

**DIPLOMA EXAMINATION IN ENGINEERING/TECHNOLOGY/MANAGEMENT/  
COMMERCIAL PRACTICE, APRIL - 2025**

**ENGINEERING GRAPHICS**

[Maximum marks: 100]

[Time: 3 Hours]

- [Note:- 1. A2 size drawing sheet to be supplied.  
2. First angle projection method to be followed.  
3. Dimensions should be as per BIS.  
4. Both sides of the drawing sheet can be used.  
5. Sketches on next page.  
6. Any missing data can be suitably assumed.]

**PART – A**

**Maximum marks: 10**

**I.** (Answer *all* the questions in one or two sentences. Each question carries **2** marks)

1. Name any two elements of dimensioning.
2. Define Ellipse.
3. State the Scale of a drawing.
4. Define isometric projection.
5. List two modify commands.

(5 x 2 = 10)

**PART – B**

**Maximum marks: 50**

**II.** (Answer any *five* of the following questions. Each question carries **10** marks)

1. Draw a plane scale of 1cm = 5m and show on it 37m.
2. Inscribe a regular pentagon in a circle of diameter 50mm.
3. Draw the involute of a circle of 50mm diameter. Also draw a tangent and normal to any point on a curve at any point M on the curve.
4. Draw the projections of the following points on a common reference line.
  - (a) P in HP and 35mm in front of VP.
  - (b) Q in HP and 35mm behind VP.
  - (c) R in both HP and VP.
  - (d) S in VP and 35mm above HP.
5. The front view of a 75mm long line measures 55mm. The line is parallel to HP and one of its end is in the VP and 25mm below HP. Draw the projections of the line and determine its inclination with VP.

6. Orthographic projections of a block are given in Fig.1. Draw the Cavalier oblique projection of the block.
7. Draw the development of a Bucket shown in Fig.2. (5 x 10= 50)

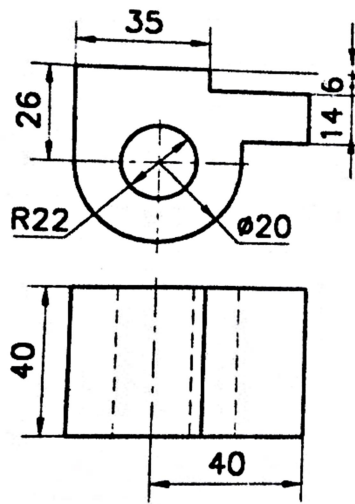
**PART – C**

**Maximum marks: 40**

(Answer *any two* of the following questions. Each question carries **20** marks)

- III.** Draw the Front view, Top view and Left Side view of the object shown in Fig.3.
- IV.** Front view and Top view of a Bearing Block are shown in Fig.4. Draw the full sectional front view as indicated by the section plane A-A and dimension it.
- V.** Orthographic views of an object is shown in Fig. 5. Draw the isometric view.

(2 x 20= 40)



(i) ORTHOGRAPHIC  
Fig. 1

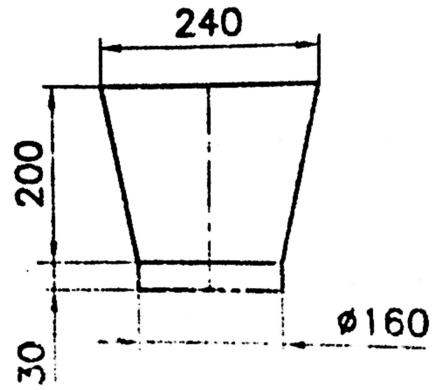
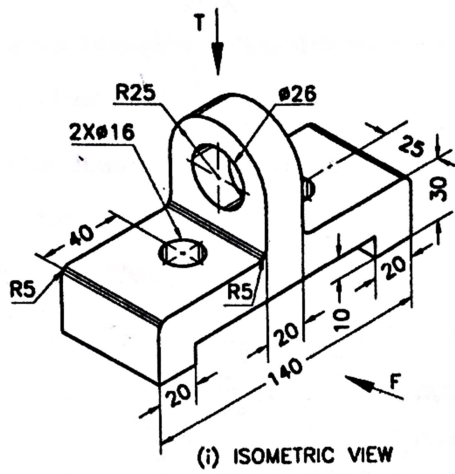
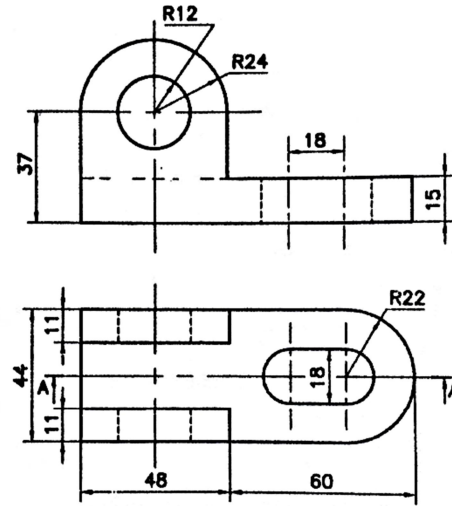


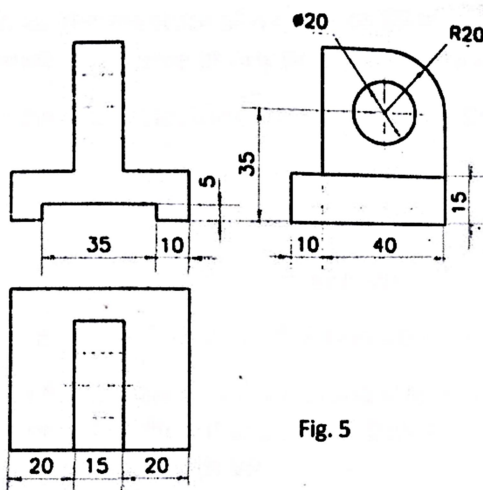
Fig. 2



(i) ISOMETRIC VIEW  
Fig. 3



(i) FRONT AND TOP VIEWS  
Fig. 4



(i) ORTHOGRAPHIC

Fig. 5