

235

Register No.:

June 2022

Time - Three hours
(Maximum Marks: 100)

- [N.B.]*
1. Answer all questions under Part-A and Part-B in the drawing sheet supplied.
 2. Q.No. 1 & 2 each carries 4 marks, Q.No 3 carries 12 marks and Q.No. 4 carries 80 marks
 3. Sketches under Part-A shall be drawn using pencil and drawing instruments not necessarily to scale.
 4. Any data not given may be assumed suitably and shall be indicated in the drawing.
 5. All dimensions indicated are in "mm".]

PART - A

1. Sketch the symbol for
 - a) Revolving door (b) Water meter
 - c) Fire extinguisher and d) Earthing
2. Write the front open space (set back) for a building fronting a street of width
 - i) up to 7.5m ii) 7.5m to 8m iii) 18 to 30m and iv) above 30m
3. Sketch the elevation of "fully paneled double leaf door" to the following specifications. (All dimensions are in mm)

Size of door:	900 x 2100
Door frame size:	75 x 100
Top rail:	100 x 40
Lock rail:	150 x 40
Bottom rail:	150 x 40
Vertical style:	100 x 40

[Turn over.....

PART - B

4. The sketch "A" shows the line plan of "A two room house with RCC slope roof with gable ends. The dimensions noted in the line plan are clear dimensions between the walls. The specifications are given below.

Specifications:

1. Foundation: For all main walls, the foundation shall be in cement concrete 1 : 4 : 8 mix, 900 x 300 laid at 1200 below ground level. The masonry footings shall be in brick work in cement mortar 1 : 5. The first footing being 600 x 450 and second footing being 460 x 450 for all main walls.
2. Basement: The basement shall be in brick work in cement mortar 1 : 5, 350 x 600 above ground level for all the walls and inside filled with quarry dust /clean sand to a depth of 450. A damp proof course in cement mortar 1 : 3, 20 thick shall be provided for all walls at basement level.
3. Super structure: For all main walls super structure shall be in brick work with cement mortar 1 : 5, 230 thick. The height of the walls shall be 3000 and raised to the required height with the slope. All walls including basement shall be plastered with cement mortar 1 : 4 externally and 1 : 6 internally for 12.5 thick.
4. Roofing: The slope of the roof shall be 30°. The roofing shall be with RCC 1:1.5:3 mix, 150 thick and finished with weathering course 100 thick including one layer of hydraulic pressed tiles of size 250 x 250 x 20 in CM 1:3 with water proofing compound.
5. Lintel: For all openings R.C.C. lintel 150 thick with 1 : 1.5:3 mix shall be provided. Sunshade 75 thick and 600 wide shall be provided throughout the building.
6. Flooring: The floor finishing 50mm thick shall be carried out using marble 25 thick in cement mortar 1 : 3, 25 , thick over flooring concrete 1 : 5 : 10 of 100 thick.
7. Steps: Steps shall be in brick work in cement mortar 1 : 5 laid over a cement concrete bed 1 : 5 :10 of 100 thick. Rise shall be 150 and Tread 300. .

8. Doors, Windows

D1 -Paneled Door	-	1000 x 2100
W -Paneled Window	-	1200 x 1200
O - Opening	-	1000 x 2100

Note:

- 1) All dimensions mentioned are in millimeters.
- 2) Assume any other dimensions if necessary and mention the same in the drawing.

Draw to a suitable scale the following views with required dimensions and details.

1. Plan at window sill level (30 Marks)
2. Sectional elevation on AB (30 Marks)
3. Front elevation (20 Marks)

