

B.Tech. Civil (Construction Management)

00225

Term-End Examination

December, 2014

ET-523(C) : REPAIR AND MAINTENANCE OF BUILDINGS

Time : 3 hours

Maximum Marks : 70

Note : Attempt any **five** questions. All questions carry equal marks.

1. (a) What are the causes that give rise to various defects in any structure ? 4
- (b) Explain the procedure for the remedy of dampness/leakage in a structure. 4
- (c) Explain the principle of corrosion. What type of measures will you take for the control of corrosion of reinforced steel ? 6
2. (a) Explain the structure of a tree with a neat sketch. 7
- (b) Describe the defects in timber due to natural forces with the help of a neat sketch. 7

- 3.** (a) Draw the stress and strain diagram for mild steel bar and cold worked deformed bar. 8
- (b) On what principles does a flushing cistern function ? Give a sketch. 6
- 4.** (a) Explain the following terms : 6
- (i) Modulus of rupture
- (ii) Jointing of PVC pipes
giving a sketch.
- (b) Explain the methods used for cleaning the clogged sewer lines. 8
- 5.** (a) What are the various preventive measures that can be taken in brick masonry work ? 7
- (b) Discuss in detail the classification of floor finishes. 7
- 6.** (a) What are the various causes of failure of foundations ? Discuss the related remedial measures. 6
- (b) Classify the occurrence of cracks in a structure, discussing the causes for the same. 8

7. Differentiate between any **four** of the following terms : $4 \times 3 \frac{1}{2} = 14$

- (a) Exogenous and Endogenous trees
- (b) Cracking and Scaling
- (c) Dampness and Leakage
- (d) Horizontal and Vertical cracks
- (e) Damp proofing technique and Water proofing technique

8. (a) What is a trap ? Explain any two types of traps with neat sketches. 7

(b) Explain the qualities and requirements of a good preservative. 7
