

DIPLOMA EXAMINATION IN ENGINEERING/TECHNOLOGY/MANAGEMENT/
COMMERCIAL PRACTICE –APRIL -2022.

ENGINEERING GRAPHICS

(Maximum Marks : 100)

[Time : 3 hours]

PART–A
(Max. Marks:10)

Marks

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

1. List features of lettering
2. Define parabola
3. Define trace of the line
4. Define development of surface
5. List any four CAD packages

(5x2=10)

PART - B
(Max. Marks: 50)

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

1. Redraw the figure shown in figure.1 and dimension it as per BIS
2. Construct a regular pentagon of side 40 mm
3. Draw an involute of an equilateral triangle of 30 mm side.
4. Draw the projections of the following points on a common x-y line
 1. Point P 12mm above HP and 20mm in front of VP
 2. Point Q is 24mm below HP and 30mm behind VP
 3. Point R is in HP and 32mm behind VP
 4. Point S is in HP and 32mm behind VP
 5. Point T is on both HP and VP
5. A line AB 90mm long is inclined at 30° to HP. Its end A is 12mm above the HP and 20mm in front of VP. Its front view measures 65mm. Draw the top view of AB and measure its length and also determine its inclination with VP.

6. Draw the development of the lateral surface of a hexagonal pyramid of base side 25mm and altitude 60mm which is resting vertically on its base on the ground with two of the sides of the base perpendicular to VP.
7. A cube of 30mm edge rests on HP on its face such that one of its vertical square faces inclined at 30° to VP. A section plane perpendicular to HP and parallel to VP cuts the cube at a distance of 10mm from its vertical axis. Draw its top and sectional front views. The vertical centre line is 30mm in front of VP.

(5x10=50)

PART - C
(Max. Marks: 40)

(Answer **two full** questions. Each question carries 20 marks)

UNIT I

- III** Draw the isometric view of the object given in fig.2
- IV** The isometric view of an object is shown in figure.3. Draw the following views to full size
- a) The plan in the direction of T
 - b) Elevation in the direction of F
 - c) Side view in the direction S
- V** Draw the orthographic views of a stepped block shown in figure 4
- a) Front elevation looking in the direction of F
 - b) Top view
 - c) Side view projected from front view

(2x20=40)

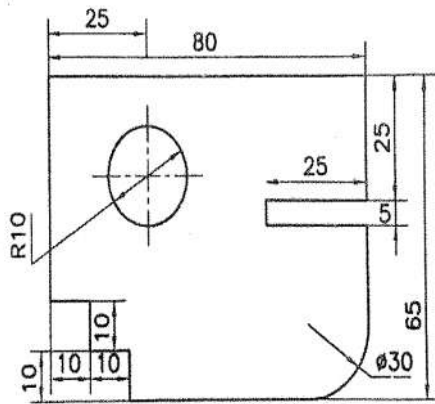


Figure.1

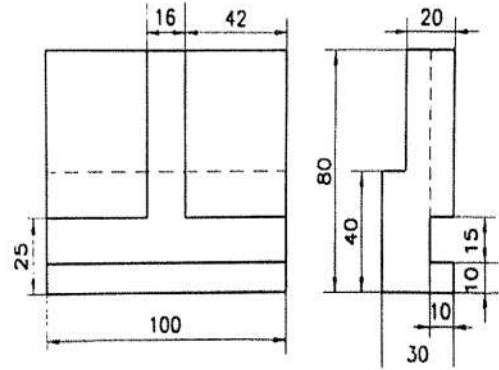


Figure.2

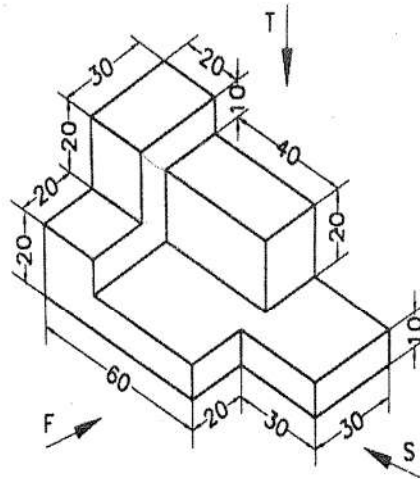


Figure.3

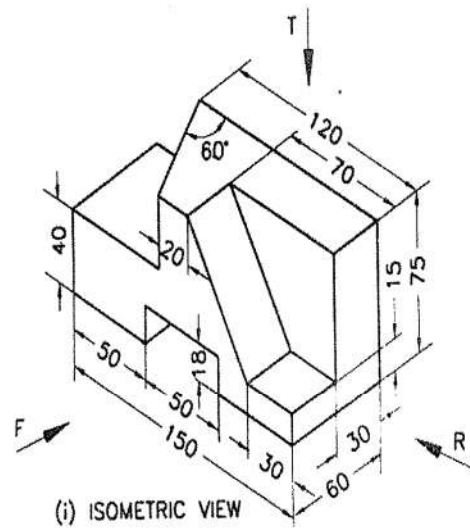


Figure.4
