

AR32C/40/2005

INTER ENGG. (ARCH.) EXAMINATION, 2005

( 2nd Semester )

BUILDING MANAGEMENT AND MAINTENANCE

Time : Three hours

Full Marks : 100

Answer any *six* of the following with suitable illustrated sketches wherever necessary.

All questions carry equal marks.

1. Write the details of Antitermite Treatment of buildings; both preconstruction and post construction.

What are the problems caused by termite attack in a building.

2. What are the causes of efflorescence and how they affect a building ? What are the general distress caused by moisture movement in a building ?

Suggest a treatment in details that can eliminate and / or eradicate both dampness and efflorescence of an wall at a time.

3. What are the types of cracks we find in a building ? What are the possible causes of it ?

How to repair the various cracks especially in case of load bearing brickbuilt structures ?

[ Turn over

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4. Write in details the normal routine maintenance that are necessary for general upkeeping of a building. How can we guess the approximate age of a building ?
5. What are the factors that affect the Durability and Watertightness of concrete ? How can we develop the performance of concrete by using different kinds of chemical admixtures with concrete ?

Write the cause, effect and measures taken to minimise carbonation of concrete.

6. Write in details the conventional method and method using different present day chemicals for waterproofing of the roof of a building.
7. What do you mean by the terms spalling of concrete and Delamination of an RCC element ?  
  
How can we repair an RCC beam affected by Delamination from the ceiling side ?
8. What is structural strengthening ? Give in details the steps and methods of strengthening a column (RCC), that has undergone serious distress.
9. Give in details the usual methods of thermal insulation of a roof alongwith waterproofing.

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10. A very fine crack has developed into an RCC structural element.  
– How can we repair it with the help of injection method ?

What are the ways of waterproofing a basement of a building from inside and a leaking water retaining body from outside when it is filled up with water ?

11. Write short notes on the following :
- a) Rising dampness – Effects, causes and remedies.
  - b) Prophylactic corrosion protection of rebars.