

22405

12425

4 Hours / 70 Marks

Seat No.

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- Instructions :**
- (1) All Questions are *compulsory*.
 - (2) Answer each next main Question on a new page.
 - (3) Illustrate your answers with neat sketches wherever necessary.
 - (4) Figures to the right indicate full marks.
 - (5) Assume suitable data, if necessary.
 - (6) Use of Non-programmable Electronic Pocket Calculator is permissible.
 - (7) Mobile Phone, Pager and any other Electronic Communication devices are not permissible in Examination Hall.

Marks

1. Attempt any THREE of the following :

12

- (a) Draw graphical symbols for
 - (i) UCR masonry
 - (ii) Brick masonry
 - (iii) Timber
 - (iv) Double shutter double swing door
- (b) Draw neat sketches for the following lines :
 - (i) Center line
 - (ii) Hidden line
 - (iii) Section line
 - (iv) Extension line

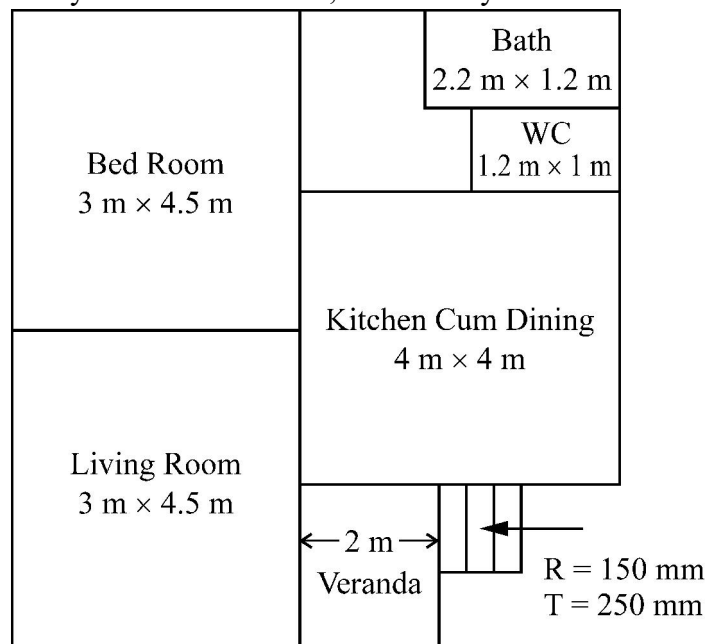


- (c) (i) Suggest suitable scales for site plan and submission drawing.
 (ii) Mention the standard sizes of A3 and A4 papers.
- (d) Define the terms :
 (i) Vanishing point
 (ii) Picture plane
- (e) State the importance of site plan.
2. Draw to a suitable scale the line plan of a Bank building. Show different units with their sizes, positions of doors & windows. 10
3. **Attempt the following :** 12

Figure No. 1 shows line plan of a residential building. Draw developed plan in 1:50 scale. Show all dimensions and label the parts.

Given data –

- (1) The structure is a load bearing structure.
- (2) Super structure consists of BBM with walls 300 mm thick and internal walls for bath and WC 100 mm thick.
- (3) Assume Chajja projection 650 mm, Slab projection 150 mm, Rise 150 mm, Tread 250 mm.
- (4) Plinth height 600 mm.
- (5) Assume any other suitable data, if necessary.



(Not to Scale)

Figure No. 1

4. Attempt any TWO of the following : 12

- (a) Draw a neat sketch showing RCC components of lintel with Chajja projection of 650 mm. Use 1:20 scale.
- (b) Draw plan and section of RCC column footing with following data :
 - (i) Size of footing – 1200 mm × 1200 mm
 - (ii) Size of column – 230 mm × 230 mm
- (c) State the purposes of Measured drawing and Submission drawing.

5. Attempt any TWO of the following : 12

- (a) Suggest various units and their sizes for a Primary Health Centre for a village.
- (b) Define the following :
 - (i) Built-up area
 - (ii) Carpet area
 - (iii) Floor area ratio
- (c) Define Aspect, Prospect and Circulation with examples.

6. Attempt any ONE of the following : 12

- (a) Draw a plan and section of a single flight of RCC staircase from the following data :

Number of Risers – 10 of 150 mm height

Number of Treads – 9 of 250 mm width

Width of staircase – 1200 mm

Landing at top – 1200 mm × 1200 mm

- (b) Draw two point perspective view of a stone memorial pillar shown in Figure No. 2 to a suitable scale. The observer stands at a distance of 6 m along the central visual ray. Assume eye level is at 1.5 m above G.L. Retain all construction lines.

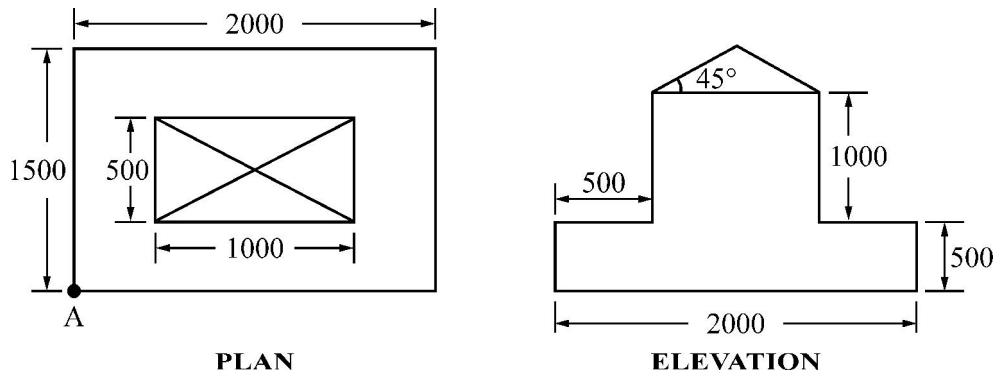


Figure No. 2

Consider ref point A touching picture plane and longer side making an angle of 60° with p.p.
