CBCS SCHEME



USN

18ARC62

Sixth Semester B.Arch. Degree Examination, June/July 2025 Materials and Methods in Building Construction - VI

Time: 4 hrs.

Max. Marks: 100

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

Module-1

1 a. Describe the importance of glass in the building industry.

(05 Marks)

b. What are the different types of glass available for use in buildings?

(05 Marks)

c. Describe any two types, their uses, advantages and disadvantages with sketches if necessary.

(10 Marks)

OR

Design a frameless glass door for an opening of 2.4 M wide between reception area and waiting lobby. Draft full plan, elevation and section to appropriate scale along with two details. Assume standard lintel height.

(20 Marks)

Module-2

a. What do you mean by point supported glazing? Describe with sketches. (10 Marks)

b. What is the composition of ACP? What are the advantages and disadvantages of ACP?

(10 Marks)

OR

Design a two storey front façade for an industrial building using metal cladding. Draft full plan, elevation and section to appropriate scale along with any two details. Floor to floor height is 4.0M.

(20 Marks)

Module-3

a. What is the advantage of UPVC over PVC?

(10 Marks)

b. What is FRP? What are its uses in the building industry?

(10 Marks)

OR

Design wood and glass sliding door for a 3M wide opening between a living room and verandah. Draft full plan, elevation and section along with two details to an appropriate scale. Assume floor to ceiling opening height of 3.5M.

(20 Marks)

Module-4

Design a aluminum and glass partition for an office. Draft full plan elevation and section to an appropriate scale along with two details to an enlarged scale. Assume standard room dimensions and heights.

(20 Marks)

OR

a. Detail out the advantages of steel and aluminum in the construction sector.
b. Do you think these materials are environment friendly? Give valid arguments.
(10 Marks)
(10 Marks)

Module-5

9 a. What is a Skylight? Describe with sketches? (10 Marks)
b. Mention Skylight's advantages if used in buildings. (10 Marks)

OR

- 10 a. What do you mean by alternative wall technologies? Describe sandwich panels using sketches.

 (10 Marks)
 - b. What are the advantages of using sandwich panels in buildings? (10 Marks)

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