

# CBCS SCHEME

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15ARC3.3

Third Semester B.Arch. Degree Examination, June/July 2019

## Climatology

Time: 3 hrs.

Max. Marks:100

**Note: 1. Answer FIVE full questions, selecting ONE full question from each Module.  
2. Draw sketches wherever necessary.**

### MODULE - 1

- 1 Describe the characteristic features of hot dry and warm humid climate. (20 Marks)
- OR
- 2 a. What is Site Climate? (08 Marks)  
b. What are the factors that affect the climate of a site? Explain any 3 in detail. (12 Marks)

### MODULE - 2

- 3 Explain Solar Azimuth and Solar Altitude Angles with the help of sketches. (20 Marks)
- OR
- 4 Describe the heat exchange process of a building with the outside environment. (20 Marks)

### MODULE - 3

- 5 a. What is Periodic heat flow? (08 Marks)  
b. Describe time lag and decrement factor using sketches. (12 Marks)

OR

- 6 Write short notes on : (20 Marks)  
a. Transmittance value.  
b. R Value.  
c. Cavity Resistances.  
d. Thermal mass wall.

### MODULE - 4

- 7 Write short notes on : (20 Marks)  
a. Shading Devices.  
b. Stack effect.  
c. Functions of ventilation.  
d. Wind scoop.

OR

- 8 Explain the various air flow movements around buildings and how it affects ventilation. (20 Marks)

### MODULE - 5

- 9 Describe with sketches the problems and solutions of day lighting in hot dry and warm humid climate. (20 Marks)

OR

- 10 Explain design considerations for warm humid climate using a case study as an example. Draw relevant sketches. (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.