S2 PL, ARCH

TED (10) – 1017

(REVISION — 2010)

Reg. No. .....

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SECOND SEMESTER DIPLOMA EXAMINATION IN ENGINEERING/ TECHNOLOGY — MARCH, 2015

ENGINEERING GRAPHICS

(Common for 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 are accompanied.]

PART—A

(Maximum marks : 10)

Marks

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

1. What are the recommended reduction scales used in Engineering Graphics ? (any four)
2. What are the shape indications are recommended by BIS in dimensioning ?
3. Write the classification of primary auxiliary views.
4. What are the important full sectional views of an object ?
5. What are the different types of oblique projections ? (5×2=10)

PART—B

(Maximum marks : 50)

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

II Redraw the given Fig. 1 to full size and dimension as per BIS.

III Inscribe a regular heptagon in a circle, if the length of one side of the heptagon is 20mm.

IV One focus of an ellipse is at a distance of 30mm from its directrics. Draw the curve, given the eccentricity as $^3/_5$.

V Draw an involute of a triangle of 30mm side.

Marks

VI Draw the projections of the following points. Take the distance between projectors are 30mm.

(a) P is 30mm above HP and 40mm on front of VP.

(b) Q is 25mm above HP and 35mm behind VP.

(c) R is 32mm below HP and 38mm behind VP.

(d) S is 36mm below HP and 15mm in front of VP.

VII The end A of line AB of length 80mm is in the HP and 20mm in front of VP. If the line is inclined 45° to HP and 30° to VP draw its projections, and measure there inclinations with the XY line.

VIII Draw the development of a funnal shown in Fig. 2. (5×10=50)

PART—C

(Maximum marks : 40)

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

IX Fig. 3 shows the pictorial view of a bracket, Draw the front view in the direction of F, Top view and left side view.

X A pictorial view of an object shown in fig. 4, draw the following views :

(i) Sectional view in the direction of F.

(ii) Side view from the right.

(iii) Top view.

XI Orthographic views of a guide block shown in fig. 5. Draw oblique (Cavalier) view of the guide block, show all the dimension on it. (2×20=40)

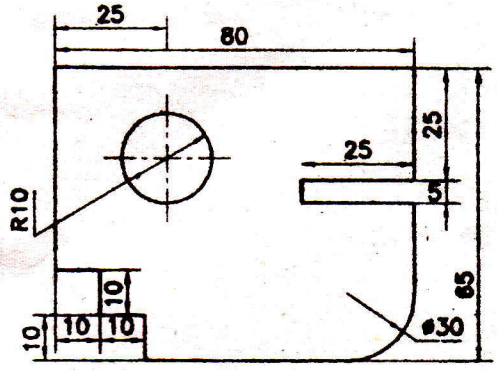


Fig. 1

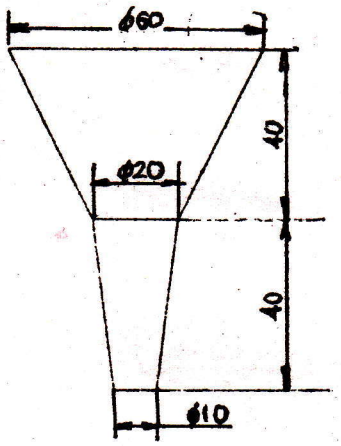
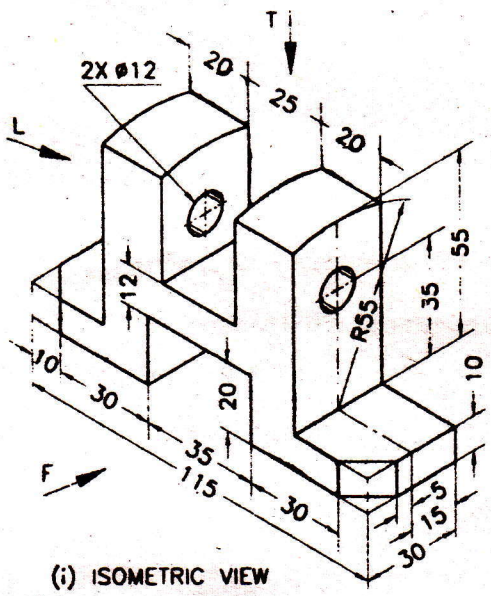


Fig. 2



(i) ISOMETRIC VIEW

Fig. 3

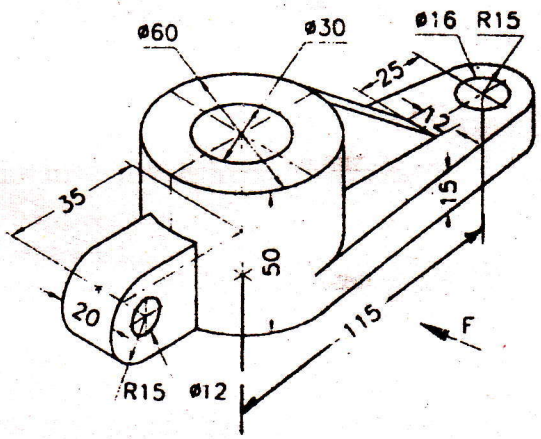
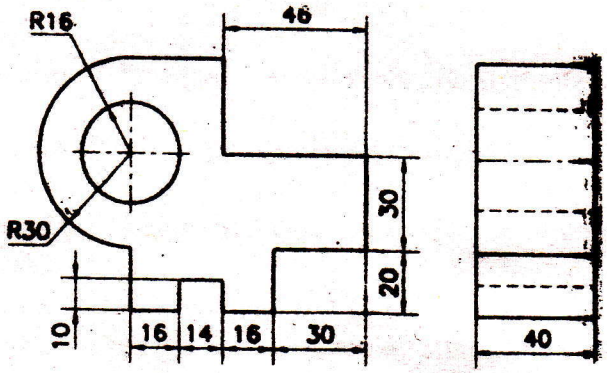


Fig. 4



(i) ORTHOGRAPHIC VIEWS

Fig 5