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Total No. of Pages : 02

Total No. of Questions : 09

B.Architecture (2012 & Onwards) (Sem.-3)

CLIMATE AND ARCHITECTURE-I

Subject Code : BACH-304

M.Code : 70416

Time : 3 Hrs.

Max. Marks : 60

INSTRUCTION TO CANDIDATES :

1. Question Number 1 is **COMPULSORY**.
2. Attempt any **ONE** question each from Unit.
3. Attempt **FIVE** questions in total.
4. Draw sketches where required.

1. Write short notes on the following :

(2×5=10)

- a) Shadow angles and shadow throws.
- b) Site Climate.
- c) Psychometric chart.
- d) Solar chart.
- e) Bioclimatic chart.

UNIT-I

2. What are the factors that determine the climate of a place, explain them. (12.5)
3. Distinguish between climate and weather. What are the factors which determine the global climate? Explain them. (12.5)

UNIT-II

4. Explain in detail the design of solar shading devices for different orientations. (12.5)
5. State the criteria for layout and building orientation for tropical coastal climate. (12.5)

UNIT-III

6. What are the indices of thermal comfort? Explain them. (12.5)
7. Differentiate between effective temperature and corrected effective temperature. How is corrected effective temperature useful in maintaining heat balance? (12.5)

UNIT-IV

8. Explain in detail with suitable sketches the design criteria of buildings and human habitation in a composite climatic zone in India as per the NBC. (12.5)
9. Compare the characteristic features of an Indian indigenous shelter in a hot and arid climate and in a hot and humid climatic zone. (12.5)

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.