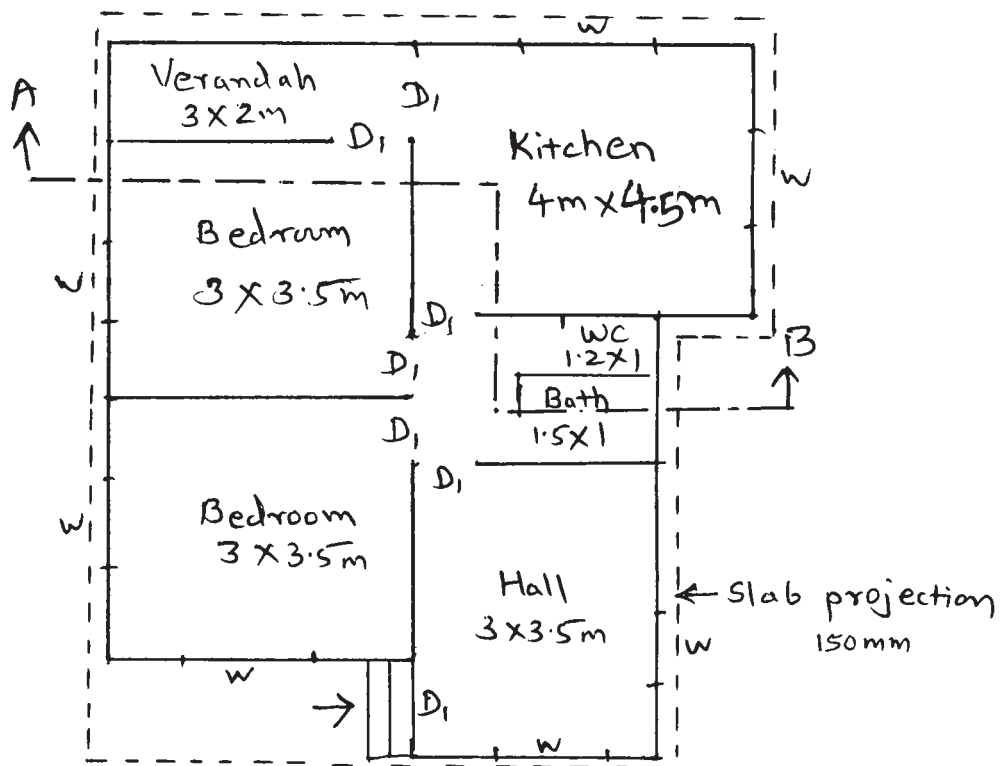# 17946

## 16117

## 4 Hours / 100 Marks

Seat No.

*Instructions* –
(1) All Questions are *Compulsory*.

(2) Figures to the right indicate full marks.

(3) Assume suitable data, if necessary.

(4) Use of Non-programmable Electronic Pocket Calculator is permissible.

(5) Mobile Phone, Pager and any other Electronic Communication devices are not permissible in Examination Hall.

(6) All questions to be solved on drawing sheet.

**Marks**

1. a) **Attempt any THREE of the following:** **12**

   (i) Draw graphical symbols for UCR masonary, wash basin, bath tub, revolving door as per IS 962 1989.

   (ii) Explain criteria for proper selection of scale for various types of drawing.

   (iii) Give minimum dimensions required for following:
   1) W.C.
   2) Garage
   3) Clear head room for loft
   4) Mezzanine floor area

   (iv) Explain principle circulation.

   b) Draw to suitable scale, line plan of restaurant for a capacity of 50 persons. **8**

**Marks**

2.  **a)**  Fig. No. 1 shows line plan of building. Draw to the scale    **30**
1:50 following:

(i)   Developed plan                                                    12

(ii)  Section along AB                                                  10

(iii) Elevation                                                         08

Assume additional data if necessary.



Line plan (Not to scale)

**Fig. No. 1**

Construction notes:

(i)   Hard strata is available at 1000 mm below GL.

(ii)  Bed concrete P.C.C. (1:4:8) – 150 mm thick and 900 mm
wide.

(iii) Foundation masonary 600 mm in width in CM 1:6 (double step) step height 400 mm and 450 mm

(iv) U.C.R. masonary in plinth, width 450 mm and height 600 mm above GL in CM 1:6

(v) Superstructure of BBM in CM 1:6, 300 mm thick main walls and 200 mm thick partition walls of sanitary block

(vi) Ceiling height is 3000 mm

(vii) Slab thk. = 120 mm

(viii) Dado finishing upto 1200 mm ht. for WC and bath

b) **Attempt any <u>THREE</u> of the following:** 24

   (i) Prepare schedule of opening and area statement for the building in Q.2 (a).

   (ii) Define plot area, plinth area, floor area and FSI.

   (iii) Suggest various units for boys hostel building for 50 students to be constructed in village. Specify their minimum sizes.

   (iv) 1) Define one point and two point perspective drawing.

   2) List different units for bank building with minimum sizes.

3. a) **Attempt any <u>TWO</u> of the following:** 16

   (i) Draw details of RCC footing with scale 1:20

   (ii) Draw line plan of 2BHK residential building in 15 m × 20 m plot with front road of 9 m width, it include WC, bath and staircase.

   (iii) Explain aspect, prospect, orientation and grouping.

**Marks**

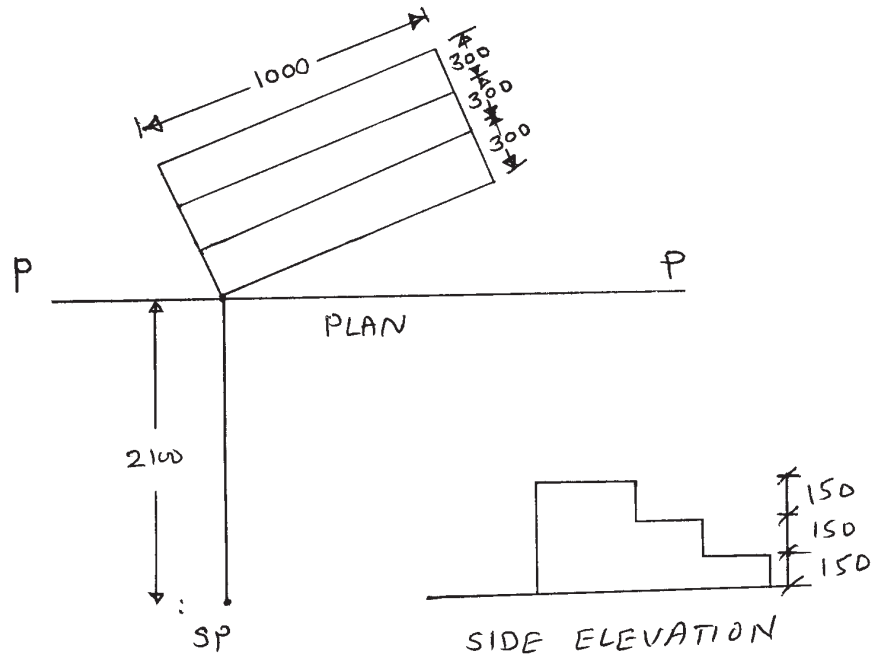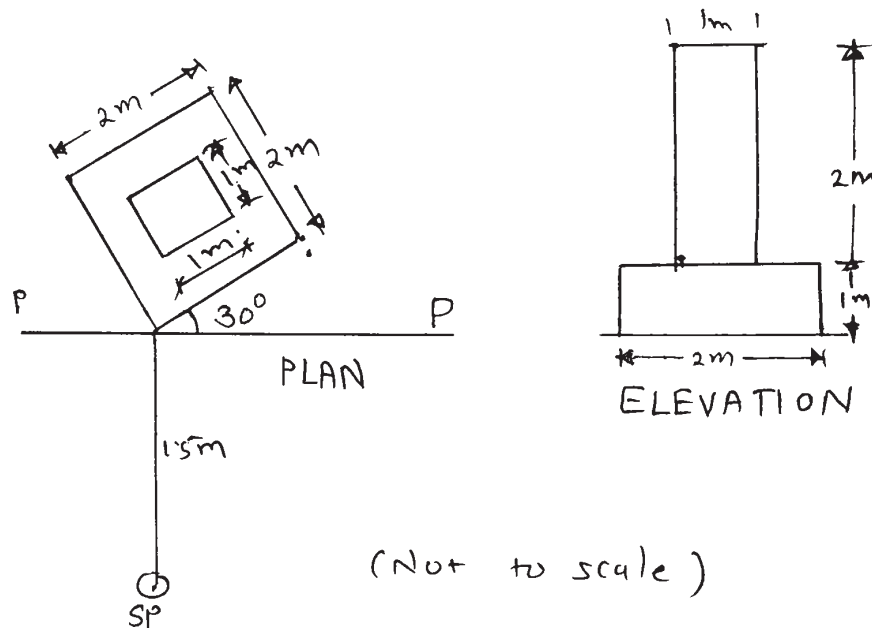b) Draw perspective view of any one object from Fig. No. 2 or Fig. No. 3    **10**



**Fig. No. 2**

**OR**



(Not to scale)

**Fig. No. 3**