DIPLOMA EXAMINATION IN ENGINEERING/TECHNOLOGY/ MANAGEMENT/COMMERCIAL PRACTICE, NOVEMBER – 2020

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

[Maximum Marks: 100]   [Time: 3 Hours]

[Note: 1. A2 size drawing sheet to be supplied.
        2. All drawing should be in first angle projection.
        3. Both sides of the drawing sheet can be used.
        4. Dimensioning as per BIS.
        5. Sketches accompanied.]

PART-A
[Maximum Marks: 10]
(Answer *all* questions in one or two sentences. Each question carries 2 marks)

I.   1. Mention any four applications of a continuous thin line.

     2. What is an inviolate?

     3. Specify position of views in first angle projection.

     4. What is mean by foci distance?

     5. Name the different type of oblique projection.   (5 x 2 = 10)

PART-B
[Maximum Marks: 30]
(Answer any *five* of the following questions.   Each question carries 10 marks)

II.   Redraw the given fig. 1 to full size as per BIS.

III.   Construct a regular hexagon of size 40mm.

IV.   Focus of an ellipse is at a distance of 30mm from its directrix. Draw the ellipse given the
       eccentricity as 3/5. Draw a tangent and normal at appoint 30mm from the centre of the ellipse.

V.   Draw the projections of the following points. Distance between projectors is 30mm

       (a) Point A is 15mm above HP and 20mm in front of VP.

       (b) Point B is 18mm below HP and 10mm behind VP.

       (c) Point C is in both HP & VP.

       (d) Point D is 17mm below HP and 22mm in front of VP.

VI.   A line AB 80mm long is inclined at 40° to HP and its top view makes an angle 55° with xy
       line. The end A is 10mm above HP and 15mm in front of VP. Draw its projections.

VII.   Draw the development of the elbow shown in fig. 2.

VIII. Fig.3 shows the pictorial view of a machine element. Draw the elevation in F direction and
       an auxiliary view of the slopping surface.   (5 x 10 = 50)

[Maximum Marks: 60]
(Answer any *two* of the following questions. Each question carries 20 marks)

IX.   Pictorial view of an object is shown in fig.4. Draw the following orthographic views.

(a) Front view in the direction of F.

(b) Top view.

(c) Right side view.

X.   The pictorial view of an object is shown in fig. 5. Draw the following views.

(a) Full sectional elevation in the direction of F.

(b) Top view

Fig 1

Fig 2

Fig 3

Fig 4

Fig 5
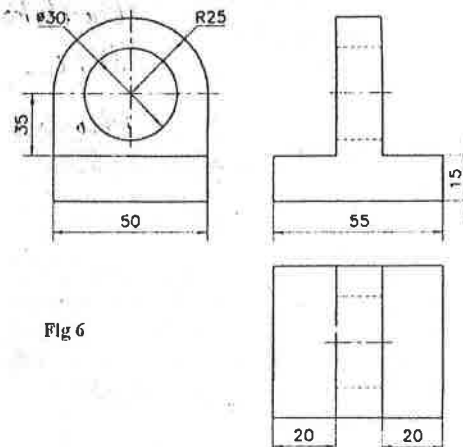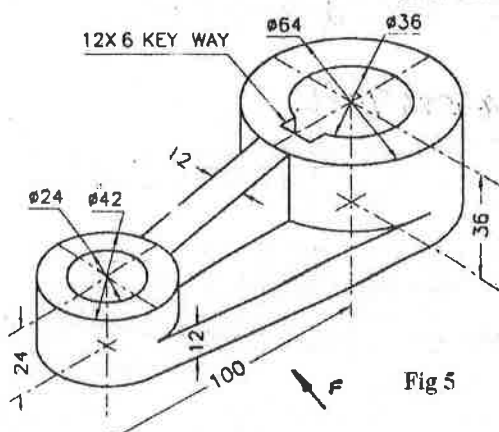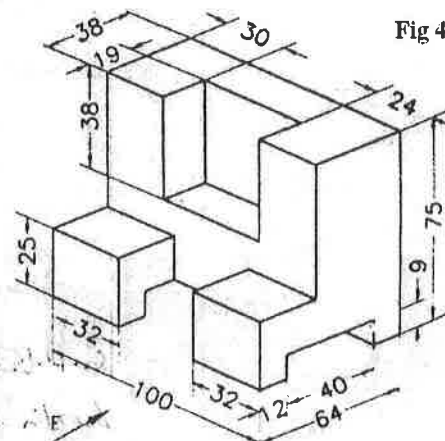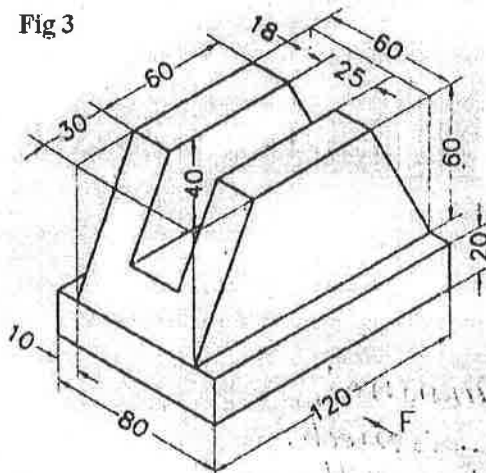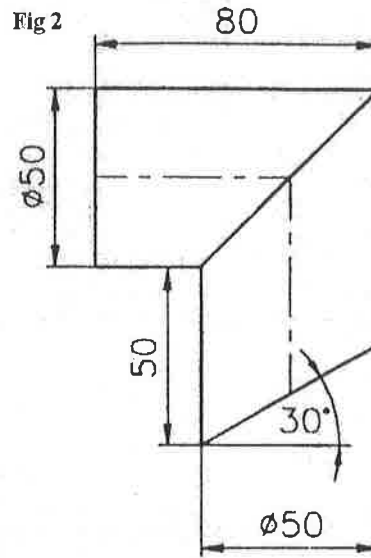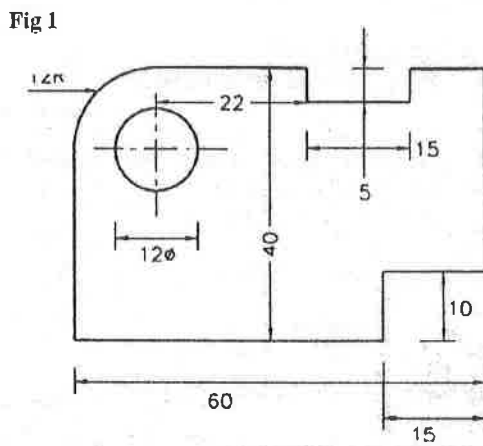
Fig 6

Orthographic views of an object are shown in Fig.6 Draw the isometric views of the same.

(2 x 20 = 40)

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