

BACHELOR OF ARCHITECTURE ENGG EXAMINATION, 2010

(3rd Year, 2nd Semester)

BUILDING DISEASES AND TREATMENT

Time : Three hours.

Full Marks : 100

Answer any **five** questions with suitable sketches whenever necessary.

1. Mention the different values associated with architecture. 5
Explain the importance of old and historic buildings in a city. 4
Define and explain the maintenance programme applicable to architecture. 5
Define and explain 'Conservation' and 'Restoration' of buildings. 6
2. Write down a list of equipments that you need for inspection and documentation of a building. 6
Discuss the method and items related to inspection for making structural assessment of a building. 8
Describe inspection report format. 6
3. Mention the commonly observed damages and decays in buildings with a note on their possible causes. 20
4. Describe various types of foundations that we can observe in old buildings. 6
Mention the different elements that were used in the construction of load bearing walls in old buildings. 4

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- Describe the damages and defects that may occur in walls of old buildings and give note on their causes and your prescription for their remedial measures. 10
5. Narrate the causes and effects of rising damp in buildings. 10
Explain the measures that can be taken for controlling rising damp in buildings. 10
 6. Draw section of roof of old buildings with ---- i) timber beams and rafters, ii) R.S. Joists and Tees. 10
Describe the process of repair of roof of an old building that is damaged by rainwater penetration. 10
 7. Narrate the possible causes of damage of Concrete (P.C.C. and R.C.C.) 10
A column of a frame-structure building is damaged having cracks and materials fallen exposing re-bars. Describe the method of repair of the column and any additional measure that you may suggest to control structural failure. 10