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**Third Semester B.Arch. Degree Examination, June/July 2016**  
**Climatology**

Time: 3 hrs.

Max. Marks: 100

**Note: Answer any FIVE full questions.**

- 1 a. What is tropical climate? Give the types of tropical climate. (05 Marks)  
b. Explain the characteristics of types of tropical climate. (15 Marks)
- 2 Explain the climate elements and give measuring instruments with the help of neat sketches. (20 Marks)
- 3 a. What are the local factors that influence site climate? Explain with sketches. (12 Marks)  
b. Explain Urban climate. (08 Marks)
- 4 What are the functions of natural ventilation? Explain with sketches design considerations effects of opening & external features on internal air flow. (20 Marks)
- 5 Briefly explain :
  - a. CET
  - b. Bioclimatic chart
  - c. Time lag
  - d. Kata thermometer. (20 Marks)
- 6 a. Draw and name parts of solar chart. (05 Marks)  
b. Explain the two sun angles that help in the design of shading devices. (15 Marks)
- 7 Explain :
  - a. Temperature inversion
  - b. Wind catchers
  - c. Design of Roof in Hot-dry climates
  - d. Plan form for warm-humid climates. (20 Marks)
- 8 Explain with neat sketches and examples the design considerations of buildings in hot and dry climates. (20 Marks)

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Important Note : 1. On completing your answers, compulsorily draw diagonal cross lines on the remaining blank pages.  
2. Any revealing of identification, appeal to evaluator and /or equations written eg, 42+8 = 50, will be treated as malpractice.