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Total No. of Pages : 02

Total No. of Questions : 08

B.Architecture (2012 & Onwards) (Sem.-6)**BUILDING SERVICES-III****Subject Code : BACH-605****Paper ID : [72291]****Time : 3 Hrs.****Max. Marks : 60****INSTRUCTION TO CANDIDATES :**

1. Attempt any FIVE questions in all with at least ONE question from EACH UNIT.
2. Q.1. is compulsory.
3. Support your answers with neat sketches where required.

Q1. a) What do you mean by Noise reduction factor?

b) What is the role of filters in air conditioning?

c) Enlist the types of building services involved in building management system.

d) What is “Sound insulation” and “Sound isolation”?

e) What do you understand by cooling load? (2×5=10)

UNIT-I

Q2. What are the types of air-distribution system used in mechanical ventilation for an enclosed area? Describe with sketches. (12.5)

Q3. Write short notes on the following :

a) Refrigeration cycle

b) Air-cooled condenser

c) Evaporative cooling (4+4+4.5)

UNIT-II

- Q4. What is reverberation time? How will you choose the reverberation time in small and big auditorium? Describe briefly how you will determine the reverberation time for a speech room. (12.5)
- Q5. What are the acoustical considerations for the designing of a School building? Explain with neat sketches.
- Q6. Write short notes on **any two** of the following :
- a) Acoustical material
 - b) Echoes
 - c) Reflection of sound (6+6.5)

UNIT-III

- Q7. What is the role of building management system in the various services in a modern building? Discuss in detail the use of information technology for effective communication for building operations and control in response to functional use. (12.5)
- Q8. Discuss in detail about the sensing and auto operational devices with respect to building services that make a building intelligent. Illustrate with suitable examples. (12.5)