



(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

(a) Psychometric chart

(b) Wet-bulb thermometer

(c) Stevenson screen

(d) Kata thermometer

(e) 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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