

**PARUL UNIVERSITY**  
**FACULTY OF ARCHITECTURE**  
**B.Arch. Summer 2016-17 Examination**

**Semester: 2****Subject Code: 01101155****Subject Name: Architecture and Environment-II****Date: 27-05-2017****Time: 10.30 am to 12.30 pm****Total Marks: 50****Instructions:**

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

**SECTION: A**

- Q.1** What is 'Climate'? Enlist various parameters of climate and explain each of them in brief. **(10)**
- Q.2 (a)** Elaborate on: 'The Inter-Relationship of Architecture and Environment'. **(05)**
- Q.2 (b)** Write a short note on: 'Heat Exchange Process of a Human body'. **(05)**

**OR**

- Q.2 (b)** Write a short note on: 'Human comfort conditions' **(05)**
- Q.3** Explain in brief: **(05)**
1. Micro climate and Macro climate.
  2. Urban Heat Island (UHI) Effect

**OR**

- Q.4** Fill in the blanks: **(05)**
- 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 spaces 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 is concerned with the relationships between organisms and their environments.
  - e) The branch of \_\_\_\_\_ science is the one concerned with the physical, chemical, and biological conditions of the environment and their effect on organisms.

**SECTION: B**

- Q.1** Give classification of Climatic zones in India and one climate and its architecture in detail. **(10)**
- Q.2 (a)** Write a short note on: 'Thermal effect on building materials'. **(05)**
- Q.2 (b)** Write a short note on: 'Effect of Humidity on buildings'. **(05)**

**OR**

- Q.2 (b)** Write a short note on: 'Ventilation' **(05)**
- Q.3** Define/Explain briefly the following: **(05)**
1. Angle of Azimuth and Angle of Altitude
  2. Latitude and Longitude

**OR**

- Q.4** Definitions: **(05)**
- |                |                 |              |
|----------------|-----------------|--------------|
| a) Conduction  | b) Convection   | c) Radiation |
| d) Evaporation | e) Transmission |              |