

**DIPLOMA EXAMINATION IN ENGINEERING/TECHNOLOGY/  
MANAGEMENT/COMMERCIAL PRACTICE, NOVEMBER - 2023**

**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 Mark : 10 )

**Marks**

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

1. List different types of lines used in engineering graphics.
2. Define an ellipse.
3. List different types of oblique projection.
4. What is profile plane?
5. What is Auto CADD?

( 5 x 2 = 10 )

**PART - B**

( Maximum Mark: 50 )

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

1. Read the dimensional drawing shown in Figure 1. Redraw the Figure.1 and dimension it as per BIS.
2. Draw any ellipse by concentric circle method given in major and minor axis in the ratio 3:2. Give the major axis is 135mm.
3. Construct an involute of a circle of diameter 50mm.
4. Draw the projections of the following points. Take the distance between the projectors as 30mm.
  - a) Point A is in VP and 35mm above HP.
  - b) Point B is in HP and 30mm behind VP.
  - c) Point C is in both HP and VP.
  - d) Point D is in VP and 30mm below HP.
  - e) Point E is 35mm above HP and 35mm in front of VP.

5. Draw the projection of a line AB 100mm long inclined  $30^\circ$  to HP and  $45^\circ$  to VP. The end A of the line is 25mm above HP and 50mm in front of VP. Mark the angle made by the line with X-Y line.
6. Draw the development of a small tray as shown in Fig.2
7. Draw isometric view of a cylinder of diameter 40mm and length 60mm. If it is resting on one of its circular bases.

( 5 x 10 = 50)

### PART – C

(Maximum Mark: 40)

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

- III The pictorial view of the object shown in Fig.3 . Draw the front view in the direction of F and top view in the direction T and side view in the direction S.
- IV. The orthographic view of an object shown in Fig.4. Prepare the isometric drawing.
- V. Pictorial view of a machine block shown in Fig.5. Draw the front view in the direction of Arrow F, top view and also front auxiliary view of the sloping surface.

( 2 x 20 = 40)

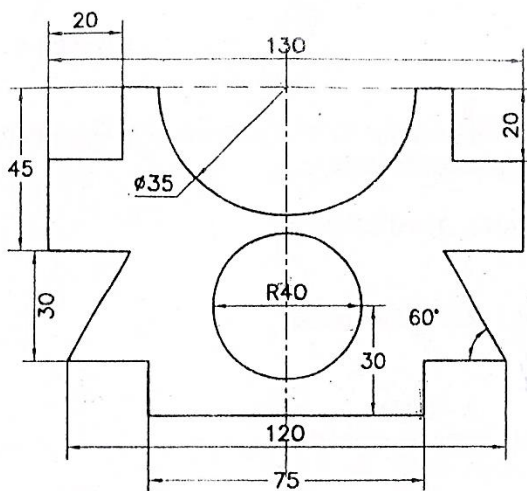


Figure 1.

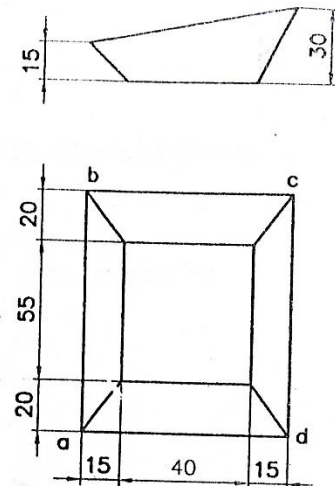


Figure 2.

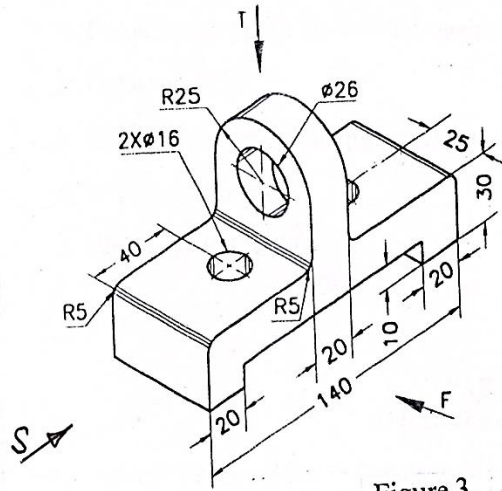


Figure 3.

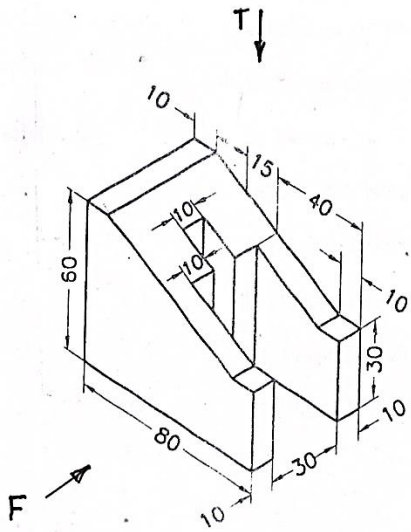


Figure 5.

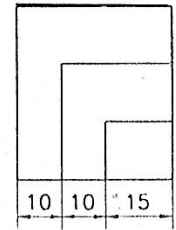
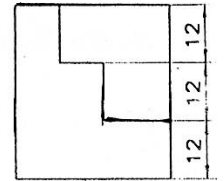
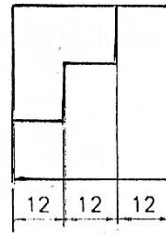


Figure 4.

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