

B.Tech. Civil (Construction Management)

Term-End Examination

00038

June, 2016

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

Time : 3 hours

Maximum Marks : 70

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

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1. (a) Briefly discuss why seasoning of timber is desired. Give a classification of seasoning methods. 7
 - (b) Describe the method of application of any preservative for timber. 7
 2. (a) Describe the method of application of shotcrete for repairing a concrete column. 7
 - (b) Briefly discuss the causes of dampness in buildings. 7

3. (a) Describe various types of cracks which normally occur in concrete structures. 7
- (b) Briefly describe the commonly occurring defects in sewer lines. 7
4. (a) Draw neat sketches of cup shakes and star shakes in a timber object. 7
- (b) Write about any two possible defects in bath fittings. Present a remedy for each in brief, with neat sketches, if required. 7
5. (a) Describe any one method of damp proofing of roofs. 7
- (b) Discuss the principle of corrosion of steel. 7
6. (a) Explain the importance of regular maintenance in buildings. 7
- (b) Write various causes of deterioration in buildings. 7
7. Write short notes on each of the following topics : $4 \times 3 \frac{1}{2} = 14$
- (a) Grade of concrete
- (b) Stress – Strain relationship of mild steel
- (c) Field tests for structural steel
- (d) Rehabilitation of buildings

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

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

- (a) Seasoning and Preservation of timber
 - (b) Setting and Hardening of concrete
 - (c) Soft wood and Hard wood
 - (d) Passivity and Transpassivity
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