USN

**18ARC33** 

## 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

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

Write short notes on:

a. "U" Value

b. Conductance

c. Time Lag

8

d. Periodic Heat Flow.

(20 Marks)

OR

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

Module-4

With neat sketches, explain the effect of openings on internal AIR flow.

(20 Marks)

OR

How is Natural Ventilation achieved in buildings?

(20 Marks)

Module-5

What are the techniques to optimize daylight in buildings?

(20 Marks)

OR

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

(20 Marks)

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

\* \* \* \* \*