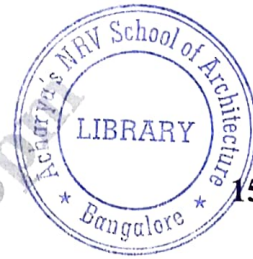


CBCS SCHEME



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15ARC72

Seventh Semester B.Arch. Degree Examination, Aug./Sept. 2020 Materials and Methods in Building Construction – VII

Time: 4 hrs.

Max. Marks: 100

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

Module-1

1 List the properties and uses of the following materials.

- Plywood
- Particle board
- Block board
- Wood wool.

(20 Marks)

OR

2 Design a wardrobe of size 2.4m × 2.1m high with 600 deep and accommodate dressing also as part of wardrobe.

- Plan, section and elevation (Internal) to scale 1:20
- Any two details.

(12 Marks)

(08 Marks)

Module-2

3 Design a Kitchen of size 4m × 3m with height of 3m. Assuming a window of 1.2m wide on the 3m side wall. With a sill of 900mm. Draw the following :

- The plan
- Elevation
- Section
- Detail.

(04 Marks)

(08 Marks)

(04 Marks)

(04 Marks)

OR

4 Design an office space of 8m × 12m with 6 work stations and 3 cabins and fitting cabinets and other necessary furniture. Entrance from the shorter side. Draw the

- Plan and furniture layout
- Details of cabins with elevation and section
- Details of the partition.

(08 Marks)

(08 Marks)

(04 Marks)

Module-3

5 A false ceiling to be designed for an office space of 5m × 7m. Choose the system ideal for office space.

Detail the following :

- Reflected ceiling plan to scale (1:20)
- Section and blown up section
- Concealed light fixture detail.

(08 Marks)

(08 Marks)

(04 Marks)

OR

6 Explain with sketches pre-stressing construction. Detail of the following :

- Prestressed Beam and slab connection
- prestressed Beam and to column connection.

(10 Marks)

(10 Marks)

Module-4

- 7 a. Explain when deep foundations are used. (05 Marks)
b. What are the types of mat foundation? Explain through sketches. (15 Marks)

OR

- 8 List the advantages of the following : (20 Marks)
a) Timber piles
b) Precast concrete piles
c) Cast In situ – concrete piles.

Module-5

- 9 Write short notes on : (10 Marks)
a) CAD/CAM Technology (10 Marks)
b) Prefabrication in India.

OR

- 10 a. List the advantages of Bamboo as a Building material. (06 Marks)
b. with sketches, explain the following : (07 Marks)
i) Bamboo Flooring (07 Marks)
ii) Bamboo walls.
