

PARUL UNIVERSITY
FACULTY OF ARCHITECTURE
B. Arch, I.D, Winter 2016-17 Examination

Semester: 2

Date: 27/12/2016

Subject Code: 01101155

Time: 10:00 am to 12:00 pm

Subject Name: Architecture And Environment-II

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 Q3 and Q4 in each section.**
5. Figures to the right indicate full marks.
6. Write separate sections on separate answer sheets.

SECTION: A

- Q.1** Define ventilation, its types, and explain in detail how to achieve good ventilation. (10)
- Q.2 (a)** Explain the effects of landscape on climate and architecture. (05)
- Q.2 (b)** Define Solar Altitude Angle and Solar Azimuth Angle. (05)

OR

- Q.2 (b)** Write Short Note on Comfort and Comfort Zone. (05)
- Q.3** Define the following : (05)
 Conduction, Convection, Radiation, Evaporation, Inversion
- Q.4** Write a short note on: Thermal effect on building materials (05)

SECTION: B

- Q.1** What is 'Climate'? Enlist various parameters of climate and explain each of them in brief. (10)
- Q.2 (a)** Describe the Heat Exchange Process between human body and external environment. (05)
- Q.2 (b)** What are different types of shading devices, their function and factors to be considered while designing? (05)

OR

- Q.2 (b)** What are design techniques for climate responsive design? (05)
- Q.3** Fill in the blanks: (05)
- a) The general climate of a large area, as of a continent or country is called _____.
 - 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 branch of _____ science is the one concerned with the physical, chemical, and biological conditions of the environment and their effect on organisms.
 - d) The branch of _____ is that which is concerned with the relationships between organisms and their environments.
 - e) _____ is the state of the atmosphere in terms of such variables as temperature, cloudiness, precipitation, and radiation.

- Q.4** Explain the effect of humidity on buildings. (05)