

**DR. BABASAHEB AMBEDKAR TECHNOLOGICAL UNIVERSITY,  
LONERE – RAIGAD – 402 103  
End Semester Examination – Oct – 2022**

**Branch: M.Tech. (Structural Engineering)**

**Semester: II**

**Subject with Subject Code:- Retrofitting of Structures CVSE-E3C**

**Marks: 60**

**Date:- 19/11/2022**

**Time: 3 Hrs.**

**Instructions to the Students**

1. Each question carries 12 marks.
2. Attempt any five questions of the following.
3. Illustrate your answers with neat sketches, diagram etc., wherever necessary.
4. If some part or parameter is noticed to be missing, you may appropriately assume it and should mention it clearly.

**(Marks-60)**

**Q.1.a)** How is the target strength for mix design fixed based on quality of concrete? Explain. (06)

b) Explain the nondestructive tests to know insitu strength and quality of concrete. (06)

**Q.2.a)** What are the different sources of dampness? Explain remedies provided to avoid dampness (06)

b) List out some coating for reinforcement to prevent corrosion? Explain anyone? (06)

**Q.3.a)** Describe the various remedial measures and their relative efficiency against corrosion of steel in RC structures? (06)

b) What are the various types of masonry wall constructions? (06)

**Q.4.a)** What is Cathodic Protection and when is it applied? (06)

b) What is meant by blanketing? Explain different methods of blanketing? (06)

**Q.5.a)** What is the role of epoxy resin in the retrofitting of structures? (06)

b) Write a note on Ready mix concrete? (06)

**Q.6. a)** What is meant by jacketing? Explain various types of jacketing Technique? (06)

b) What are the advantages of using latex modified systems? (06)