

SECOND SEMESTER DIPLOMA EXAMINATION IN ENGINEERING/  
TECHNOLOGY—OCTOBER, 2014

**ENGINEERING GRAPHICS**  
(Common to all branches except DCP and CABM)

[Time : 3 hours]

(Maximum marks : 100)

- [Note : 1. A2 size drawing sheet will be supplied and both sides can be used.  
2. All drawing should be in first angle projections.  
3. Theory portions of the questions will be answered in the answer book.  
4. Sketches accompanied.  
5. Dimensioning as per BIS.]

## PART—A

(Maximum marks : 10)

- |  | Marks    |
|--|----------|
| I Answer the following questions in one or two sentences. Each question carries 2 marks. |          |
| 1. Write the elements of dimensioning.   |          |
| 2. Define conic sections.  |          |
| 3. Interpret profile plane.  |          |
| 4. Define multiview projection.  |          |
| 5. What is an isometric plane ?  | (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 pentagon of side 30 mm.
- IV Draw an ellipse whose major axis is 80 mm and minor axis is 50 mm.
- V Draw the projections of the following points. Take the distance between projectors as 20 mm :
- (a) Point C in the HP and 30 mm in front of the VP.
- (b) Point D is in VP and 35 mm below HP.
- (c) Point E is in both HP and VP.
- (d) Point F 25 mm in front of the VP and 25 mm above the HP.

- VI A line AB, 60 mm long is inclined  $30^\circ$  to HP and  $45^\circ$  to VP. The end A is 20 mm above HP and 40 mm in front of VP. Draw its projections.
- VII The isometric view of a jig angle is shown in figure 2. Draw the front view, left side view and an auxiliary view of the inclined surface. Do not dimension the views.
- VIII Draw the development of the funnel 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 channel block. Draw its front view in the direction F and top view.
- X The pictorial view of a shaft support is shown in figure 5. Draw the full sectional front view in the direction F and left side view.
- XI The orthographic view of a block is shown in figure 6. Draw the isometric view of the block. (2×20=40)