

PARUL UNIVERSITY
FACULTY OF ARCHITECTURE & PLANNING
B.Arch./BID Summer, 2017-18 Examination

Semester: 2**Subject Code: 01101155****Subject Name: Architecture & Environment-II****Date: 16/05/2018****Time: 10:00 am to 12:00 pm****Total Marks: 50****Instructions:**

1. All questions are compulsory.
2. Figures to the right indicate full marks.
3. Make suitable assumptions whenever required.
4. Draw suitable sketches whenever required.

Q.1 Draw and explain in detail 'Comfort chart' with comfort zone. **(10)**

Q.2 Attempt any **five** out of the following six. **(20)**

1) Fill in the blanks:

- a. _____ is the state of the atmosphere in terms of such variables as temperature, cloudiness, precipitation and radiation.
- b. The climate of a small area, as of confined space such as caves or houses, communities, is called _____, which may be different from that in the general region.
- c. The general climate of a large area, as of a continent or country is called _____.
- d. The branch of _____ is that which concerned with the relationships between organisms and their environments.

2) Describe in detail the types of ventilation?

3) Explain body heat exchange with an appropriate sketch for heat loss and heat gain.

4) What is solar radiation? Enlist and explain the solar radiation control techniques.

5) What are the common sources of heat gain and heat loss in a building?

6) Describe methods for humidity control through ventilation.

Q.3 Explain the following in brief. (**Any five**) **(10)**

1. Wet bulb temperature.
2. Relative Humidity.
3. Warm and humid climate.
4. Ecological balance.
5. Ecosystem.
6. Cold and cloudy climate.

Q.4 Answer any **two** out the following three. **(10)**

- 1) What is 'Climate'? Enlist various parameters of climate and explain each of them in brief.
- 2) Enlist and explain various factors which influence human comfort condition
- 3) Give difference between Moderate and Composite climate.