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Second Semester B.Arch Degree Examination, Jan./Feb.2021 Materials and Methods in Building Construction – II

Time: 4 hrs.

Max. Marks:100

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

Module-1

- 1 Explain with sketches :
- a. Lean to roof.
 - b. Collared roofs. (20 Marks)

OR

- 2 Explain :
- a. Sketch types of steel roof truss. (10 Marks)
 - b. Differentiate between G.I and Aluminium sheets for roofing. (10 Marks)

Module-2

- 3 Explain various standard tests on Portland cement. (20 Marks)

OR

- 4
- a. Explain applications of precast concrete in construction and its advantages and disadvantages. (10 Marks)
 - b. Explain procedure of preprepared ready mix concrete and its merits over the concrete prepared on site. (10 Marks)

Module-3

- 5
- a. What do you understand by the term Form work in RCC construction? Suggest appropriate methods of erecting form work for a semicircular Arch. (10 Marks)
 - b. What are the different methods of curing of concrete? (10 Marks)

OR

- 6 Explain with sketches, different types of Foundations and Footings. (20 Marks)

Module-4

- 7 What are types of staircases used in buildings? Define important components of staircase with the help of neat sketch. (20 Marks)

OR

- 8 Draw a plan (1 : 20) and sectional elevation (1 : 20) of RCC – Folded type staircase to access a height of 3150 mm with a staircase room of internal dimension are 4500 mm × 3500 mm. (20 Marks)

Module-5

- 9 Explain with sketches various components of steel stair case. (20 Marks)

OR

- 10 Explain with sketches, composist stair of,
- a. Steel and Glass. (10 Marks)
 - b. Concrete and Wood. (10 Marks)

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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.