

# TED(21) 1005 A & TED(21) 1005 B

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(Revision – 2021)

**N22-2110220186 A**

Reg. No.....  
Signature .....

**DIPLOMA EXAMINATION IN ENGINEERING/TECHNOLOGY/  
MANAGEMENT/COMMERCIAL PRACTICE, NOVEMBER – 2022**

## ENGINEERING GRAPHICS

[Maximum Marks: 75]

[Time: 3 Hours]

- [Note: 1. A2 size drawing sheet to be supplied  
2. Missing data if any, suitably assumed  
3. Sketches are accompanied  
4. All dimensions as per BIS  
5. All drawings should be in first angle projections.]

### PART-A

**I. Answer all the following questions in one word or one sentence or sketch. Each question Carries 'one' mark.**

**(5 x 1 = 5 Marks)**

		Module Outcome	Cognitive level
1.	Write any two applications of continuous thick lines.	M1.02	U
2.	In the case of parabola, the eccentricity is.....	M1.04	U
3.	Define a projector.	M2.01	U
4.	What is an isometric projection?	M3.01	U
5.	Define CADD.	M4.04	R

### PART-B

**II. Answer any five questions from the following. Each question carries 'eight' marks.**

**(5 x 8 = 40 Marks)**

		Module Outcome	Cognitive level
1.	Draw a regular pentagon having 50mm side.	M1.04	U
2.	Construct a regular octagon of 30mm side length.	M1.04	U
3.	Draw an ellipse by eccentricity method. Given eccentricity as $\frac{4}{7}$ and one focus is at a distance of 40mm from the directrix.	M1.04	U
4.	Draw a parabola by rectangular method, given the sides of rectangle as 120mm and 50mm.	M1.04	U
5.	Draw the projections of the following points on a common reference line: A is 30mm above H.P and 20mm is front of V.P B is 30mm below H.P and 30mm behind V.P C is 35mm above H.P and 15mm behind V.P	M2.02	U
6.	Draw the projections of a line PQ, 70mm long, inclined $60^\circ$ to H.P, parallel to V.P and 20mm in front of V.P	M2.03	A

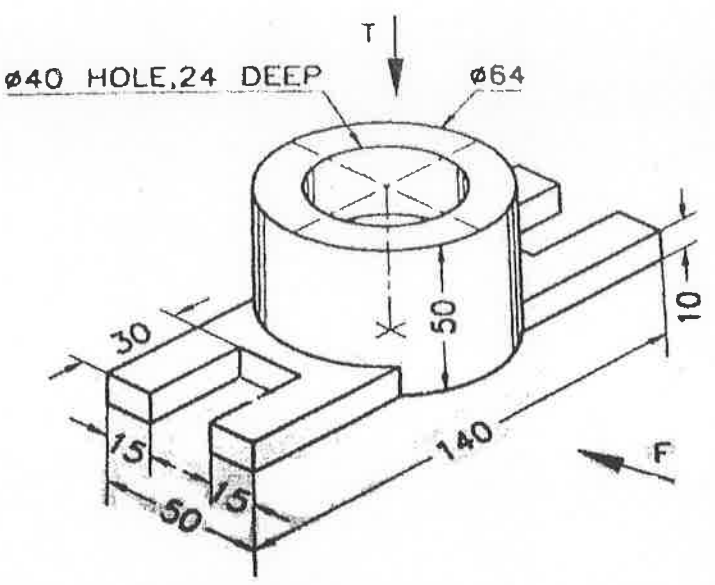
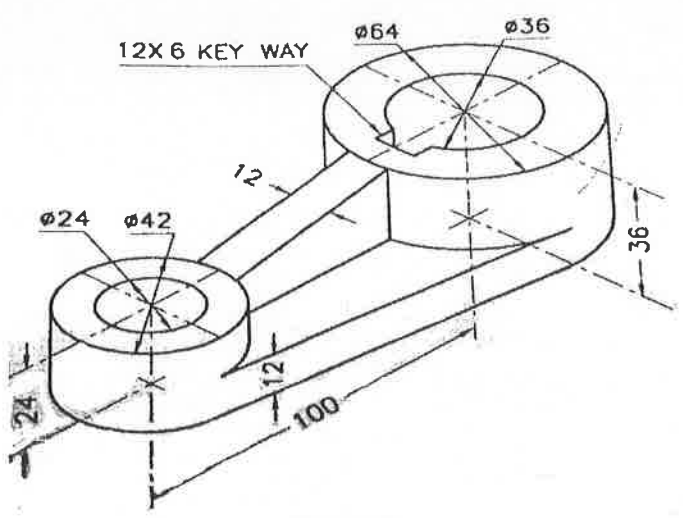
7.	The top view of a line parallel to V.P and inclined $40^\circ$ to H.P is 60mm. One end of line is 15mm above H.P and 30mm in front of V.P. Draw the projections of the line and determine the true length.	M2.03	A
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**PART-C**

Answer any two questions from the following. Each question carries 'fifteen' marks

**(2 x 15 = 30 Marks)**

Module Outcome Cognitive level

III.	<p>The isometric view of an object is shown in figure 1, draw front view and top view.</p>  <p align="center"><b>Figure 1</b></p>	M3.01	U
IV.	<p align="center"><b>OR</b></p> <p>Draw sectional front view and top view of an object shown in figure 2.</p>  <p align="center"><b>Figure 2</b></p>	M1.02	U

V. Draw the isometric view of a model, whose two views are shown in figure3.

M4.03

A

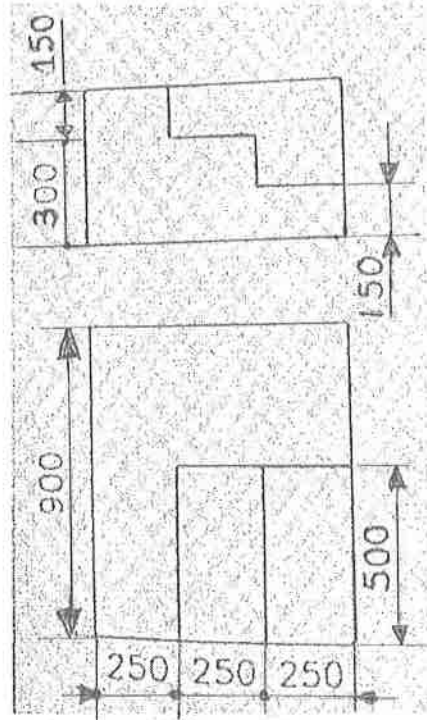


Figure 3

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**DIPLOMA EXAMINATION IN ENGINEERING/TECHNOLOGY/MANAGEMENT/  
COMMERCIAL PRACTICE – NOVEMBER - 2022**

**ENGINEERING GRAPHICS**

(Maximum Marks : 75)

[Time : 3 hours]

- [Note:- 1. A2 size drawing sheet to be supplied.  
2. Missing data if any suitably assumed.  
3. Sketches are accompanied.  
4. All drawing should be in first angle projections.]

**PART-A**

**I. Answer all questions in one word or one sentence or sketch. Each question carries 1mark.**

**(5x1= 5marks)**

		Module Outcome	Cognitive level
1	List different types of scales used in engineering drawings.	M 1.05	U
2	Identify the quadrant when a point is below HP and behind VP.	M 2.02	U
3	What do you mean by reference line?	M 2.01	U
4	List different types of conic sections.	M1.04	U
5	List the different coordinate systems in Autocad.	M4.04	U

**PART - B**

**II. Answer any Five questions from the following. Each question carries 8 marks.**

**(5x8=40marks)**

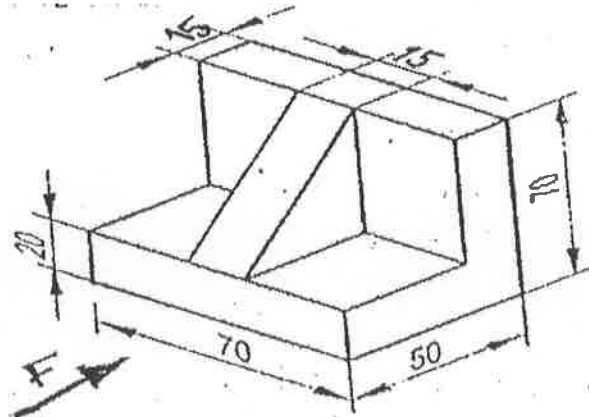
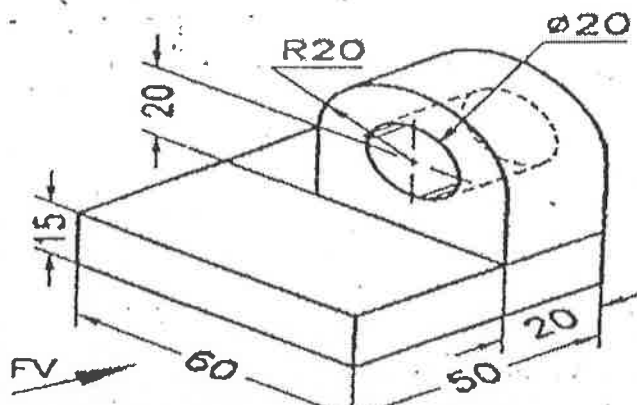
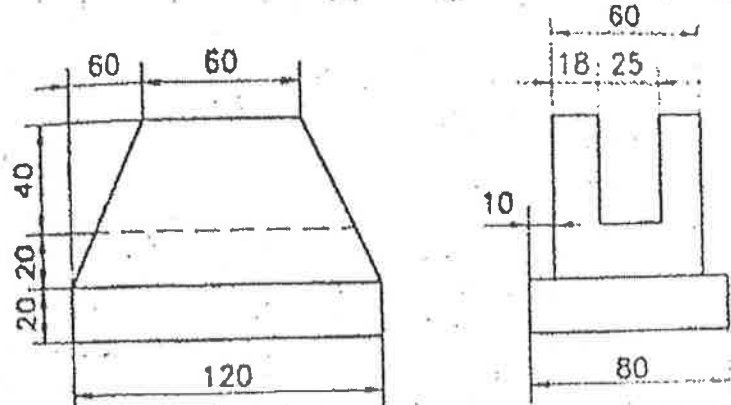
		Module Outcome	Cognitive level
1	Construct a regular heptagon of side 50 mm.	M 1.04	U
2	Draw an ellipse by rectangular method, major and minor axes given as 100 mm and 60 mm respectively.	M 1.04	U
3	Draw a parabola given the distance of the focus from the directrix as 60 mm.	M1.04	U
4	Draw the involute of a rectangle having length 30 mm and breadth 20 mm.	M1.04	U
5	Draw the projections of the following points on a common reference line. (i) Point A is 20 mm above HP and 25 mm in front of VP. (ii) Point B is 20 mm above HP and is in the VP. (iii) Point C is 25 mm in front of VP and is in the HP. (iv) Point D is 20 mm below HP and 15 mm behind VP.	M2.02	U
6	A line MN, 70 mm long lies in the VP and has the end M in both HP and the VP. It is inclined at 35° to the HP. Draw the projections of the line.	M2.03	A
7	A line PQ, 60 mm long has one end P, 20 mm above the HP and 35 mm in front of the VP. The line is parallel to HP. The front view has a length of 50 mm. Find its true inclinations with the VP.	M2.03	A

PART - C

III. Answer any two questions from the following. Each question carries 15 marks.

(2x15=30Marks)

Module Outcome Cognitive level

1	<p>Draw the front and right side views of the object shown in figure</p> 	M3.01	U
2	<p>Draw the front view and left side view of the object shown in figure.</p> 	M3.01	U
3	<p>Orthographic views of an object are shown in figure. Draw the isometric view of the object</p> 	M4.02	A

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