

TED (15) - 2005

(REVISION-2015)

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# 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)

Marks

- 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.

 $(5 \times 2 = 10)$ 

### 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 90mm and 60mm 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.



Marks

- V Draw the projections of following points on a common reference line.
  - (a) Point P is 12mm above HP and 20mm in front of VP
  - (b) Point O is 24mm below HP and 30mm behind VP
  - (c) Point R is in HP and 32mm behind VP
  - (d) Point S is 15mm below HP and 40mm in front of VP
  - (e) Point T is lying in both HP and VP
- VI A line AB 75mm long is inclined at an angle 30° to the HP and 45° to the VP. Point A is 25mm above HP and 30mm in front of VP. Draw the projections.
- VII A rectangular lamina 60mm × 40 mm has one of its shorter edge in the VP and inclined at 40° to the HP. Draw its top view, if its front view is a square of side 40mm.

VIII Draw the development of a bucket shown in fig. 2

 $(5 \times 10 = 50)$ 

#### 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.

 $(2 \times 20 = 40)$ 

5.61y











