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**Third Semester B.Arch. Degree Examination, June/July 2015**  
**Climatology**

Time: 3 hrs.

Max. Marks: 100

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

- 1 a. Name the climatic zones where in "Air movement" inside habitable room's is vital. (05 Marks)  
b. Narrate the factors that are important in designing opening for "Air – movement". Explain with the help of sketches plans and sections, with stress on the roof forms. (15 Marks)
- 2 a. What are the differences between macro climate and micro climate? (10 Marks)  
b. Explain with sketches, the elements and features helping in altering the micro climate on site. (10 Marks)
- 3 a. Explain what is Stack effect. (05 Marks)  
b. How could 'Stack effect' be utilized in ventilating different functions in a building? (15 Marks)
- 4 a. Explain what is "Thermal Insulation". (10 Marks)  
b. Describe the various methods of roof insulation. (10 Marks)
- 5 a. What is Time lag? Explain. (10 Marks)  
b. Describe the techniques of achieving longer time lag in wall construction in Hot and Dry climates. (10 Marks)
- 6 a. What is "Day Light Factor"? (05 Marks)  
b. Describe how 'day light factor' can be useful in functional architectural spaces. (15 Marks)
- 7 Write short notes on :  
a. Thermometers.  
b. Bio climatic chart.  
c. Sun path diagram.  
d. Urban climate. (20 Marks)
- 8 Explain briefly :  
a. The relationship between inlets and outlets.  
b. Roof forms in Hot – Dry climate.  
c. Climatic zones of India.  
d. Comfort zone. (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.