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Sixth Semester B.Arch. Degree Examination, Dec.2024/Jan.2025 Building Services – III

Time: 3 hrs.

Max. Marks: 100

Note: Answer any FIVE full questions, choosing one full question from each module.

Module-1

- 1 a. Express the NBC guidelines for the kitchen ventilation. (08 Marks)
- b. Explain the need and types of mechanical ventilations. (12 Marks)

OR

- 2 a. Write short notes on:
 - i) Air distribution systems
 - ii) Load calculation parameters
 - iii) Psychometric processes. (12 Marks)
- b. Explain refrigeration cycle with neat line diagram. (08 Marks)

Module-2

- 3 a. Explain types of central air conditioning systems. (14 Marks)
- b. What are water and air cooled chillers? (06 Marks)

OR

- 4 Write short notes on:
 - a. Clean room AC system
 - b. A.H.O.
 - c. Ducting system
 - d. OT AC system. (20 Marks)

Module-3

- 5 a. Explain with neat sketch the traction (mechanical) elevator system. (14 Marks)
- b. What is Quality and Quantity of service with respect to elevator system? (06 Marks)

OR

- 6 Explain the escalator components with neat sketch and working principle. (20 Marks)

Module-4

- 7 Write short notes on:
 - a. Classification of fire (07 Marks)
 - b. Classification of buildings as per MBC (07 Marks)
 - c. Combustible and non-combustible materials. (06 Marks)

OR

- 8 a. Explain the fundamentals and methods of passive fire protection in buildings. (14 Marks)
- b. Write about refuse area and compartmentation and its importance. (06 Marks)

Module-5

- 9 Explain active fire protection systems. (20 Marks)

OR

- 10 What are NBC rules and fire fighting requirements for high rise buildings in India? (20 Marks)

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Important Note : 1. On completing your answers, compulsorily draw diagonal cross lines on the remaining blank pages.
2. Any revealing of identification, appeal to evaluator and /or equations written eg. 42+8 = 50, will be treated as malpractice.