24225		
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) 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:

 $3 \times 4 = 12$

- (a) Draw Graphical symbols for :
 - (i) Timber

- (ii) Bath Tub
- (iii) Brick Masonry
- (iv) Glass
- (b) Define circulation and roominess with respect to principles of planning.
- (c) Draw sketches of
 - (i) Section line

- (ii) Hidden line
- (iii) Long break line
- (iv) Extension line
- (d) What is the importance of Site Plan?
- (e) Define: Station Point and Vanishing Point.
- 2. Draw to suitable scale the line plan of Primary Health Care Centre showing important units. Show all dimensions and label the units.



[1 of 4] P.T.O.

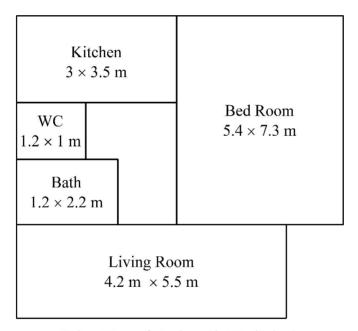
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3. Figure No. 1 shows line plan of residential building. Draw developed plan with scale of 1 : 50. Show all dimensions and show positions of doors and window.

12

Data:

- (i) Superstructure B.B. masonry having wall thickness 300 mm
- (ii) Plinth height 600 mm
- (iii) Sill height for windows 900 mm
- (iv) Lintel height -2.1 m
- (v) Slab height -3 m



(Line Plan of Residential Building) (Not to Scale)

Figure No. – 1

4. Attempt any TWO of the following:

 $2 \times 6 = 12$

- (a) Draw front elevation for the building shown in Fig. No-1.
- (b) Define Built up area, Carpet area and F.S.I.
- (c) Draw longitudinal section of RCC lintel beam of length 1.5 m.

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5. Attempt any TWO of the following:

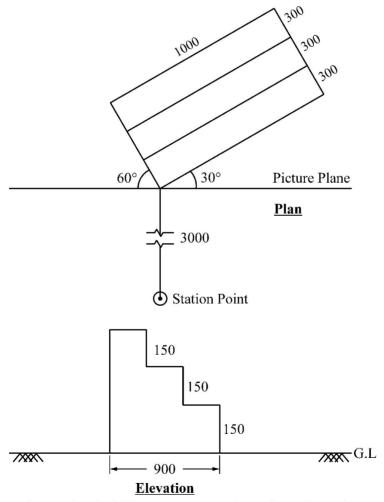
 $2 \times 6 = 12$

- (a) Explain following principles of planning:
 - (i) Orientation
- (ii) Prospect
- (iii) Circulation
- (b) Write any four purposes of construction notes and write any two general construction notes.
- (c) Write schedule of openings for plan prepared in Q. 3 (Fig. No. 1)

6. Attempt any ONE of the following:

12

(a) Draw to a scale of 1 : 50, two point perspective view for plan and elevation shown in Figure No.-2. Retain all construction lines.



Take Eye level of Observer at 1.5 m above Ground Level Not to Scale

Figure No. − 2

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(b) Draw plan and section of a single flight RCC staircase using following data:

- (i) Number of risers 10 of 160 mm height
- (ii) Number of treads 9 of 250 mm width
- (iii) Width of staircase 1000 mm
- (iv) Landing of staircase -1000×1000 mm