

**SECOND SEMESTER DIPLOMA EXAMINATION IN ENGINEERING/
TECHNOLOGY — MARCH, 2016**

ENGINEERING GRAPHICS

(Common to all branches except DCP and CABM)

[Time : 3 hours

(Maximum marks : 100)

[Note :—1. Missing data if any suitably assumed.

2. Sketches to be accompanied.]

PART — A

(Maximum marks : 10)

Marks

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

1. Define representative fraction of a scale.
2. Define eccentricity of conic section.
3. What is an involute ?
4. Write four applications of CAD
5. What do you mean by development of surfaces ?

(5×2=10)

PART — B

(Maximum marks : 50)

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

- II Redraw the given figure 1 and dimension as per BIS.
- III Construct a regular heptagon of side 40 mm.
- IV Draw a plain scale of 1cm = 5 meters and shown on it 37 meters.
- V Orthographic projection of points P, Q, R, S and T are shown in figure 2. Read the views and state their position with respect to HP and VP.
- VI Draw the projection of the line AB 100 mm long inclined at 30° to HP and 45° to VP. The end A of the line AB is 50 mm below HP and 25 mm behind VP, mark the angle made by the line with the xy plane.
- VII A pentagonal lamina of 40 mm side has an edge on the HP. The surface of the plane is inclined at 45° to HP and perpendicular to the VP. Draw its projections.
- VIII Draw the Development of the tray shown in figure 3.

(5×10 = 50)

PART — C

(Maximum marks : 40)

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

- IX Figure 4 shows the pictorial view of a bearing. Draw its front view in the direction of the arrow F and top view.
- X The pictorial view of a lever shown in figure 5. Draw full sectional front view in the direction F and top view.
- XI The orthographic view of the letter H shown in figure 6. Draw its isometric projection. (2×20 = 40)
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