

Roll No.

Total No. of Questions : 06

Total No. of Pages : 01

Paper ID

B.Arch. (Sem.-1st)**BUILDING CONSTRUCTION AND MATERIALS – I (AR-102)**

Time: 04 Hours

Maximum Marks : 60

Instructions to Candidate:Attempt any **One** question from each part.**PART – A**

Q.1 (a) Define:-

- Queen closer (9)
- King closer
- Mitred closer

(b) Sketch and explain the difference between English bond and Flemish bond. (11)

Q.2 Draw plans of alternate courses and a cross-section through an L shaped $13\frac{1}{2}$ thick brick walls in English bond. (20)

PART – B

Q.3 (a) Briefly describe with the help of sketches the step by step procedure for construction of Segmental arch in brick masonry. (8)

(b) Draw the relevant plans, Elevation, Sectional details for a brick jalli of size $12' \times 8'$. (12)

Q.4 (a) Write illustrated short notes on any two of the following:

- Window sill and lintel.
- Coping and threshold details.
- Flat and semicircular arch in brick masonry. (9)

(b) Design a Brick jalli of 6'-0" height for the terrace of your house. Draw its plan, elevation and section. (11)

PART – C

Q.5 Draw plans and cross-section through an 18" thick coursed ashlar stone masonry work. (20)

Q.6 (a) Describe with sketches:-

- (1) Random rubble masonry coursed (2) Difference Between Plastering and Pointing
- (b) What are the different types of stones used in stone masonry? Discuss common defects of stone. (20)