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Sixth Semester B.Arch. Degree Examination, June/July 2023 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. Explain how glass plays an important role in the construction industry. (10 Marks)
b. Explain any 5 types of glass commonly used in building construction. (10 Marks)

OR

- 2 A shopfront in a mall has to be designed with a frameless glass door for an opening of 3000 × 3600mm. Assuming suitable scales, draw plan, elevation, cross sections and 2 minimum associated details for the same. (20 Marks)

Module-2

- 3 With neat sketches, explain the various support systems the point fixed support glazing uses. (20 Marks)

OR

- 4 a. With neat illustrations, explain any 4 types of structural glazing systems. (10 Marks)
b. Why is aluminum preferred as a building material? Illustrate with details the common types of sun lowers seen in buildings. (10 Marks)

Module-3

- 5 An artist's studio requires an opening of 3000 × 2700mm to be designed with a wooden sliding folding door design. With suitable scale, draw plan, elevation, cross-sections and any 2 details. (20 Marks)

OR

- 6 An architect's office requires an opening of 3000 × 2700mm to be designed with a UPVC door design. Assuming suitable scales, draw plan, elevation, cross-sections and any 2 details for the same. (20 Marks)

Module-4

- 7 Design and detail an opening of 3600mm × 2700mm for a conference room in an office using aluminium sliding folding doors. Draw the construction mechanism for the same with a layout plan, elevation, cross sections and details related to the same. (20 Marks)

OR

- 8 Explain the working mechanism with neat sketches of a steel sliding folding door. (20 Marks)

Module-5

- 9 A music studio with a recording room of size 4000 × 4500mm requires to be sound proofed using appropriate sandwich panels, provide construction details with suitable sketches for the same. (20 Marks)

OR

- 10 Design and detail a skylight in a terrace for an opening of size 1200 × 1500mm. Draw with suitable scale the plan, elevation, cross-sections and details for the same. (20 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 e.g. 42+8 = 50, will be treated as malpractice.