

B. ARCH. 3RD YEAR 2ND SEM. EXAMINATION 2018 (Old)

BUILDING DISEASES AND TREATMENT

Full Marks : 100

Time : Three Hours

Answer any **fore** questions. Each question is for **25** marks.

- Q1. Prepare a 'List' of damages and decays that you can find in buildings of various ages and mention the probable 'Causes' of those damages and decays. Mention the 'Process' of inspection of a building for assessing its physical condition, and write down the 'Inspection Report Format' in this regard.
 - Q2. Define and explain the terms 'Conservation' and 'Restoration' with suitable examples. What is 'Maintenance' of a building? What is the 'Process' of maintenance of an old building? Mention and explain some types of 'Tests' that an architect conducts on buildings to assess the quality of damage and decay in them.
 - Q3. Write the scientific explanation of 'Rising Dampness' in a building. Describe the 'Causes and Effects' of rising dampness in a building. Write a list of 'Measures' that can be taken to stop or control rising dampness of various situations.
 - Q4. Write explanatory notes on 'Cracks', 'Bulges' and 'Voids' that are found in old load-bearing walls. Describe with sketches the general 'Techniques' of repair of damaged load-bearing walls. Draw 'Section' of foundation of a load-bearing wall (thickness 550mm above plinth) of a 150-years old building.
 - Q5. Draw 'Sections' of Roofs of two buildings – (i) 150-years old, and (ii) 5-years old and label them properly. Describe the method of 'Repair' of a roof of a 20-years-old building that is damaged from rainwater leakage. Describe the 'Causes' of deterioration of Concrete.
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