

TED (15) - 2005-B

(REVISION -- 2015)

Reg. No	*******************************
Sionature	

DIPLOMA EXAMINATION IN ENGINEERING/TECHNOLOGY/ MANAGEMENT/COMMERCIAL PRACTICE — APRIL, 2019

ENGINEERING GRAPHICS

[Time: 3 hours

(Maximum marks: 100)

[Note: - Sketches accompanied.]

PART --- A

(Maximum marks: 10)

Marks

- 1 Answer all questions in one or two sentences. Each question carries 2 marks.
 - 1. List different types of lines used in engineering drawings.
 - 2. Define first angle projection.
 - 3. Write different types of scales used in engineering practice.
 - 4. State the use of auxiliary views in engineering drawing.
 - 5. List any four options for drawing a circle using Auto CAD.

 $(5 \times 2 = 10)$

PART --- B

(Maximum marks: 50)

- II Answer any five of the following questions. Each question carries 10 marks.
 - Read the dimensioned drawing shown in figure 1. Redraw the figure and dimension it as per BIS.
 - 2. Inscribe an ellipse within a parallelogram of sides 100 mm and 60 mm. The acute angle is 60°.
 - 3. Draw an involute of a square of side 25 mm.
 - 4. Draw the projections of the following points on a common reference line.
 - (a) Point P is in HP and 30mm in front of VP.
 - (b) Point Q is in VP and 35mm below HP.
 - (c) Point R is in both HP and VP.
 - (d) Point H is in HP and 35mm behind VP.
 - (e) Point T is in VP and 30mm above HP.



Marks

- 5. A line AB measuring 70 mm has its end A 15 mm in front of VP and 20mm above HP and other end B is 60 mm in front of VP and 50mm above HP. Draw the projections of the line and find the inclinations of the line with both the reference planes of projections.
- 6. Draw the development of the funnel as shown in the figure 2.
- 7. A regular pentagonal lamina 40 mm side has its plane vertical and inclined 30° to the VP. Draw the projections when one of its sides is perpendicular to the HP. $(5\times10=50)$

PART --- C

(Maximum marks: 40)

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

- III The pictorial view of a block is shown in figure 3. Draw the following views in first angle projections.
 - (a) Front view in the direction of F.
 - (b) Top view in the direction of T.
 - (c) Left hand side view in the direction of L.
- IV The pictorial view of a machine part is shown in figure 4. Draw the front view and a sectional top view taking section along A-A.
- V The orthographic views of a guide block are shown in figure 5. Draw its cavalier oblique projection and show all the dimension on it.

 $(2 \times 20 = 40)$



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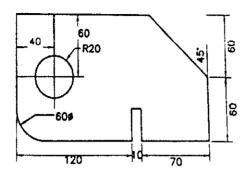


Figure 1.

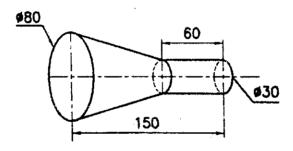


Figure 2.

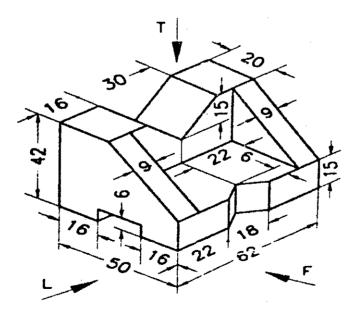


Figure 3.



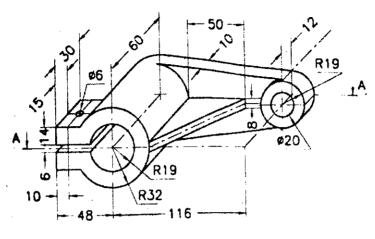


Figure 4.

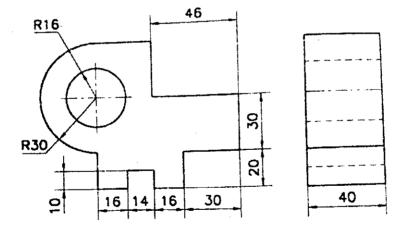


Figure 5.