Acharya's NRV School of Architecture LIBRARY Bangalore

CBCS SCHEME

USN | | | | | | | | | | |

18ARC33

Third Semester B.Arch. Degree Examination, June/July 2026
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.

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

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 a. Explain with sun path diagram, its components and methods of computing solar altitude and azimuth for given date and time. **(10 Marks)**

b. Explain the concept of Sol-Air temperature and solar gain factor. **(10 Marks)**

OR

4 Explain the heat exchange processes of a building with the outside 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 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 a. What is Daylight Factor? Explain its components, with sketches. **(10 Marks)**

b. Explain design considerations for daylighting in Hot-Dry climate, with sketches. **(10 Marks)**

OR

10 With the help of literature studies, explain the design considerations for buildings in composite climate, illustrate with plan, section and views. **(20 Marks)**

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