

PARUL UNIVERSITY
FACULTY OF ARCHITECTURE
B.Arch Regular Examination Summer 2015-16

Semester: II**Date: 18/05/2016****Subject Code: 01101155****Time: 10:00AM to 12:00PM****Subject Name: Architecture And Environment - II****Total Marks: 50****Instructions:**

1. Each section carries 25marks.
2. Q1 and Q2.a are compulsory questions of each section.
3. Q2.b has sub optional questions.
4. Only one question has to be attempted between Q3 and Q4.
5. Figures to the right indicate full marks.
6. Write separate sections on separate answer sheets.

SECTION: A

- Q.1** Differentiate between “Hot and dry” & “Warm and Humid” climate zone of India. Elaborate passive design techniques for “Hot and dry” & “Warm and Humid” climates in detail. **(10)**
- Q.2 (a)** Explain the effect of humidity on buildings. **(5)**
- Q.2 (b)** Define Solar Altitude Angle and Solar Azimuth Angle. **(5)**

OR

- Q.2 (b)** Write Short Note on Comfort and Comfort Zone. **(5)**
- Q.3** Fill in the Blanks: **(5)**

_____ is the state of the atmosphere in terms of such variables as temperature, cloudiness, precipitation and radiation.

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.

The general climate of a large area, as of a continent or country is called _____ .

The branch of _____ is that which concerned with the relationships between organisms and their environments.

The branch of _____ science is the one concerned with the physical, chemical and biological condition of the environment and their effect on organisms.

OR

- Q.4** What are climate and its parameters? **(5)**

SECTION: B

- Q.1** Define ventilation and its need. Differentiate between stack and cross ventilation. **(10)**
- Q.2 (a)** Describe the Heat Exchange Process between Buildings and external environment. **(5)**
- Q.2 (b)** What are different types of shading devices, their function and factors to be considered while designing? **(5)**

OR

- Q.2 (b)** Explain the effects of landscape on climate and architecture. **(5)**
- Q.3** Define the following: **(5)**
 Roof Pond, Green Roof, Wing wall, Heat Island Doldrums.

OR

- Q.4** Define Humidification and dehumidification. Explain application of water tower. **(5)**