

CBCS SCHEME

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15ARC72

Seventh Semester B.Arch. Degree Examination, Feb./Mar. 2022 Materials and Methods in Building Construction - VII

Time: 4 hrs.

Max. Marks: 100

- Note: 1. Answer any FIVE full questions, choosing ONE full question from each module.
2. Assume suitable data/scale if required.
3. Draw neat sketches wherever necessary.

Module-1

1 Write short notes on :

- a) MDF Board (05 Marks)
- b) Block Board (05 Marks)
- c) Laminates (05 Marks)
- d) Particle Board (05 Marks)

OR

2 Design a Wardrobe for a bedroom size of 3.6m × 4m. Provide following details :

- a) Plan with furniture layout (1 : 20) (05 Marks)
- b) Wardrobe section (1 : 20) (05 Marks)
- c) Wardrobe Elevation (1 : 20) (05 Marks)
- d) Any one detail (1 : 5) (05 Marks)

Module-2

3 Explain with sketches :

- a) Timber Partition (07 Marks)
- b) Aluminum partition (07 Marks)
- c) Metal Baskets in modular kitchen. (06 Marks)

OR

4 Design modular kitchen for a room size of 3.6m × 3.6m. Provide following details.

- a) Plan – 1 : 20 (05 Marks)
- b) Section – 1 : 20 (05 Marks)
- c) Elevation – 1 : 20 (05 Marks)
- d) Any one detail – 1 : 5 (05 Marks)

Module-3

- 5 a. Explain with sketches prestressed concrete. (10 Marks)
- b. Explain in detail materials used in false ceiling. (10 Marks)

OR

6 Design a Grid false ceiling for a room size of 4m × 4m.
Provide following details :

- a) Reflected ceiling plan – 1 : 20 (07 Marks)
- b) Section (Partial section) (1 : 10) (07 Marks)
- c) Any one detail (1 : 5) (06 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.

Module-4

- 7 Design a raft foundation showing following details.
- a) Plan showing reinforcement details (07 Marks)
 - b) Section showing reinforcement details (07 Marks)
 - c) Any two detail (06 Marks)

OR

- 8 Explain with sketches :
- a) RCC cantilever Retaining wall (05 Marks)
 - b) Mechanically stabilized earth retainers walls (05 Marks)
 - c) Sheet piles (05 Marks)
 - d) Friction piles (05 Marks)

Module-5

- 9 Write short notes on :
- a) Treatment for Bamboos (07 Marks)
 - b) Bamboo joinery details (07 Marks)
 - c) Prefabricated construction (06 Marks)

OR

- 10 Draw following detail to suitable scale.
- a) Bamboo wall details (06 Marks)
 - b) Bamboo foundation details (07 Marks)
 - c) Bamboo roof details (07 Marks)
