

Total No. of Questions : 08

B. Architecture (2012 & Onwards EL-I) (Sem.-8)

BUILDING MAINTENANCE – I

Subject Code : BACH-808

Paper ID : [72752]

Time : 3 Hrs.

Max. Marks : 60

INSTRUCTIONS TO CANDIDATES :

1. Question No. 1 compulsory.
2. Attempt FIVE questions in ALL with minimum ONE question from each UNIT.
3. Support the answer with sketches as per the need.

Q1 a) What is efflorescence in concrete?

b) What do you mean by the terms spelling of concrete?

c) Enlist the two methods for repair of crack in brick masonry.

d) What do you mean by life cycle of buildings?

e) What do you understand by structural safety of a building?

(2×5=10)

UNIT-I

Q2. What are the reasons behind the maintaining of a structure? Explain the role of an Architect involved in it from preconstruction stage to post construction stage of a building. (12.5)

Q3. Write short notes on the followings :

a) Effect of climate on life cycle of building.

b) Social significance of building maintenance.

c) The role of design and detailing on maintenance in post construction phase. (4+4+4.5)

Q4. What are the causes for deterioration and decay of a building? Explain the remedial measures one can take in case of a RCC structure. (12.5)

UNIT-II

- Q5. What are the different types of cracks in a building? Enlist the possible causes of it. Explain the methods to repair the various cracks in case of load bearing structures. (12.5)
- Q6. What is retrofitting of structure? Explain in details the steps and methods of strengthening a column (RCC), which has undergone serious distress. (12.5)
- Q7. What are the causes of Dampness in a building and how it affects? Explain the general distress caused by moisture movement in a building. Suggest a treatment in details which can eliminate both dampness and efflorescence of a brick masonry. (12.5)
- Q8. Write short notes on **any two** the followings :
- a) Corrosion of concrete.
 - b) Antitermite Treatment of buildings.
 - c) Deterioration of a structure due to faulty laying of services lines. (6+6.5)