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## Third Semester B. Arch. Degree Examination, June/July 2024 Climatology

Time: 3 hrs.

Max. Marks: 100

Note: 1. Answer any FIVE full questions, choosing ONE full question from each module.  
2. Explain with neat sketches when necessary.

### Module-1

1 Explain the characteristics of Tropical composite climate. (20 Marks)

OR

2 What are the factors which influence site "Micro Climate". (20 Marks)

### Module-2

3 Explain the components and application of sun path diagram. (20 Marks)

OR

4 With a neat diagram, explain Thermal Balance Equation for a building. (20 Marks)

### Module-3

5 Write short notes on :

- "U" Value
- Conductance
- Time Lag
- Periodic Heat Flow. (20 Marks)

OR

6 Explain the construction techniques to improve the thermal performance of walls. (20 Marks)

### Module-4

7 With neat sketches, explain the effect of openings on internal AIR flow. (20 Marks)

OR

8 How is Natural Ventilation achieved in buildings? (20 Marks)

### Module-5

9 What are the techniques to optimize daylight in buildings? (20 Marks)

OR

10 With examples, explain climate design considerations for "Warm and Humid" climate. (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.