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Total No. of Questions : 08

B.Arch. (Sem.-4)
CLIMATE & ARCHITECTURE-I
Subject Code : AR-230
M.Code : 45031

Time : 3 Hrs.

Max. Marks : 50

INSTRUCTIONS TO CANDIDATES :

- 1. Attempt any ONE question each from Unit-I and Unit-II.**
- 2. Attempt any THREE more questions from the rest.**
- 3. Attempt FIVE questions in total.**
- 4. All questions carry equal marks.**
- 5. Draw sketches where required.**

UNIT-I

1. Why is the consideration of climatic conditions important for the design of the built environment?
2. What is the interrelation of climatic elements expressed through the psychrometric chart? Why and how this understanding is important for an Architect.

UNIT-II

3. Describe the characteristic features of an Indian indigenous habitation and shelter in a hot and arid zone.
4. Discuss the moderation of microclimate in a typical Mughal garden.

UNIT-III

5. Discuss the bioclimatic chart showing the variation of thermal comfort conditions.

UNIT-IV

6. Explain the following :
- a) Horizontal shadow angle and horizontal shadow throw AND Vertical shadow angle and vertical shadow throw.
 - b) Use of Shadow angles and shadow throws in the design of shading devices.

UNIT-V

7. With the help of sketches describe the air movement inside the building in relation to size and placement of inlets and outlets.

UNIT-VI

8. Discuss the concept of U-value and heat flow through buildings.

NOTE : Disclosure of Identity by writing Mobile No. or Making of passing request on any page of Answer Sheet will lead to UMC against the Student.