

Reg. No	
Signature	

# DIPLOMA EXAMINATION IN ENGINEERING/TECHNOLOGY/ MANAGEMENT/COMMERCIAL PRACTICE — OCTOBER, 2018

## **ENGINEERING GRAPHICS**

[Time: 3 hours

(Maximum marks: 100)

[Note:-1. A2 size drawing sheet to be supplied.

- 2. All drawing should be in first angle projections.
- 3. Both sides of the drawing sheet can be used.
- 4. Dimensioning as per BIS.
- 5. Sketches accompanied.

#### PART — A

(Maximum marks: 10)

Marks

- Answer all questions in one or two sentences. Each question carries 2 marks.
  - 1. What is reference line or xy line.
  - 2. Give the names of the conic curves having eccentricity unity and eccentricity less than unity.
  - 3. Give the length and width of the drawing boards designated as D0, D1, D2 and D3.
  - 4. What is the difference between oblique view and isometric view?
  - 5. What are the uses of sectional views?

 $(5 \times 2 = 10)$ 

#### PART — B

(Maximum marks: 30)

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

- Redraw the figure -1 and dimensions it as per BIS. H
- III Draw a parabola, if the distances of its focus from the directrix is 60 mm. Draw a tangent and normal at any point on the parabola.
- Draw the projections of the following points in a common reference line.
  - (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 in HP and in VP.



Marks

- V A line AB of length 80mm is inclined 45° to HP and 30° to VP. The end A of the line is 15mm above HP and 20mm in front of VP. Draw its projections.
- VI Draw the involute of a square of side 25mm.
- VII A hexagonal plane of side 30mm, has its one edge parallel to VP and 16mm in front of it. The plane is inclined 40° to VP and the lowest corner is 12mm above HP. Draw its projections.
- VIII The three orthographic views of an object is shown in figure 2. Draw the isometric view.  $(5\times10=50)$

### PART — C

(Maximum marks: 40)

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

- IX The isometric view of an object is shown in figure 3. Draw its front view, top view and left side view.
- X The isometric view of a lever is shown in figure 4. Draw the full sectional elevation and plan.
- XI Draw the development of the elbow shown in figure 5.  $(2\times20=40)$



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(REVISION — 2010)

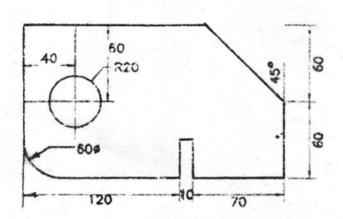


Figure 1

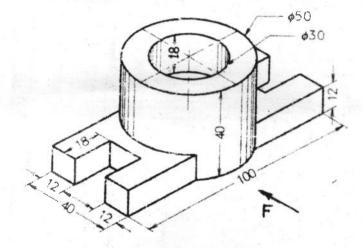


Figure 3

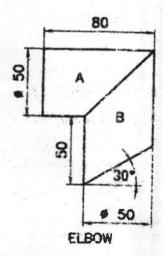


Figure 5

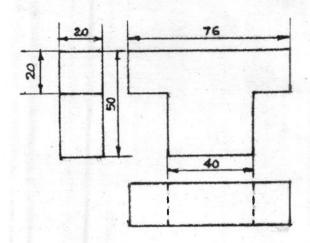


Figure 2

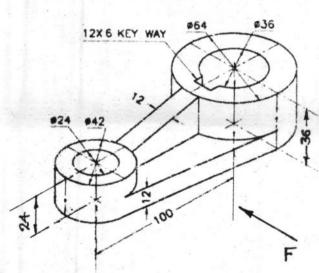


Figure 4



