

Seat No: _____

Enrollment No: _____

PARUL UNIVERSITY
FACULTY OF ARCHITECTURE & PLANNING
B.Arch. / B.ID Summer 2018-19 Examination

Semester: 2

Subject Code: 01101155

Subject Name: Architecture & Environment – II

Date: 15/05/2019

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 wherever required.
4. Draw suitable sketches wherever required.

Q.1 Differentiate between “Hot and dry” & “Warm and Humid” climatic zone of India. Elaborate passive design techniques for “Hot and dry” & “Warm and Humid” climates in detail. **(10)**

Q.2 Answer the following: (any 05) each of 04 marks **(20)**

1) Give a classification of climatic zone in India

2) Define the following:

- a) Conduction b) Convection c) Radiation d) Evaporation

3) Fill in the Blanks:

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

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

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

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

4) Explain the following:

- a) Angle of Azimuth and Angle of Altitude b) Latitude and Longitude

5) Describe the Heat Exchange Process between human body and external environment.

6) Elaborate on: ‘The Inter-Relationship of Architecture and Environment’.

Q.3 Write a short note on: **(10)**

a) Human Comfort conditions.

b) Effect of humidity on buildings.

Q.4 Explain in brief: **(10)**

a) Micro climate and Macro climate.

b) Urban Heat Island (UHI) Effect.

OR

Q.4 Answer the following: **(10)**

a) What are design techniques for climate responsive design?

b) What are different types of shading device, their function and factors to be considered while designing?