

# CBCS SCHEME

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15ARC7.2

## Seventh Semester B.Arch. Degree Examination, Dec.2018/Jan.2019 Materials and Methods of 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. Assume suitable data/scale if required.

### Module-1

- 1 Provide design of construction details for a wardrobe of size 1.8m × 2.1m high and 600 mm deep with the following drawings:
- Plan, Section, Elevation (inside and outside) to a scale of (1:20). (15 Marks)
  - Draw any one fixing detail. (1 : 5 scale) (05 Marks)

OR

- 2 Write short notes on:
- Particle Board. (05 Marks)
  - HDF. (05 Marks)
  - Plywood. (05 Marks)
  - Veneers. (05 Marks)

### Module-2

- 3
- Explain with sketches different types of hinges and channels used in interiors. (10 Marks)
  - Explain with sketches different partition systems. (10 Marks)

OR

- 4
- Explain with sketches modular kitchen with cabinet shelves. (10 Marks)
  - Design and detail a work station to seat 4 people with requisite storage. Draw plan elevation and section to scale 1 : 10. (10 Marks)

### Module-3

- 5 Design a false ceiling for a room size of 3.6m × 6m . Provide following details:
- Reflected ceiling plan to scale 1 : 20. (10 Marks)
  - Cross section to scale 1 : 10 (Partital section) (06 Marks)
  - Any one detail. (04 Marks)

OR

- 6 Explain following with neat sketches:
- False ceiling . (05 Marks)
  - Cove lighting. (05 Marks)
  - Prestressed structures. (05 Marks)
  - Post tensioned structures. (05 Marks)

**Module-4**

- 7 a. Explain with sketches different types of Raft foundations. (10 Marks)  
 b. Write short notes on:  
 (i) SBC of soil.  
 (ii) Grillage foundation.  
 (iii) Earth retaining structure - Sheet pile.  
 (iv) Earth retaining structure - Gravity walls. (10 Marks)

OR

- 8 Write short notes on:  
 a. Pile foundations. (10 Marks)  
 b. Different types of Ra foundations. (10 Marks)

**Module-5**

- 9 Design a security room of size 3m × 3m using bamboo for complete superstructure work. Provide following details:  
 a. Plan - 1 : 20 scale (08 Marks)  
 b. Section - 1 : 20 scale. (04 Marks)  
 c. Elevation - 1 : 20 scale. (04 Marks)  
 d. Any one detail - 1 : 5 scale. (04 Marks)

OR

- 10 Explain the following with neat sketches:  
 a. Bamboo structures. (10 Marks)  
 b. Prefabricated construction. (10 Marks)

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