CBCS SCHEME

USN | | | | | | | | | | |

18ARC42

Fourth Semester B.Arch. Degree Examination, June/July 2023

Materials and Methods in Building Construction – IV

Time: 4 hrs. Max. Marks: 100

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

Module-1

1 a. Explain in detail different types of flat slab. **(10 Marks)**

b. Explain with sketches difference between flat slab and conventional slab beam system. **(10 Marks)**

OR

2 Draw following details of a flat slab with drop panel of span 20 m × 16 m.

a. Plan **(08 Marks)**

b. Section **(06 Marks)**

c. Any two detail **(06 Marks)**

Assume suitable scale

Module-2

3 Design a Manglore Tile Filler slab for a residence. Draw following details.

a. Plan **(10 Marks)**

b. Section **(06 Marks)**

c. Detail (any 1) **(04 Marks)**

Assume suitable scale.

OR

4 a. Explain with sketches RCC Waffle slab. **(10 Marks)**

b. Explain with sketches RCC Filler slab. **(10 Marks)**

Module-3

5 Explain the different types of steel sections used in the construction with its uses and properties. **(20 Marks)**

OR

6 Sketch the following junction details of structural steel sections.

a. Column to beam junction **(10 Marks)**

b. Beam to beam junction **(10 Marks)**

Module-4

7 Draw steel window of size 1m × 1.35 m showing following details.

a. Plan **(06 Marks)**

b. Elevation **(06 Marks)**

c. Section **(06 Marks)**

d. Any one detail **(02 Marks)**

Assume suitable scale.

OR

8 Explain the following with neat sketches.

a. Collapsible gate **(10 Marks)**

b. Rolling shutters **(10 Marks)**

Module-5

9 Draw aluminium sliding window of size 1m × 1.35m showing following details.

a. Plan **(06 Marks)**

b. Elevation **(06 Marks)**

c. Section **(06 Marks)**

d. Any one detail. **(02 Marks)**

OR

10 Draw plan, elevation, section with joinery detail of aluminium partition of size 6m × 3m (height). **(20 Marks)**

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