

22405

21819

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 (1) Concrete (2) Wood work (3) Sliding door (4) UCR Masonary
 - (b) Draw neat sketches for following lines
(1) Section line (2) Hidden line (3) Dimension line (4) Extension line
 - (c) Define Orientation and Grouping in Principles of Planning.
 - (d) State the importance of site plan and openings schedule in civil engineering drawing.
 - (e) Give the necessity of perspective drawing.

- 2. Draw to suitable scale the line plan of bank building. Label all units with their sizes. Clearly indicate position of openings.** **10**

- 3. Attempt the following :** **12**
- Fig. No. 1 show a line plan of residential building. Draw to a scale of 1 : 50 the developed plan. Show all dimensions and label the units. Use following data plinth height 600 mm.
- Super structure in Brick Masonary with walls 300 mm thick and internal walls for bath and W.C. 100 mm thick.
- Assume Chajja projection 450 mm. Assume suitable data if necessary.
- 4. Attempt any TWO of the following :** **12**
- (a) Write any four purposes of construction notes and any two purposes of north line.
- (b) Explain important rules and byelaws of sanctioning authorities for construction in rural area.
- (c) Draw a neat sketch showing RCC components of lintel with 1 : 20 scale.
- 5. Attempt any TWO of the following :** **12**
- (a) Prepare schedule of openings in the standard format and area statement for building in Q. No. 2.
- (b) Enlist units of primary Health Center and write minimum dimension of each unit.
- (c) List any three purposes of submission drawing and working drawing in civil engineering works.
- 6. Attempt any ONE of the following :** **12**
- (a) Draw to a suitable scale two point perspective drawing of the object shown below in fig. No.2 or fig. No. 3. Assume eye level 1.5 m above GL and station point at 3.0 m from PP. Retain all construction lines.
- (b) Draw a plan and section of a single flight of a RCC stair case from the following data :
- Number of risers - 10 of 160 mm height
Number of treads - 9 of 250 mm height
Width of stairs case is 1000 mm
Landing at top is 1000 × 1000 mm.
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