

Printed Pages : 2



AR405

(Following Paper ID and Roll No. to be filled in your Answer Book)

PAPER ID : 181409

Roll No.

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B. Arch.

(SEM. IV) THEORY EXAMINATION, 2014-15
CLIMATOLOGY

Time : 3 Hours]

[Total Marks : 50

- Note: (1) Question 1 is compulsory.
 (2) In total attempt five questions.
 (3) All questions carry equal marks.
 (4) Support your answers with neat sketches.

- 1 Write short notes on following : 2×5=10
- Psychometric chart
 - Wet-bulb thermometer
 - Stevenson screen
 - Kata thermometer
 - Day light factor
- 2 Enumerate the typical features of hot and dry climate, 10
 Explain with the help of neat sketches and short notes, what measures an architect should take for a Climate responsive design of project.

- 3 (a) Why do architects need to study Building climatology. 5
- (b) Enlist and explain (any four) Elements of Climate. 5
- 4 What are different types of Shading Devices. Explain the use of solar chart and shadow angle protector for working out shading devices for buildings. Give Illustrated examples. 10
- 5 (a) What is human heat balance and thermal stress index. 5
- (b) Explain bio-climatic chart and effective temperature. 5
- 6 Explain the following : $2 \times 5 = 10$
- (a) Windward and Leeward side. Explain it with the help of diagram showing air movement around building.
- (b) Radiative cooling and Evaporative cooling.
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