

B.Arch. Tenth Semester (Architecture Engineering) (CGS)
10078 : Climate Responsive Architecture
010 AR 01

P. Pages : 1

Time : Three Hours



AV - 3207

Max. Marks : 80

- Notes :
1. Question No. **one** is compulsory.
 2. Due credit will be given to neatness and adequate dimensions.
 3. Assume suitable data wherever necessary.
 4. Illustrate your answer necessary with the help of neat sketches.
 5. Use of pen Blue/Black ink/refill only for writing the answer book.

1. Explain with diagram the non-conventional hybrid energy generation system and its importance. 20
2. Explain with sketches the concept ideas and issues to develop and implement sustainable architecture. 20

OR

3. a) Explain the Global environmental problems and issues ? 10
b) Explain with sketches the role of climatic factors to generate environmentally supportive architecture ? 10
4. a) Explain with diagram the purpose of daylight factor. 10
b) Explain with sketches the types of ventilation systems and its purpose ? 10

OR

5. a) Explain with diagram the stack effect & reverse stack effect ? 10
b) Explain with sketches the orientation of openings and its sizes with respect to climate ? 10
6. Explain with sketches the planning design, material and technique to be considered in Hot & Dry climate ? 20

OR

7. a) Explain with sketches the evolution of planform & Built up forms in Hot & Dry climate to minimize heat gain ? 10
b) Explain with diagram the wind energy generation system & its application ? 10
