

17309

16117

4 Hours / 100 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. (A) Answer any **THREE** :

12

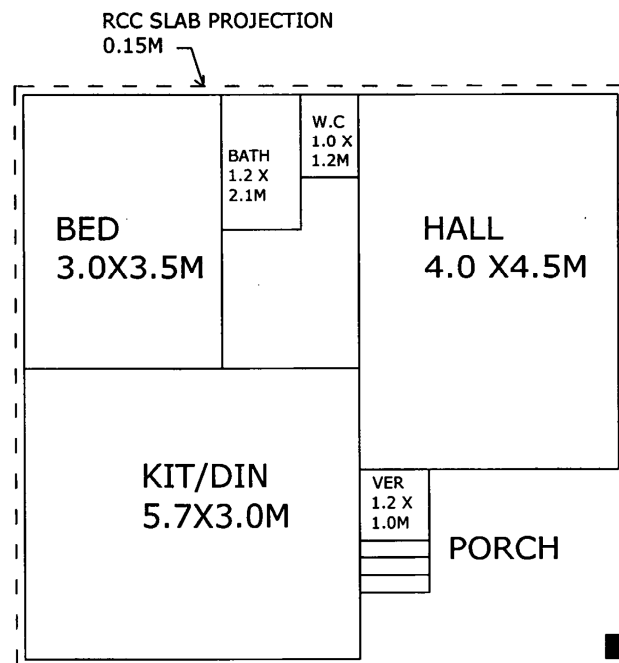
- (i) Draw Graphical Symbols for :
- (a) Brickwork
 - (b) Timber
 - (c) Centre hung window
 - (d) Revolving Door
- (ii) Draw neat sketches of following lines :
- (a) Centre Line
 - (b) Section Line
 - (c) Hidden Line
 - (d) Extension Line
- (iii) Define :
- (a) Elegance
 - (b) Roominess

(iv) Give the values of minimum requirements for :

- (a) Size of Bathroom
- (b) Size of Kitchen
- (c) Plinth for Residential Building
- (d) Width of Stair for Residential Building.

(B) Draw to a suitable scale the Line Plan for a Polytechnic Girls Hostel Building with an Intake Capacity of 60 Girls. Show position of doors and windows also. **08**

2. Figure 1 shows a line plan of a residential building. Draw to a Scale of 1 : 50, the following views, show all the dimensions and label the parts.



LINE PLAN NOT TO SCALE

(All dimensions are in mm)

Fig. 1

- | | |
|-------------------------|-----------|
| (i) Developed Plan | 12 |
| (ii) Front Elevation | 08 |
| (iii) Section Along A-B | 08 |

Use following construction notes.

- (a) Depth of foundation 1.0 m below G.L.
- (b) Plinth height above G.L. 600 mm.
- (c) Floor to Slab bottom height of all rooms is 3000 mm and that for W.C and bath is 2400 mm.
- (d) Wall thickness in Super structure is 300 mm for main walls and 200 mm thick for walls in W.C and bath.
- (e) R.C.C. Slab of 120 mm thickness.
- (f) Chajja Projection – 600 mm.
- (g) Assume suitable position for Doors and Windows.
- (h) Assume any other suitable data if required.

3. Answer any THREE : 24

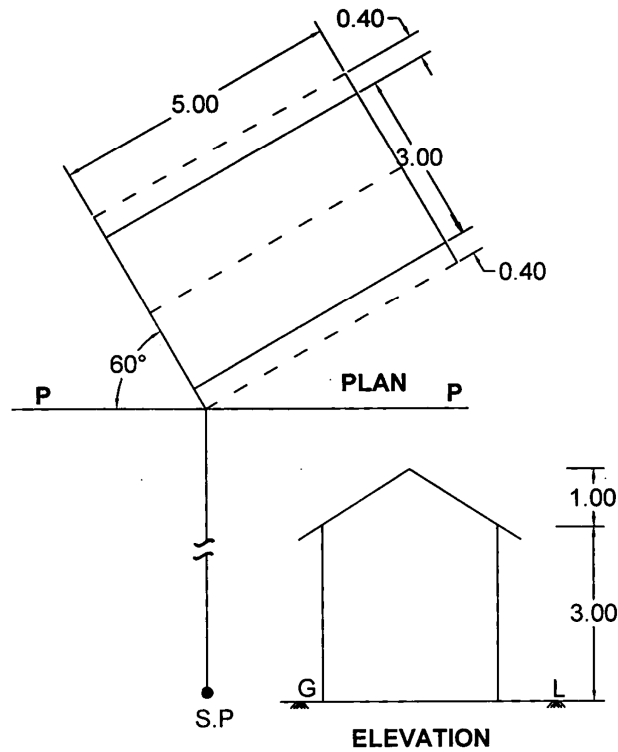
- (a) Prepare Schedule of Opening and area statement for a building shown in figure No. : 1, Q. No. 2.
- (b) Draw to a suitable scale foundation plan for a building shown in Fig. No. 1 of Q. No. 2.
- (c) Suggest various units required for primary school building for 200 students.
- (d) Explain the importance of Planning Principle 'Aspect' and Prospect in Building Drawing with their examples.

4. Answer any TWO : 16

- (a) Define :
 - (i) Built-up Area
 - (ii) Carpet Area
 - (iii) Plinth Area
 - (iv) Floor Area
- (b) List the drawings and documents to be submitted for getting approval from Sanctioning Authority.
- (c) Draw detailed Plan and Section of R.C.C. column footing with following data :
 - (i) Size of footing 1200 mm × 1200 mm
 - (ii) Size of column 230 mm × 450 mm

P.T.O.

5. Fig No. 2, shows a plan and elevation of a small structure. Draw to a suitable scale, two point perspective drawing. Assuming eye level at 2.0 m above G.L, retain all construction lines.

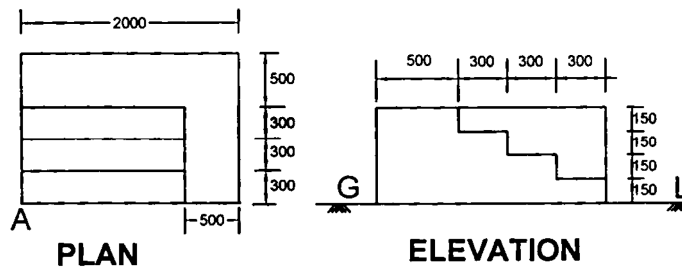


(All dimensions are in m)

Fig. No. 2

OR

Draw to a suitable scale two point perspective drawing for steps shown in Fig. 3. Assume eye level at 1.5 m above ground level and station point at 3.0 m from picture plane along Central Visual Ray. Retain all consumption lines.



(All dimensions are in m)

Fig. No. 3