| TED (15) 2005-B    |
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| (Revision-2015/19) |

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# DIPLOMA EXAMINATION IN ENGINEERING/TECHNOLOGY/MANAGEMENT/ COMMERCIAL PRACTICE, APRIL-2021

## **ENGINEERING GRAPHICS**

[Maximum marks: 75]

(Time: 2.15 Hours)

(Note: 1. Missing data if any suitably assumed

2. Sketches to be accompanied)

#### PART - A

- I (Answer any three questions in one or two sentences. Each question carries 2 marks)
  - 1. What are the elements of dimensioning?
  - 2. Define eccentricity of conic sections
  - 3. What is meant by development of surfaces?
  - 4. What is the use of auxiliary view?
  - 5. List any four CAD software (packages)

 $(3 \times 2 = 6)$ 

#### PART - B

(Answer any *four* of the following questions. Each question carries 11 marks)

- II. Redraw the given figure-1 and mark dimensions as per BIS.
- III. Inscribe a regular pentagon in a circle of diameter 100mm.
- IV. Draw the involute of a square of side 25mm.
- V. Draw a parabola, if the distance of focus from the directrix is 60mm. Draw a tangent and normal to the curve at any point on it
- VI. Draw the projections of the following points on a common reference lime, keeping the distance between projectors as 25mm apart.
  - (a) Point 'P' is 12mm above HP and 20mm infront of VP
  - (b) Point 'Q' is 24mm below HP and 30mm behind VP.
  - (c) Pont 'R' is in HP and 32mm behind VP.
  - (d) Point 'S' is 15mm below HP and 40mm infront of VP.
  - (e) Point 'T' is lying on both HP and VP
- VII. The end A of a line AB of length 80mm is in the HP and 20mm infront of VP. If the

line is inclined 45° to HP and 30° to VP. Draw its projections.

VIII. Draw the development of the funnel shown in figure 2.

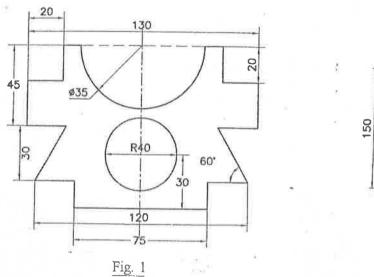
(4x11=44)

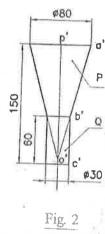
### PART - C

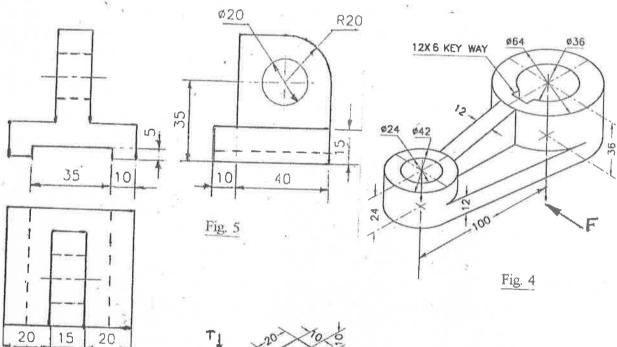
(Answer any one question from the following. Each question carries 25 marks)

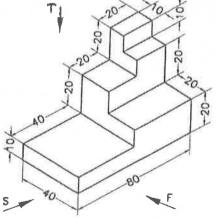
- IX. Draw the front view in the direction 'F' top view in the direction 'T' and the side view in the direction 'S' of the object shown in figure 3.
- **X.** Draw the full sectional elevation in the direction 'F' and the plan of the object shown in figure 4.
- XI. The orthographic views of an object is shown in figure 5. Draw the isometric view.

(1x25=25)









ISOMETRIC VIEW

Fig. 3

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