

SECOND SEMESTER DIPLOMA EXAMINATION IN ENGINEERING/  
TECHNOLOGY—MARCH, 2013

**ENGINEERING GRAPHICS**

(Common to all branches except DCP and CABM)

[Time : 3 hours

(Maximum marks : 100)

- [Note : 1. A<sub>2</sub> size drawing sheet to be supplied.  
2. All drawing should be in first angle projections.  
3. Both sides of the drawing sheet can be used.  
4. Dimensioning as per BIS.  
5. Sketches accompanied.]

Marks

PART—A

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

- I 1. Write the advantages of minidrafter.  
2. Define eccentricity.  
3. Compare isometric projection and isometric view.  
4. What is the need of drawing auxiliary view ?  
5. What do you mean by plane of projection ? (5x2=10)

PART—B

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

- II Redraw the given figure 1 to full size and dimension as per BIS.  
III Construct a regular pentagon of side 50 mm.  
IV Draw an ellipse by concentric circles method. Given the major and minor axes are 100 mm and 60 mm respectively.  
V Draw the projections of the following points. The distance between the projectors is 30 mm.  
(a) Point P(30, 20) (c) Point R(-40, -35)  
(b) Point Q(-35, 25) (d) Point S(45, -25)  
VI The top view of a 75 mm long line AB measures 65 mm, while the length of its front view is 50 mm. Its one end A is in the HP and 12 mm in front of VP. Draw its projections and find the inclination with the HP and VP.

- VII Draw the development of a bucket as shown in figure 2.
- VIII Figure 3 shows the pictorial view of C-block with a slopping surface. Draw the front view in the arrow direction. Add an auxiliary view of the slopping surface and a top view. (5x10=50)

## PART - C

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

- IX Figure 4 shows the pictorial view of a machine element. Draw its front view, top view and right side view.
- X The pictorial view of a machine part is given in figure 5. Draw full sectional front view and a top view.
- XI The orthographic views of a casting are shown in figure 6. Draw the cabinet oblique projection when the receding axis is inclined at an angle of  $30^\circ$  to the horizontal. (2x20=40)
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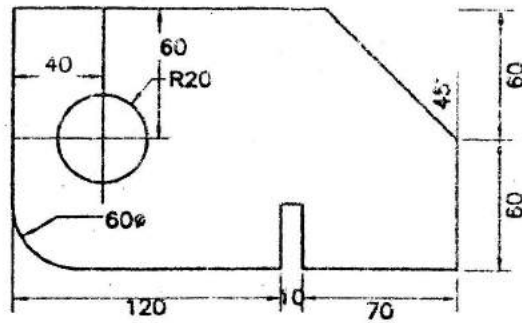


fig. 1

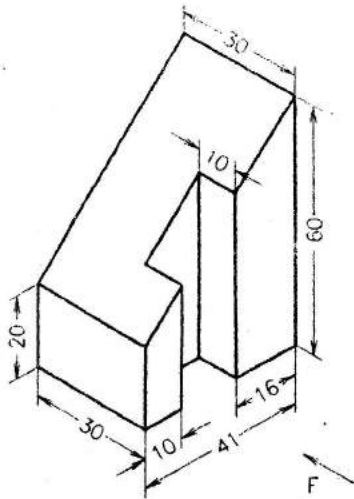


fig. 3

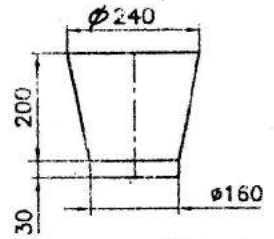


fig. 2

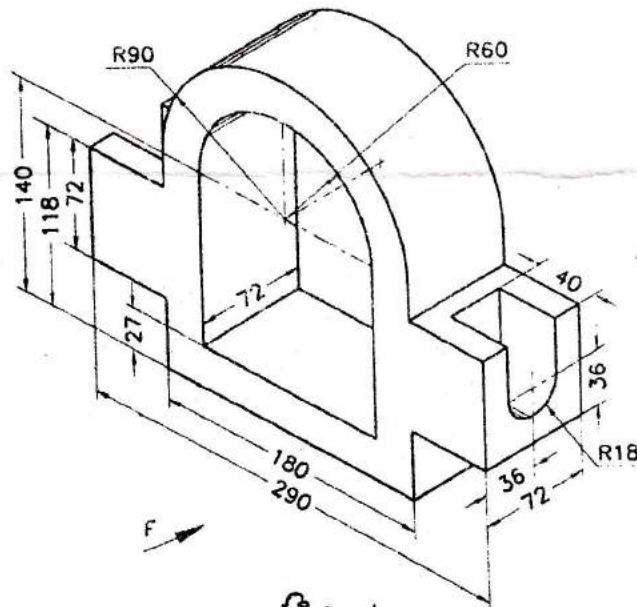


fig. 4

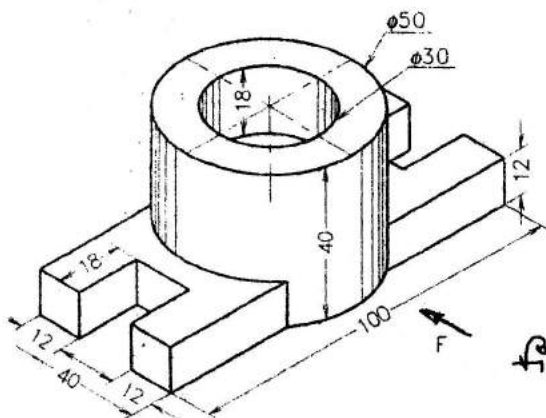


fig. 5

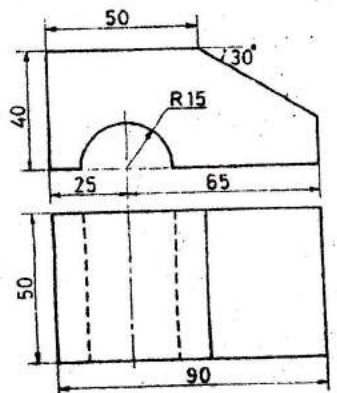


fig. 6