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Third Semester B. Arch. Degree Examination, Dec.2024/Jan.2025
Climatology

Time: 3 hrs.

Max. Marks: 100

Note: 1. Answer any FIVE full questions, choosing ONE full question from each module.
 2. Draw neat sketch wherever necessary.

Module-1

- 1 Explain in detail the factors which influence climate. (20 Marks)

OR

- 2 Differentiate between tropical warm and humid and tropical hot and dry climate. (20 Marks)

Module-2

- 3 a. Illustrate and explain sun path diagram and its components and also explain method of computing solar altitude and azimuth for given date and time. (10 Marks)
 b. Explain the process of thermo regulatory mechanism of human body. (10 Marks)

OR

- 4 Describe the heat exchange process of building with the out door environment. (20 Marks)

Module-3

- 5 Write short notes:

- a. Resistance of Multilayer body
 b. Insulation
 c. Cavity wall
 d. Joule

(20 Marks)

OR

- 6 Write short notes on:

- a. Transmittance
 b. Sol-Air Temperature
 c. Time Lag
 d. Conductivity.

(20 Marks)

Module-4

- 7 What are the methods for achieving natural ventilation in a building? (20 Marks)

OR

- 8 Explain the effect of openings on air flow. (20 Marks)

Module-5

- 9 a. Explain day light factor and its components. (08 Marks)
 b. Explain what are the different challenges in providing adequate day lighting in hot and dry climate and way of overcoming them? (12 Marks)

OR

- 10 With the help of literature study, explain the design consideration for building in warm and humid climate. Illustrate with plan, section and views. (20 Marks)
