



TED (15) 2005-B  
(Revision-2015/19)

A21-00757

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**DIPLOMA EXAMINATION IN ENGINEERING/TECHNOLOGY/MANAGEMENT/  
COMMERCIAL PRACTICE, APRIL-2021**

**ENGINEERING GRAPHICS**

[Maximum marks: 75]

(Time: 2.15 Hours)

(Note: 1. Missing data if any suitably assumed  
2. Sketches to be accompanied)

**PART – A**

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

1. What are the elements of dimensioning?
2. Define eccentricity of conic sections
3. What is meant by development of surfaces?
4. What is the use of auxiliary view?
5. List any four CAD software (packages)

(3 x 2 = 6)

**PART – B**

(Answer any **four** of the following questions. Each question carries 11 marks)

- II. Redraw the given figure-1 and mark dimensions as per BIS.
- III. Inscribe a regular pentagon in a circle of diameter 100mm.
- IV. Draw the involute of a square of side 25mm.
- V. Draw a parabola, if the distance of focus from the directrix is 60mm. Draw a tangent and normal to the curve at any point on it
- VI. Draw the projections of the following points on a common reference line, keeping the distance between projectors as 25mm apart.
  - (a) Point 'P' is 12mm above HP and 20mm in front of VP
  - (b) Point 'Q' is 24mm below HP and 30mm behind VP.
  - (c) Point 'R' is in HP and 32mm behind VP.
  - (d) Point 'S' is 15mm below HP and 40mm in front of VP.
  - (e) Point 'T' is lying on both HP and VP
- VII. The end A of a line AB of length 80mm is in the HP and 20mm in front of VP. If the



line is inclined  $45^{\circ}$  to HP and  $30^{\circ}$  to VP. Draw its projections.

VIII. Draw the development of the funnel shown in figure 2.

(4x11=44)

### PART – C

(Answer *any one* question from the following. Each question carries 25 marks)

IX. Draw the front view in the direction 'F' top view in the direction 'T' and the side view in the direction 'S' of the object shown in figure 3.

X. Draw the full sectional elevation in the direction 'F' and the plan of the object shown in figure 4.

XI. The orthographic views of an object is shown in figure 5. Draw the isometric view.

(1x25=25)

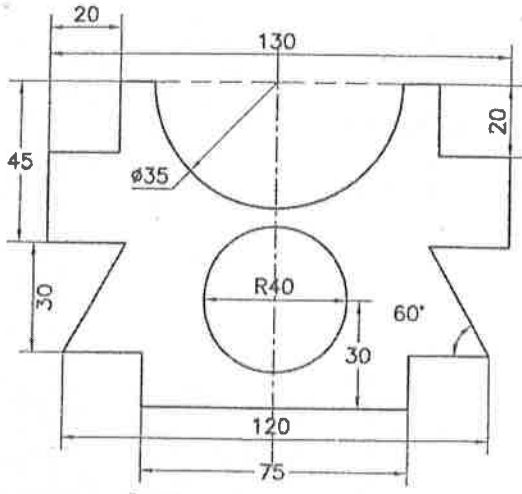


Fig. 1

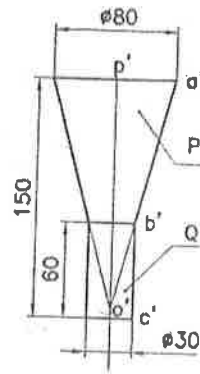


Fig. 2

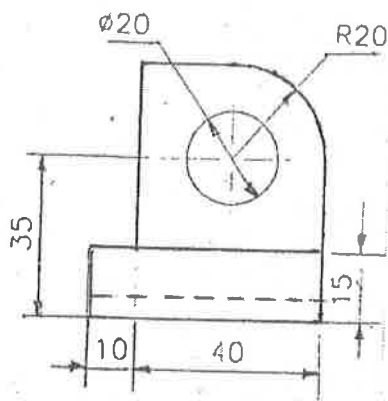
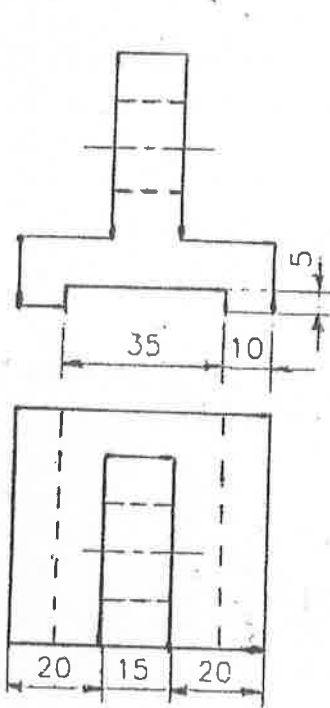


Fig. 5

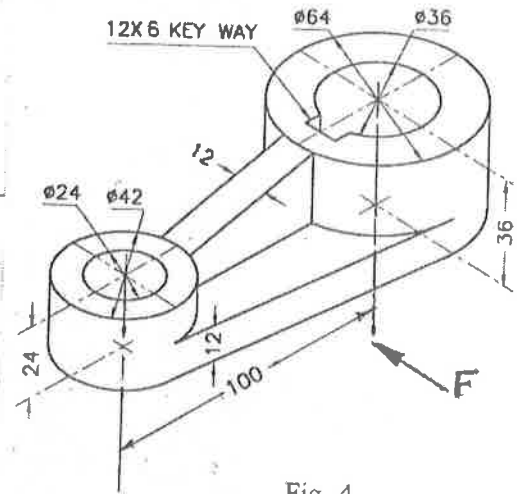
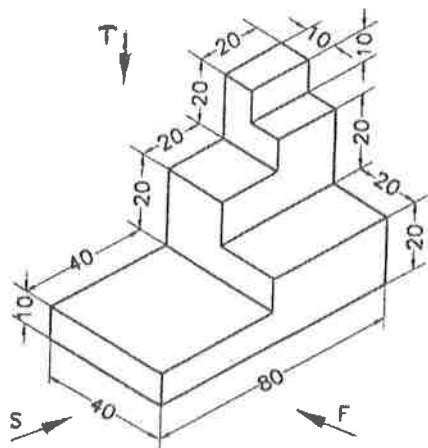


Fig. 4



ISOMETRIC VIEW

Fig. 3

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