

**B.Tech. Civil (Construction Management)**

**Term-End Examination**

**December, 2015**

00931

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

*Time : 3 hours*

*Maximum Marks : 70*

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

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1. (a) Show the macro-structure of a tree with a neat sketch. 7
- (b) Discuss the qualities which are required from a good preservative for timber. 7
  
2. (a) Briefly explain how corrosion of steel is checked due to environment provided by concrete in reinforced concrete construction. 7
- (b) Give a listing of various precautions which may be taken to reduce dampness in buildings. 7

3. (a) Enlist the names of some defects in timber due to natural forces. Briefly discuss any one of these. 7
- (b) Discuss some problems which are related with plumbing in buildings. Provide suggestions to deal with them. 7
4. (a) Describe the common defects in various types of flooring in buildings. 7
- (b) How can the bearing capacity of weak soils be improved? Discuss some measures in this respect briefly. 7
5. (a) Discuss a strengthening procedure adopted for a cracked RC concrete beam. 7
- (b) Briefly discuss the various reasons behind the general deterioration of buildings. 7
6. (a) What do you understand by 'seasoning of timber'? Discuss any one method for it. 7
- (b) Discuss the various factors which are considered while repairing fire damaged concrete structures. 7

7. Write short notes on the following :

$$4 \times 3 \frac{1}{2} = 14$$

- (a) Efflorescence
- (b) Curing of concrete
- (c) Water-cement ratio in concrete
- (d) Workability

8. Differentiate between the terms given in each of the following :

$$4 \times 3 \frac{1}{2} = 14$$

- (a) Exogenous and Endogenous trees
  - (b) Cup and Star shakes
  - (c) Superplasticizer and Retarder
  - (d) Bib and Stop-cock
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