

22405

11920

4 Hours / 70 Marks

Seat No.

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

Marks

1. Attempt any THREE of the following :

3 × 4 = 12

- (a) Draw graphical symbols as per IS 962 – 1989.
 - (i) Brickwork
 - (ii) Partition Block
 - (iii) Wood
 - (iv) Single shutter door
- (b) (i) Suggest suitable scale for following :
 - (1) Location plan
 - (2) Door details
 - (ii) Define prospect and ventilation in principles of planning.
- (c) State the purpose of writing the construction notes in the working drawing.
- (d) Define the terms :
 - (i) Centre of vision
 - (ii) Picture plane
- (e) State the purpose of preparing data drawing and measures drawing. (At least two purposes each)

2. Draw to a suitable scale the line plan of a post office for a taluka place with different units. Also, show position of doors, windows and dimensions of each room. **10**

3. **Attempt the following :** **12**

Fig. No. 1 shows a line plane of residential building. Draw developed plan with suitable scale. Show all dimensions and label the parts.

Given data :

- (1) Super structure consists of B.B. Masonry with walls 230 mm thick and internal walls for bath and W.C. 110 mm thick.
- (2) Assume Chajja projection 450 mm.
- (3) Plinth height 600 mm.
- (4) Width of main door 1.2 m, internal door 0.9 m and window 1.2 m, ventilator/louvres – 0.8 m.

Assume suitable data if necessary.

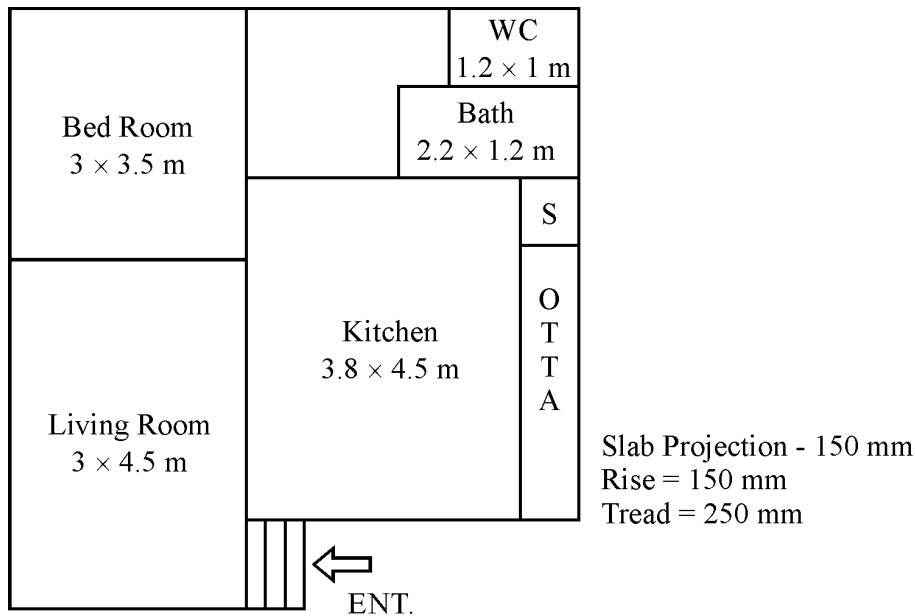


Fig. 1

4. Attempt any TWO of the following :

2 × 6 = 12

- (a) State the importance of submission drawing and working drawing in civil engineering works.
- (b) Prepare schedule of openings and area statement table for fig. No. 1.

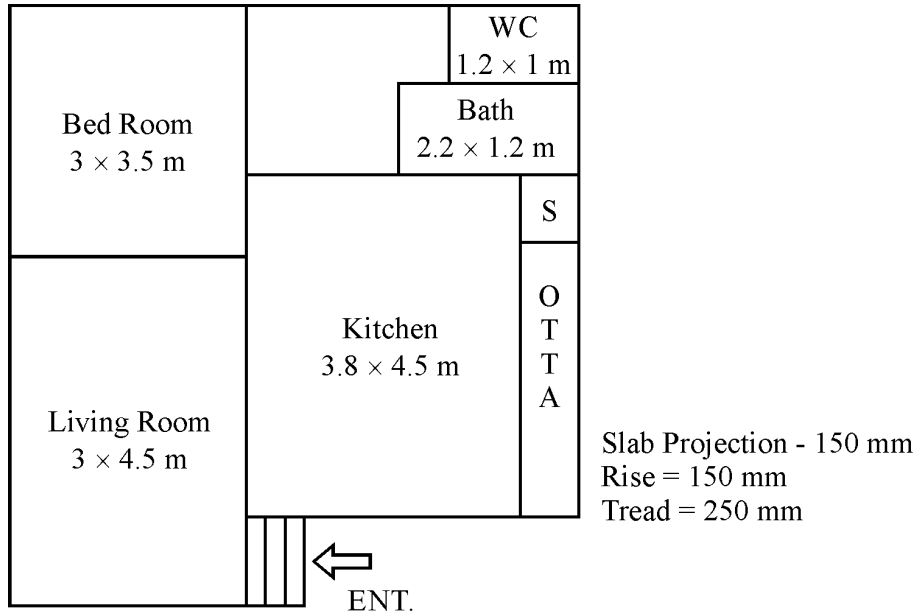


Fig. 1

- (c) Differentiate between load bearing and framed structure.

5. Attempt any TWO of the following :

2 × 6 = 12

- (a) Enlist the various documents and drawings required for municipal sanction.
- (b) Define following :
- Floor Area
 - Super built up Area
 - Carpet Area
- (c) Suggest various units and their sizes for primary health centre for the structure constructed in a village.

6. Attempt any ONE of the following :

1 × 12 = 12

- (a) A plan and elevation of pedestal is shown in fig. No. 2. Corner 'A' touches the picture plane and observer is exactly opposite the corner at 5 m distance. Eye level is 1.5 m. Draw two point perspective with 30-60 angles.

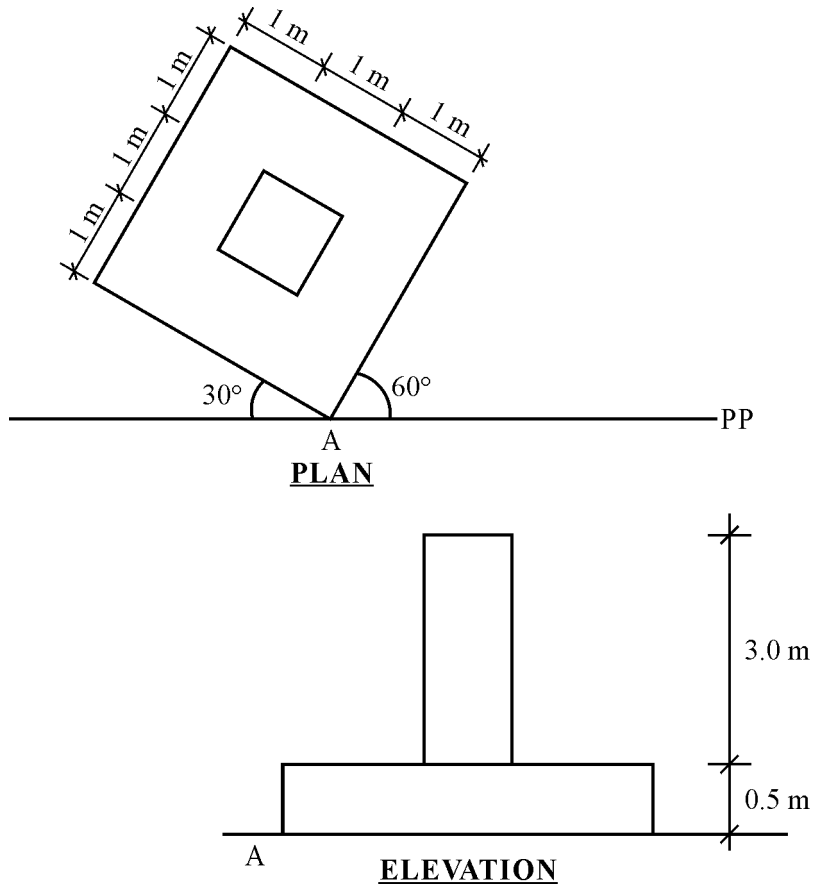


Fig. 2

- (b) Draw a plan and section of single flight of an RCC stair case from following data :
- (i) Number of Risers – 10 Nos. of 160 mm height.
 - (ii) Number of treads – 9 Nos. of 250 mm width
 - (iii) Width of stair case – 1000 mm
 - (iv) Landing at top is – 1000 × 1000 mm