

PARUL UNIVERSITY
FACULTY OF ARCHITECTURE
B.Arch./ B.ID, Winter 2018-19 Examination

Semester: 2**Subject Code: 01101155****Subject Name: Architecture and Environment-II****Date: 28/11/2018****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 Enlist 'Elements of Climate'. Give classification of Climatic zones in India. Enlist and explain briefly simple techniques through which Architecture can respond to Climate. **(10)**

Q.2 Write a short note on: (Any 5) (20)

- 1) Heat exchange process in a building
- 2) Effect of Landscape elements on Climate and Architecture.
- 3) Thermal effect on building materials.
- 4) Effect of Humidity on buildings
- 5) Urban Heat Island Effect
- 6) Interrelationship of Climate and Architecture.

Q.3 Define/Explain briefly: (Any 5) (10)

- 1) Micro-climate and Macro-climate
- 2) Angle of Azimuth and Angle of Altitude
- 3) Latitude and Longitude
- 4) Absolute and Relative Humidity
- 5) Sketch a diagram showing: Human Body Heat Exchange process
- 6) Comfort Zone and Effective temperature

Q.4 Write a short note on: (Any 2) (10)

- a) Effect of Climate on Man, Shelter and Environment.
- b) Ventilation
- c) Factors affecting Micro-climate of a site.