

CBCS SCHEME



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18ARC33

Third Semester B.Arch. Degree Examination, Feb./Mar. 2022

Climatology

Time: 3 hrs.

Max. Marks: 100

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

Module-1

- 1 What are the elements that constitute climate? Briefly explain the tools and units used for their measurement. (20 Marks)

OR

- 2 a. Explain the characteristics of various tropical climatic zones. (10 Marks)
b. Make a comparative study of the climatic zones of India. (10 Marks)

Module-2

- 3 Explain thermal exchange between a building with the outdoor environment. (20 Marks)

OR

- 4 Explain the application of sun path diagram in design of building orientation and shading devices. (20 Marks)

Module-3

- 5 Write short notes on : (20 Marks)
a. U value
b. K value
c. Temperature inversion
d. Time LAG.

OR

- 6 What is "Passive Cooling" in buildings? (20 Marks)

Module-4

- 7 Write note on : (20 Marks)
a. Stack effect
b. Cross ventilation.

OR

- 8 Write notes on : (20 Marks)
a. Wind catchers
b. Importance of ventilation.

Module-5

- 9 Write notes on : (05 Marks)
a. LUX (05 Marks)
b. Glare control (10 Marks)
c. Daylight factor and its components.

OR

- 10 Explain climate responsive design principles to be considered for buildings in "Warm and HUMID" zone. (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.