Roll No……..….. **Total No. of Printed Pages: 1**

Total No. of Questions: [09]

B. Tech (Civil Engg.) (Semester – 5th)

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