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# B. Arch. Examination 2021-22

(Even Semester)

## BUILDING CONSTRUCTION AND MATERIALS - II

Time: Three Hours]

[Maximum Marks: 60

- Note: (i) Attempt all questions.
  - (ii) Assume any missing data.
  - (iii) Weightage will be given to neat drafting.

# SECTION-A

- 1. Explain / define the following questions:  $8 \times 1 = 8$ 
  - (a) What is the difference between Arches and Lintels?
  - (b) What is Timber?
  - (c) What do you understand by the term D. P. C.?

- (d) Define the term Voussoirs.
- (e) Explain the corbelling.
- (f) Give five names of D. P. C. materials.
- (g) Define the term R. C. C. and R. B. work.
- (h) Explain the horizontal D. P. C. in brief.

#### SECTION-B

- 2. Attempt any two parts of the following:  $2 \times 6 = 12$ 
  - (a) Draw an arch in elevation and show the elements on it:
    - (i) Extrados
    - (ii) Intrados
    - (iii) Key stone
    - (iv) Voussoirs
    - (v) Spandril
    - (vi) Haunch

(Assume the data).

(b) Draw a sketch of Mortise and Tennon joint **OR** single dovetailed joint. Also write short notes on it.

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- Write the advantages and disadvantages and uses (c) of reinforced cement concrete.
- Where and how does the D. P. C. material is (d) used in construction?

## SECTION-C

Note: - Attept any two questions of the following.

 $20 \times 2 = 40$ 

- What is Timber? Explain the classification, defects and preventions of timbers with neat sketches.
- Draw the corner details of rat trap bond, having length of wall 2100 mm side, show alternate courses of plan and taking height upto 600 mm in elevation. (Assume suitable data).
- Draw the plan, elevation, and section of a wooden 5. framed, ledged, braced and battened door, having size 1,000 mm × 2100 mm (in scale 1:100). Also draw any two details in scale 1:1 or 1:5.