

SECOND SEMESTER DIPLOMA EXAMINATION IN ENGINEERING/
TECHNOLOGY—OCTOBER, 2012

ENGINEERING GRAPHICS

(Common to all branches except DCP and CABM)

[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.]

Marks

PART—A

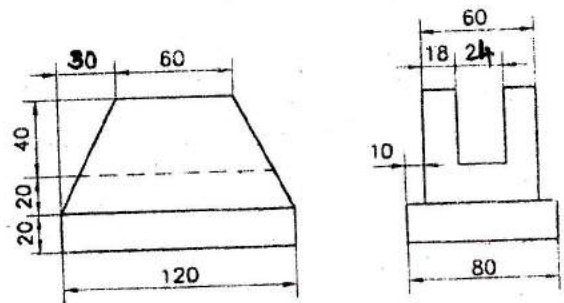
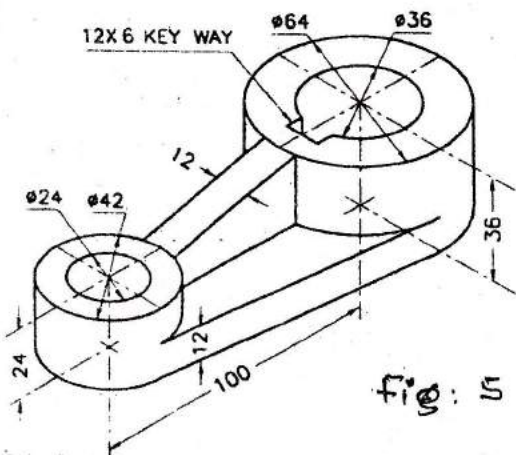
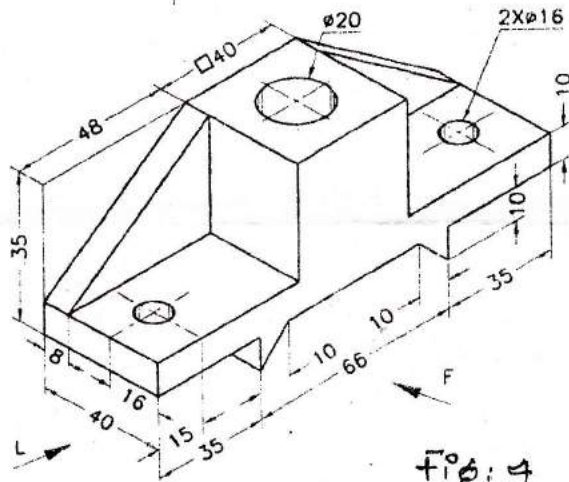
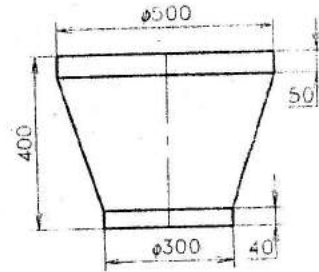
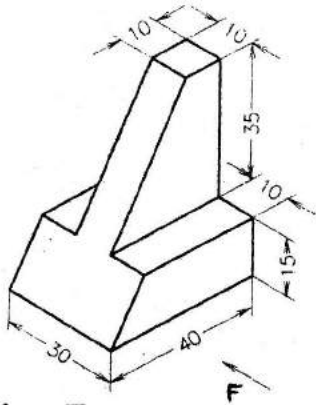
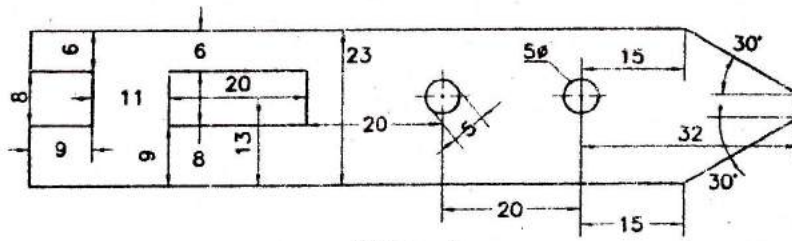
I Answer the following questions in one or two sentences. Each question carries 2 marks.

1. Write the uses of protractor.
2. What is an involute ?
3. Compare Oblique projection and Isometric projection.
4. State the difference between first angle projection and third angle projection.
5. What do you mean by Visualization of objects ? (5×2=10)

PART—B

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

- II Redraw the given figure I to full size and dimension as per BIS.
- III Construct a regular hexagon of side 40 mm.
- IV A circle of 50 mm diameter rolls along a straight line without slipping. Draw the curve traced out by a point P on the circumference, for one complete revolution of the circle.
- V Draw the projections of the following points. The distance between the projectors is 30 mm :
 - (a) Point P is in the VP and 35 mm below HP.
 - (b) Point Q is in the HP and 30 mm behind VP.
 - (c) Point R is in both HP and VP.
 - (d) Point S is 40 mm below HP and 40 mm behind VP.



- VI A line AB, 90 mm long is inclined at 45° to the HP and its top view makes an angle of 60° with the VP. The end A is in the HP and 12 mm in front of the VP. Draw its projections and find the true inclination with the VP.
- VII Draw the development of a bin as shown in figure 2.
- VIII Figure 3 shows the pictorial view of an inverted T-block with a slopping surface. Draw front view in the arrow direction. Add an auxiliary view of the slopping surface and top view. (5×10=50)

PART—C

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

- IX Figure 4 shows the pictorial view of a machine element. Draw its front view, top view and left side view.
- X The pictorial view of a machine part is given in figure 5. Draw full sectional front view and a top view.
- XI The orthographic views of a block are shown in figure 6. Draw the isometric view. (2×20=40)
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