

S.No. : 116

AR 1404

No. of Printed Pages : 03

Following Paper ID and Roll No. to be filled in your Answer Book.

**PAPER ID : 10123**

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## **B. Arch. Examination 2021-22**

**(Even Semester)**

### **CLIMATOLOGY**

***Time : Three Hours]***

***[Maximum Marks :60***

**Note :-** Attempt all questions.

#### **SECTION-A**

1. Define the following :

1 × 8 = 8

- (a) Climate
- (b) Seasonal changes
- (c) Psychometric chart
- (d) Temperature
- (e) Daylight factor
- (f) Solar azimuth

***[P. T. O.***



- (g) Courtyard
- (h) Trombe wall

### SECTION – B

2. Attempt any three parts of the following :  $4 \times 3 = 12$

- (a) What is human heat balance and thermal stress index?
- (b) Describe in detail the factors affecting climate on a global scale.
- (c) Explain the use of solar chart and shading devices for buildings. Give illustrated examples.
- (d) What do you understand by orientation? Explain in detail the factors influencing orientation of built form with respect to sun and wind.

### SECTION – C

**Note:-** Attempt any two questions.  $2 \times 20 = 40$

3. Enumerate the typical features of hot and dry climate. Explain with the help of neat sketches and short notes. What measures an architect should take for a climate responsive design of project.



4. Enumerate climate of India and discuss about the different type of climate in India.
5. What do you understand by ventilation and air movement around a building. Also enumerate the factors affecting indoor air of a built form.

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