRUCTURE**  
**Subject Code: BCIED1562**  
**Paper ID: [19110724]**

**Time: 03 Hours**

**Maximum Marks: 60**

**Instruction for candidates:**

1. Section A is compulsory. It consists of 10 parts of two marks each.
2. Section B consist of 5 questions of 5 marks each. The student has to attempt any 4 questions out of it.
3. Section C consist of 3 questions of 10 marks each. The student has to attempt any 2 questions.

**Section – A**

**(2 marks each)**

Q1. Write short note on the following:

- a. Stage of inspection
- b. Reasons of deterioration
- c. cement mortar
- d. Ferro Cement
- e. Use of chemicals in concrete
- f. Durability of concrete
- g. Strength of concrete
- h. Reinforcement corrosion
- i. Cathodic Protection
- j. Carbon fiber wrapping

**Section – B**

**(5 marks each)**

- Q2. Write a note on assessment procedure for evaluating a damage structure.
- Q3. What is polymer concrete? Is it safe for RCC structure?
- Q4. Explain the thermal properties of concrete.
- Q5. What is rebound hammer and where and why it is used on RCC structure?
- Q6. What are the different carbon composites in repair of concrete structure?

**Section – C**

**(10 marks each)**

- Q7. Discuss various techniques of repair, which is distressed due to corrosion.
- Q8. What are the various methods to measure the crack?
- Q9. Explain the different engineering demolition methods