

**BACHELOR OF ARCHITECTURE
(BARCH)**

Term-End Examination

June, 2013

**BAR-029 : ARCHITECTURAL SCIENCES AND
SERVICES - I (CLIMATOLOGY)**

Time : 3 hours

Maximum Marks : 70

- Note :** (i) *All questions carry equal marks.*
(ii) *Attempt any five questions.*

1. What do you understand by micro and macro climate ? How does it affect the building design ? 14
2. Explain the following terms : 14
 - (a) Thermal Conductivity
 - (b) Day light factor
 - (c) Psychometric chart
 - (d) Effective Temperature
3. What is the heat exchange process of a building and how does it affect the comfort conditions of interiors ? 14
4. Discuss in detail with charts and examples the use of Mahoney's concepts in designing of buildings in tropical climates. 14

5. What do you understand by evaporative cooling ? Discuss in detail. 14
 6. What are the various type of shading devices used in a building ? 14
 7. Define orientation, ventilation and cross ventilation of buildings. Discuss the effect of air movement around the buildings. 14
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