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Third Semester B.Arch. Degree Examination, Dec.2017/Jan.2018
Climatology

Time: 3 hrs.

Max. Marks:100

Note: Answer any FIVE full questions.

- 1 a. What are the major climatic zones in India? Explain the features of any one in detail. (10 Marks)
b. What are the climate data required to understand the climatic characteristics of a place? Describe with example. (10 Marks)
- 2 Explain the term 'Thermal comfort' and its importance in the thermal balance between the human body and the environment. (20 Marks)
- 3 What is a weather station? What elements of climate recorded here? Explain with mention of the instruments used. (20 Marks)
- 4 What are the heat exchange processes of buildings with the outdoor environment? (20 Marks)
- 5 a. What are the two angles that determine the position of the sun with respect to a given point on the surface of the earth? Explain with sketches. (10 Marks)
b. Explain the use of a sun path diagram in climatic design. (10 Marks)
- 6 What is the function of ventilation? (10 Marks)
Explain the effect of openings and external features on internal air flow. (10 Marks)
- 7 What are the factors in formulating a climate responsive design proposal for a hot dry climatic region? (20 Marks)
- 8 Write short notes on :
 - a. Daylight factor
 - b. Composite climate
 - c. Effective temperature
 - d. Evaporative cooling. (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.