



**DAT-161001010306**

Seat No. \_\_\_\_\_

**B. Architecture (Sem. III) Examination**

**May - 2022**

**Environmental Science & Services-I**

Time : **2 Hours**]

[Total Marks : **80**

**Instructions :** Any three out of question 1 to 5 and question 6 is compulsory.

- 1** Explain with neat diagram : (any **five**) **15**
  - (a) Humidity
  - (b) Time-lag
  - (c) China mosaic floor
  - (d) Heat reflecting Glass
  - (e) Altitude and Azimuth of Sun-path Diagram
  - (f) Specific heat
- 2** Explain stack and wind effect. What are the principle **15**  
followed in planning for good natural ventilation in the building?
- 3** Explain Various of Shading devices and their effectiveness **15**  
for different orientation.
- 4** Design strategies adopted in design of houses at Div. **15**
- 5** Explain the reasons from climate responsive point of **15**  
view behind using this strategies: (any **three**)
  - (a) Use of earthy color on walls of houses in Rajasthan
  - (b) Fountain in the courtyard of an old Haveli in Ahmedabad
  - (c) Protection of Glass Facade of a shop facing sun

- (d) Roof Overhang on all four side of outer wall in South Indian houses
- (e) Decoration on the exterior stone facade of the Temple, fort etc.

**6** Match the following :

**5**

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|----------------|------------------------|
| (1) Delhi      | (a) Cool sunny climate |
| (2) Jaisalmer  | (b) Warm-humid climate |
| (3) Leh        | (c) Hot-dry climate    |
| (4) Trivandram | (d) Composite climate  |
| (5) Pune       | (e) Temperate climate  |
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