

SECOND SEMESTER DIPLOMA EXAMINATION IN ENGINEERING/
TECHNOLOGY—MARCH, 2011

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ENGINEERING GRAPHICS
(Common-Except DCP and CABM)

[Time : 3 hours

(Maximum marks : 100)

- [Note :—1. A2 size drawing sheet to be supplied.
2. First angle projection is to be followed.
3. Dimension should be as per BIS.
4. Both sides of the sheet can be used.
5. Sketches on the next page.]

PART—A

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

Marks

- I 1. What is the importance of engineering graphics in technical field?
2. What you mean by 'plane' in engineering graphics?
3. Identify and mark four Nos. of quadrant for orthographic projections.
4. What is the main difference in full section and half section of an object?
5. What is the speciality of pictorial drawing from orthographic drawing?

(5×2=10)

PART—B

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

- II Draw six different types of lines used in engineering graphics.
III Draw the projections of the following points represented by their x and y co-ordinates :
P (30, 20), Q (-35, 25), R (-40, -35), S (45, -25), T (20, 0).
IV Fig. 1 shows a set of orthographic views of an object. Draw sectional front view and end view from left.
V Explain the principle of orthographic projections.
VI Recognize the need of auxiliary views with simple example.
VII One focus of an ellipse is at a distance of 30 mm from its directrix. Draw the ellipse, given the eccentricity as $\frac{3}{5}$.
VIII A pentagonal lamina of side 30 mm is parallel to VP at a distance of 25 mm from it and perpendicular to HP at a distance of 20 mm. Draw its projection. One side is 30° inclined to H.P.

(5×10=50)

PART—C

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

IX Pictorial view of a horizontal shaft support is shown in fig. 2. Draw three views to the full size scale.

X Oblique view of an object is shown in fig. 3. Draw its half sectional front view looking in the direction of F, full plan and left end view.

XI Draw the complete development of an elbow shown in fig. 4. (2×20=40)

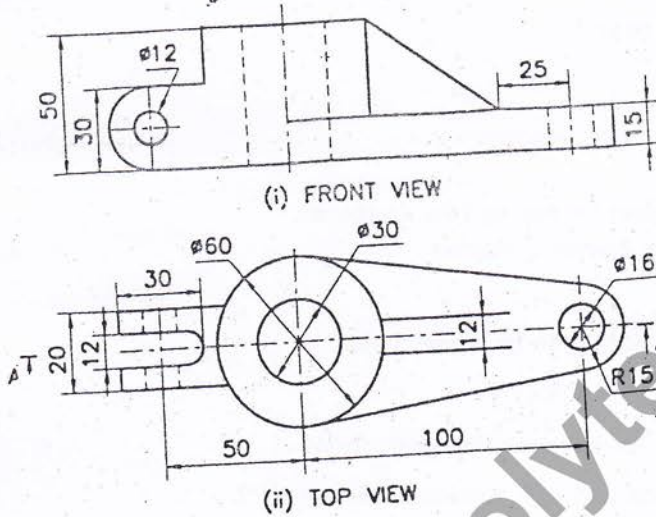


FIG 1

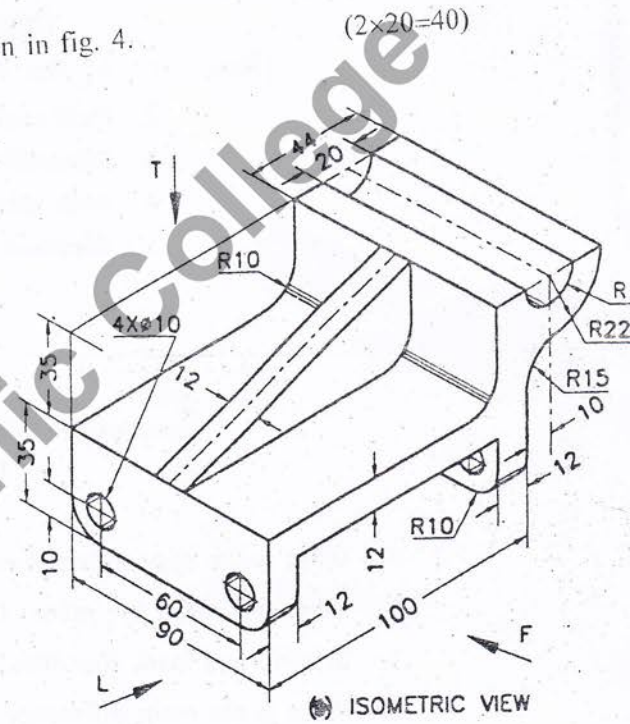


FIG 2

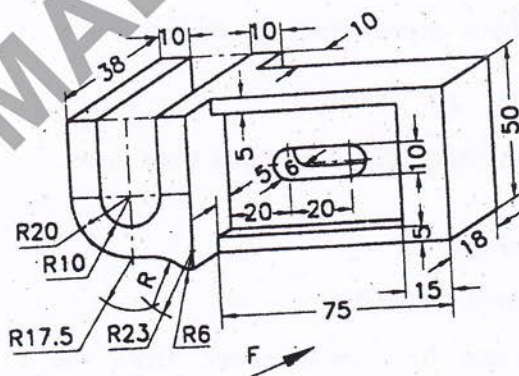


FIG 3

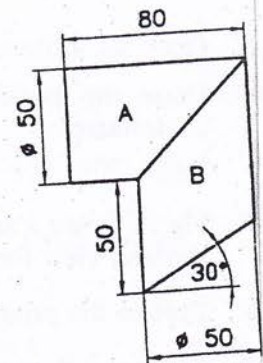


FIG 4