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Third Semester B.Arch. Degree Examination, Dec.2013/Jan.2014
Climatology

Time: 3 hrs.

Max. Marks:100

Note: Answer any FIVE full questions.

- 1 List major and subzones of tropical climate and explain briefly the characteristics of any two climatic zones. (20 Marks)
- 2 a. What is meant by site climate? Explain various factors influencing site climate. (12 Marks)
b. Discuss the factors causing deviation of urban climate from macroclimate. (08 Marks)
- 3 a. What is thermal comfort zone? (05 Marks)
b. Explain the effect of climatic elements on thermal comfort. (15 Marks)
- 4 a. What are various functions of ventilation in buildings? (08 Marks)
b. Explain the effects of different type and location of openings on internal air-flow with sketches. (12 Marks)
- 5 a. Name the two angles that determine the position of the sun with respect to a given point on the surface of the earth. Draw sketches to explain them. (10 Marks)
b. Explain the use of sun-path diagram. (10 Marks)
- 6 Write short notes on:
a. Shading devices
b. Time-lag
c. Weather station
d. Bio-climatic chart (20 Marks)
- 7 What is day-light factor? Explain its various components. (20 Marks)
- 8 Explain the design considerations for buildings in hot-dry climate. (20 Marks)
