1242221 BAR-029

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BACHELOR OF ARCHITECTURE Term-End Examination June, 2019 BAR-029 : ARCHITECTURAL SCIENCES AND SERVICES-I (CLIMATOLOGY)

Time : 3 Hours Maximum Marks : 70

Note: Question No. 1 is compulsory. Attempt any four questions from the rest. Make neat sketches.

1. Write short notes on any four of the following :

4×5=20

- (a) Stack Effect
- (b) Evaporative Cooling
- (c) Human heat balance
- (d) Mahoney Tables
- (e) Trombe Wall
- 2. Define Shading Devices. Explain with the help of sketches, the role and need of shading devices in different Indian climatic regions.

 $12\frac{1}{2}$

- 3. What is a "Wind Scoop" ? Explain its working with suitable diagrams. $12\frac{1}{2}$
- 4. Explain with suitable diagrams, the importance of "Courtyard" in tropical residential buildings. $12\frac{1}{2}$
- 5. What do you understand by 'Physiological Comfort' ? Discuss in detail the importance of thermal performance of building elements in relation to physiological comfort. $12\frac{1}{2}$
- 6. For a composite climate like Delhi, what are the design considerations in form and planning of building? $12\frac{1}{2}$

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