



CBCS SCHEME

21CV646

Sixth Semester B.E. Degree Examination, June/July 2024 Alternative Building Materials

Time: 3 hrs.

Max. Marks: 100

Note: Answer any FIVE full questions, choosing ONE full question from each module.

Module-1

- 1 a. Explain energy in building materials. Illustrate content in one burnt brick. (10 Marks)
b. List the four categories of energy consumption in building and explain them. (10 Marks)

OR

- 2 a. List out various environmental friendly and cost effective building technologies. Explain any one in brief. (10 Marks)
b. What are the advantages of LEED? List out main categories in LEED rating system. (10 Marks)

Module-2

- 3 a. Explain table moulded bricks and wire cut brick along with characteristics. (10 Marks)
b. Write short notes on: (i) Late rite blocks (ii) Fal G blocks (10 Marks)

OR

- 4 a. Explain concept of Stabilized Mual Block (SMB). (10 Marks)
b. List the properties of good mortar and explain any two in detail. (10 Marks)

Module-3

- 5 a. Name different types of pozzolona material. Explain any two in detail. (10 Marks)
b. Write notes on: (i) Metallic fiber (ii) Natural fiber (10 Marks)

OR

- 6 a. List the agro wastes and mention its application in the building construction. (10 Marks)
b. What are different industrial wastes used effectively in construction industry? Explain any two materials. (10 Marks)

Module-4

- 7 a. What are primary functions of a roof? Explain briefly the various roofing alternative. (10 Marks)
b. What are the materials used in ferrocement? Explain the construction method in brief. (10 Marks)

OR

- 8 a. Explain composite masonry and cavity wall masonry. (10 Marks)
b. Write the advantages and disadvantages of Mivan construction. (10 Marks)

Module-5

- 9 a. What are the advantages and disadvantages of manufacturing concrete from RMC plant? (10 Marks)
b. What is meant by precast elements? What are the advantages of precast elements? (10 Marks)

OR

- 10 a. Write short notes on: (i) Type of concrete mixers (ii) Cost concept in buildings (10 Marks)
b. What are the equipments used for producing stabilized mud blocks? Explain in brief. (10 Marks)

Important Note : 1. On completing your answers, compulsorily draw diagonal cross lines on the remaining blank pages.
2. Any revealing of identification, appeal to evaluator and/or equations written eg, 42+8 = 50, will be treated as malpractice.