

Roll No.

Total No. of Pages : 02

Total No. of Questions : 09

B. Architecture (Sem.-4)
CLIMATE AND SUSTAINABILITY-I

Subject Code : BACH-406

M.Code : 71021

Date of Examination : 18-07-22

Time : 3 Hrs.

Max. Marks : 60

INSTRUCTION TO CANDIDATES :

1. Question 1 is compulsory.
2. Attempt any FIVE questions with minimum one question from each UNIT.
3. Draw sketches where required.

1. Write short notes on the following : (2.5×4)

- a) Embodied energy.
- b) Xeriscaping.
- c) U-Value.
- d) GRIHA.

UNIT-I

2. Discuss the significance of ventilation in buildings. (12.5)
3. Enlist and describe the factors which affect the indoor air flow in a building. (12.5)

UNIT-II

4. Discuss how do the landscape elements help in modifying the climate of a site? (12.5)
5. Discuss in detail the solar control measures on the exterior of a building facade. (12.5)
6. With reference to thermal properties of building materials discuss the following :
 - a) Conductance and conductivity. (6.5)
 - b) Decrement factor and time lag. (6)

UNIT-III

7. Enlist the components of sustainable architecture, and discuss their role & importance. (12.5)
8. Briefly discuss the major objectives and fundamental principles of ECBC. (12.5)
9. Distinguish between renewable resources of energy and non renewable resources of energy with examples. Also discuss their role in sustainability. (12.5)

NOTE : Disclosure of Identity by writing Mobile No. or Making of passing request on any page of Answer Sheet will lead to UMC against the Student.