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Fifth 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. Explain what is Mechanical Ventilation system. What is the need for Mechanical Ventilation? (10 Marks)
- b. Explain the various types of Ventilation Systems (mechanical) for buildings. (10 Marks)

OR

- 2 What are the components involved in mechanical ventilation? Explain briefly basic ventilation methods for Basements. (20 Marks)

Module-2

- 3 a. Write short note on Air Conditioning and its types. (10 Marks)
- b. Mention the key parts of AC and explain its working. (10 Marks)

OR

- 4 Explain the specialized air conditioning system used in clean rooms or server rooms with sketches. (20 Marks)

Module-3

- 5 Explain parts of traction lift with neat sketches. Brief on its working. (20 Marks)

OR

- 6 a. What are the various escalator configurations? Explain each with neat sketches. (10 Marks)
- b. Explain the factors that affect the design of an escalator. (10 Marks)

Module-4

- 7 a. What are Fire hazards? What is Grading of structural elements for fire resistance as per NBC? (10 Marks)
- b. Explain briefly types of Fire classes. (10 Marks)

OR

- 8 Explain Passive fire protection design in buildings. (20 Marks)

Module-5

- 9 Describe Dry and Wet Riser system in detail. (20 Marks)

OR

- 10 Explain the various fire protection requirements for a multi-storied building in India. (20 Marks)

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.