

B.Tech. Civil (Construction Management)

Term-End Examination

December, 2010

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

Time : 3 hours

Maximum Marks : 70

Note : Answer any five questions. All questions carry equal marks. Give neat sketches in support of your answers wherever required.

1. (a) What are the Natural forces that cause defects in timber ? Explain in detail about knots, and shakes with neat sketches. 7
- (b) What are the procedures for identifying corrosive environment and active corrosion in concrete ? 7
2. (a) Describe various defects in sanitary fittings which occur during manufacturing process ? 7
- (b) Describe the manufacturing defects in steel. 7
3. (a) Write in detail about the types of preservatives used to protect timber against deterioration. 7
- (b) Describe the method of repair of G.I. water supply pipes. 7

4. (a) With reference to the repair of cracks and deteriorations in concrete, write short notes on the following : $3\frac{1}{2} \times 4 = 14$
- (i) Treatment of cracks
 - (ii) Guniting
 - (iii) Pressure Grouting
 - (iv) Surface treatments of concrete
5. (a) Describe the common defects in Timber flooring. 7
- (b) Explain about classification of defects in masonry. 7
6. (a) Describe the metallic water proofing. 7
- (b) Discuss in brief, about various causes of dampness. 7
7. Write short notes on the following $4 \times 3\frac{1}{2} = 14$
- (a) NDT methods for Testing Concrete
 - (b) Corrosion control methods in steel
 - (c) Plaster cracks
 - (d) Signs and Detection of Dampness
8. Differentiate between the following $4 \times 3\frac{1}{2} = 14$
- (a) Scaling and spalling in concrete
 - (b) Bow and cup in timber
 - (c) Chrome - Nickel and stainless steel
 - (d) Chemical seasoning and Electrical seasoning