

DR. BABASAHEB AMBEDKAR TECHNOLOGICAL UNIVERSITY, LONERE

Regular End Semester Examination – Summer 2022

Course: B. Tech. Branch : CIVIL

Semester : VIII

Subject Code & Name: BTCVSS801D Maintenance and Repairs of Concrete Structures.

Date:04/07/2022

Max Marks: 60

Duration: 3.45 Hr.

Instructions to the Students:

1. All Questions are Compulsory
2. Draw neat diagram wherever necessary.
3. Figures to right indicates full marks
4. Assume suitable data wherever necessary and mention it clearly

(Level/CO) Marks

Q. 1 Solve Any Two of the following.

- A) Explain chloride induced corrosion. 06
B) What are different types of rebars? 06
C) Write a short note on ring test for assessing the quality of steel rebars. 06

Q.2 Solve Any Two of the following.

- A) Explain internal and external Sulphate attack on cementious systems. 06
B) What are precautionary measures to save post tensioned member against corrosion? 06
C) Explain in brief cosmetic and structural surface repairs. 06

Q. 3 Solve Any Two of the following.

- A) How to prepare the surface for repair of concrete? 06
B) Explain electrochemical chloride extraction technique. 06
C) Write the ingredients of materials used for repair. 06

Q.4 Solve Any Two of the following.

- A) Explain rapid chloride penetration test. 06
B) Explain external post tensioning repair method. 06
C) Write causes of cracks in concrete. 06

Q. 5 Solve Any Two of the following.

- A) Explain expansion joint with shear dowels. 06
B) Write flexural strength repair method for beams. 06
C) Explain injection grout method for concrete repair. 06

***** End *****