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B.Arch. (2019 PIT) (Sem.-1)
BUILDING CONSTRUCTION & MATERIALS-I
Subject Code : UC/BARCH-105-19
M.Code : 77237

Max. Marks : 40

1. Attempt four questions in all selecting one from each Unit. All questions carry equal marks. Use any suitable scale for your drawing work.

1. List any four types of cement. What are the constituents of cement? Explain its advantages over lime in building construction.
2. Compare the constituents, properties and uses of lime mortar and cement mortar.

3. Draw to a suitable scale, plans of consecutive courses and elevation of cross junction of 1 brick thick and half-brick thick wall in English bond.
4. Draw plans of consecutive courses and elevation of a T-junction between a 9" and 13½" brick wall in English bond.

5. Draw a vertical section through a 9" thick external brick wall in a single storey structure showing threshold, sill and lintel details.
6. Draft out on a suitable scale a flat, segmental and semi-circular arch in brick masonry.

7. Draw detail plan, elevation and section of Random rubble masonry (built to course) for a 450mm thick stone wall.
8. Sketch out scaled diagrams (plans, elevations and sections) of various types of stone masonry used in building works.

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