

TED (15/19) 2005
(Revision – 2015/19)

N22 – 02258

Reg. No.
Signature

**DIPLOMA EXAMINATION IN ENGINEERING/TECHNOLOGY/
MANAGEMENT/COMMERCIAL PRACTICE, NOVEMBER 2022**

ENGINEERING GRAPHICS

- [Note: - 1. Missing data if any suitably assumed.
2. Sketches to be accompanied].

[Maximum Marks: 100]

[Time: 3 Hours]

(PART-A)

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

- I. 1. State the importance of engineering graphics.
2. Define an ellipse.
3. List different types of scales used in engineering practice.
4. Explain the need to draw section view.
5. State the need for preparing the development drawing. (5 x 2 = 10)

(PART-B)

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

- II. Redraw the given **figure – I** and output dimensions as per BIS.
- III. Inscribe a regular pentagon in a circle where the length of one side is equal to 25mm.
- IV. A body is projected with an initial velocity of 20 m/s, travel a horizontal distance of 100m and reaches a maximum height of 30 m. Draw the path of the body assuming it to be parabolic.
- V. Draw the projections of the following points on a common reference line:
(i) P in HP and 35mm in front of VP (ii) Q in HP and 35mm behind VP
(iii) R in both HP and VP (iv) S in VP and 30mm above HP
(v) T in VP and 30mm below HP
- VI. The length of elevation of a line PQ which is parallel to HP and inclined at 30° to VP is 60mm. The end P of the line is 20mm in front of VP and 25mm above HP. Draw the projections of the line and find its true length.
- VII. Draw the isometric view of a hexagonal prism of 25mm side and height 60mm. resting with its base edge on the ground and parallel to VP.
- VIII. Draw the development of a bucket shown in **figure – 2** (5 x 10 = 50)

(PART-C)

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

IX. Isometric view of a shaft support is shown in **figure – 3**. Draw the following views.

- (i) Front view in the direction of the arrow F
- (ii) Top view
- (iii) Left side view

X. **Figure – 4** shows pictorial views of an object. Draw the full sectional front view and top view.

XI. Orthographic views of an object are shown in **figure – 5**. Draw the isometric view of the same.

(2 x 20 = 40)

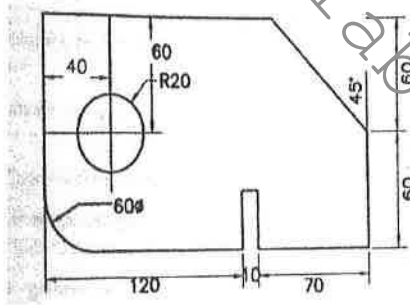


Figure - 1

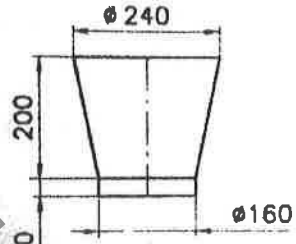


Figure - 2

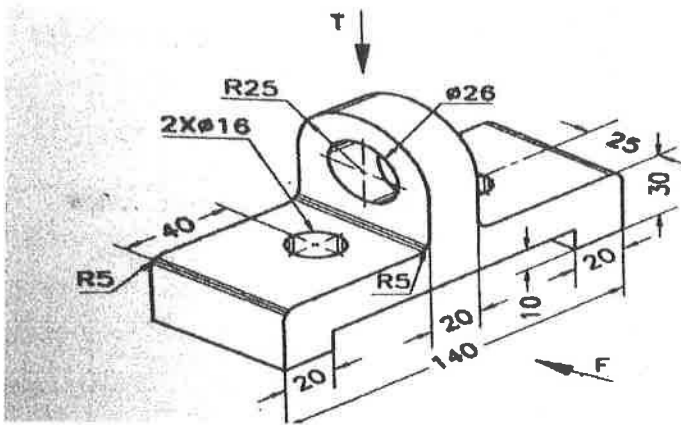


Figure - 3

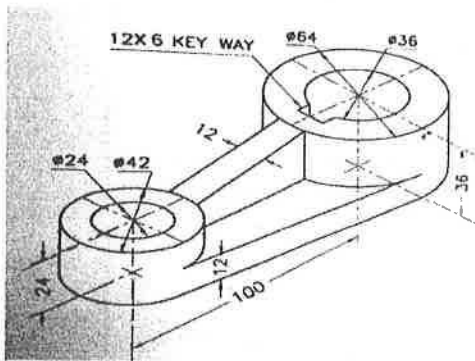


Figure - 4

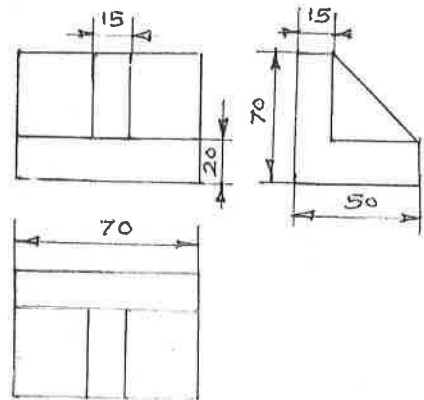


Figure - 5
