

**DIPLOMA EXAMINATION IN ENGINEERING/TECHNOLOGY/  
MANAGEMENT/COMMERCIAL PRACTICE, APRIL - 2024**

**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 out the elements of dimension.
  2. Define parabola.
  3. Define reference line. How it represented in engineering drawing.
  4. List the different types of oblique projection in engineering drawing.
  5. What do you mean by multiview projection?

( 5 x 2 = 10 )

**PART - B**

( Maximum Mark: 50 )

- II Answer **any five** of the following questions. Each question carries 10 marks.
1. Redraw the given figure – 1 and dimension as per BIS.
  2. Inscribe a regular pentagon in a circle of diameter 50mm.
  3. Draw the projections of the following points, Take the distance between projectors as 35mm.
    - a) Point A is 25mm above HP and 30mm behind VP.
    - b) Point B is 30mm above HP and 20mm in front of VP.
    - c) Point C is in HP and 35 mm behind VP.
    - d) Point D is in VP and 30mm below HP.
    - e) Point E is in both HP and VP.

4. Draw the projection of a line PQ 75mm long inclined  $30^\circ$  to HP and  $45^\circ$  to VP. The end P of the line is 40mm below HP and 30mm behind VP.
5. A circle of 55mm diameter inclined  $35^\circ$  to HP and perpendicular to VP has its centre 35mm in front of VP and on HP. Draw its front and top views.
6. The orthographic views of a V block shown in figure -2. Draw the cabinet oblique projection. Take the receding axis is at  $45^\circ$  to the horizontal.
7. Draw the development of a bucket shown in figure-3.

( 5 x 10 = 50)

### PART – C

(Maximum Mark: 40)

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

- III Isometric view of a block shown in figure – 4 . Draw:
  - a) Front view in the direction of F
  - b) Top view in the direction of T
  - c) Right side view
- IV. Pictorial view of a machine part is shown in figure – 5. Draw the front view and a sectional top view taking section along A-A.
- V. Figure – 6 shows the orthographic projections of an object. Draw its isometric view.

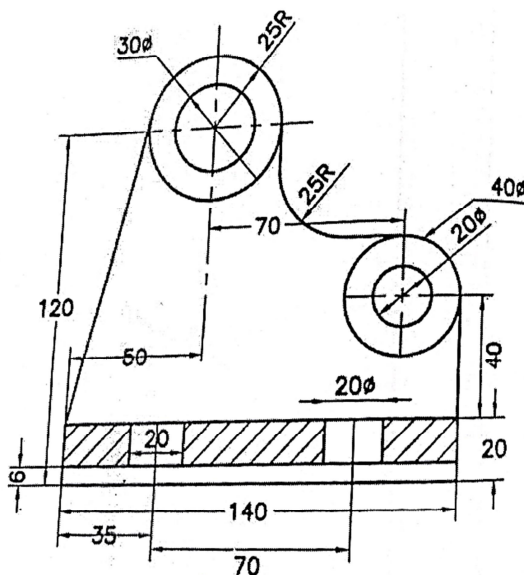


Figure -1

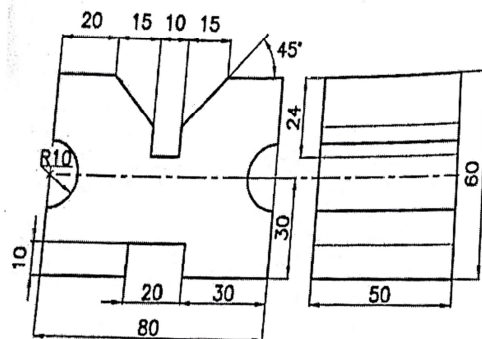


Figure -2

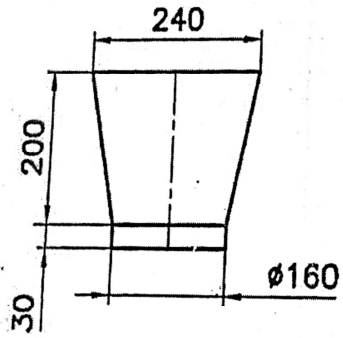


Figure -3

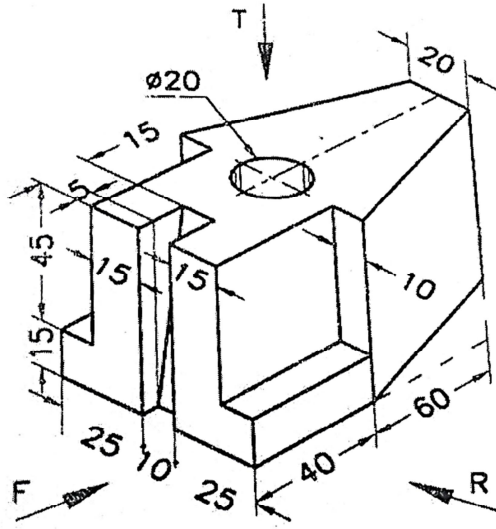


Figure -4

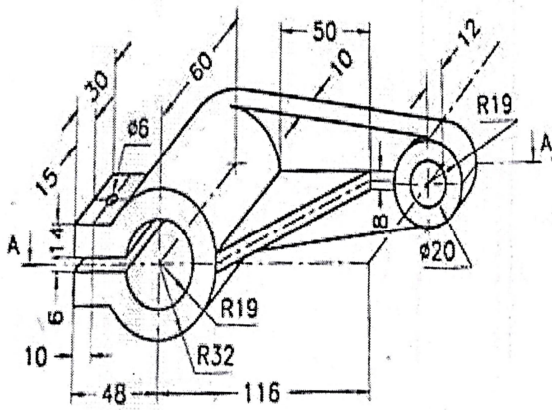


Figure -5

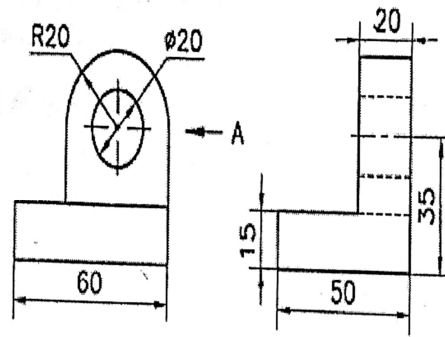


Figure -6