TED (15) - 2005
(REVISION-2015)

# SECOND SEMESTER DIPLOMA EXAMINATION IN ENGINEERING/ TECHNOLOGY - OCTOBER, 2016 

## ENGINEERING GRAPHICS

(Common to all branches except DCP and CABM)
[Time : 3 hours
(Maximum marks : 100)
[Note:-1. Missing data if any suitably assumed.
2. Sketches accompanied.]

## PART - A

(Maximum marks : 10)

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

1. List important four characteristics of lettering.
2. Indicate the symbolic representation of first angle projection.
3. List any four commands used in CAD for modifying an object.
4. Define isometric axes.
5. Define helix.

## 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 Draw an ellipse by concentric circle method, given the major and minor axes as 90 mm and 60 mm respectively.

IV Construct a diagonal scale of RF $1 / 2000$ to show meters, decimeters and centimeters and long enough to measure 300 meters. Mark a distance of 257.75 meters.

V Draw the projections of following points on a common reference line.
(a) Point $P$ is 12 mm above HP and 20 mm in front of VP
(b) Point Q is 24 mm below HP and 30 mm behind VP
(c) Point R is in HP and 32 mm behind VP
(d) Point S is 15 mm below HP and 40 mm in front of VP
(e) Point T is lying in both HP and VP

VI A line AB 75 mm long is inclined at an angle $30^{\circ}$ to the HP and $45^{\circ}$ to the VP . Point A is 25 mm above HP and 30 mm in front of VP. Draw the projections.

VII A rectangular lamina $60 \mathrm{~mm} \times 40 \mathrm{~mm}$ has one of its shorter edge in the VP and inclined at $40^{\circ}$ to the HP. Draw its top view, if its front view is a square of side 40 mm .

VIII Draw the development of a bucket shown in fig. 2
PART - C
(Maximum marks : 40)
(Answer any two of the following questions. Each question carries 20 marks.)
IX Figure 3 shows the pictorial view of a shaft end support. Draw its front view in the direction of the arrow F and top view.

X The isometric view of a machine block shown in figure 4. Draw front view in the direction of F , top view and auxiliary view of the inclined surface.

XI The orthographic view of an object is shown in figure 5. Draw oblique projection by cavalier method.

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