

07150554B

MECHANICAL PRODUCTION TECHNICIAN LEVEL 5**ENG/OS/ME/CC/01/5****Interpret Technical Drawing November/December 2025**Printed By: Technical And Vocational College Date: 19.11.2025
11:51 AMPrinted By: Technical And Vocational College Date: 19.11.2025
11:51 AM

**TVET CURRICULUM DEVELOPMENT, ASSESSMENT AND CERTIFICATION COUNCIL
(TVET CDACC)**

WRITTEN ASSESSMENT

Printed By: Technical And Vocational College Date: 19.11.2025
11:51 AM

INSTRUCTIONS TO CANDIDATE

1. This paper consists of **TWO** sections: **A** and **B**.
2. Answer **ALL** questions in section A and **ANY THREE** (3).
3. Answer **Question 11** and **ANY OTHER TWO** questions in section B
4. Marks for each question are indicated in the brackets.
5. Candidates are provided with a separate answer booklet
6. **Do not write on the question paper.**

Printed By: B Technical And Vocational College Date: 19.11.2025
11:51 AM**This paper consists of FIVE (5) printed pages**

**Candidate should check the question paper to ascertain that all pages are printed as
indicated and that no questions are missing.**

Printed By: Technical And Vocational College Date: 19.11.2025
11:51 AM

SECTION A (40 MARKS)**Answer ALL the questions in this section**

1. Define the following used in technical drawing (4 Marks)

- Orthographic projection
- Isometric drawing
- Sectional view
- Dimensioning

2. Proper maintenance of drawing instruments ensures precision, safety, and durability during use. State FOUR ways of Maintaining them. (4 Marks)

3. Subdivide a line of 70 mm it into the ratio of 1: 2: 4 (4 Marks)

4. Using free hand sketching, draw a ball pen hammer used in a mechanical workshop. (4 Marks)

5. Construct a regular heptagon with each side equal to 30 mm. (4 Marks)

6. Using only a ruler and a pair of compasses, construct angles of 90° and 45° (4 Marks)

Printed By: Bu Technical And Vocational College

Date: 19.11.2025 11:51 AM

7. In modern engineering and design, Computer-Aided Drawing (CAD) has become a preferred method compared to traditional manual drafting. State FOUR reasons for this. (4 Marks)

8. Computer-Aided Drawing (CAD) software provides tools that allow users to edit and improve existing drawings. Identify FOUR such tools. (4 Marks)

9. Outline the purpose of the following drawing instruments: (4 Marks)

Printed By: Technical And Vocational College Date: 19.11.2025

11:51 AM

- a. French curves;

- b. Set squares;

- c. Compass;

- d. T-squares

Printed By: Technical And Vocational College Date:

19.11.2025 11:51 AM

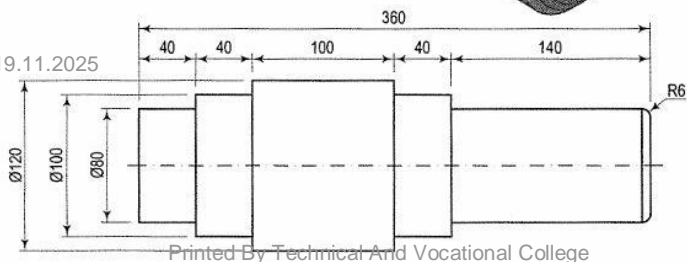
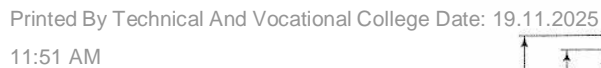
10. Draw an equilateral triangle of 40mm (4 Marks)

Printed By: Technical And Vocational College Date: 19.11.2025

11:51 AM

11. Figure 1 below show machined shaft designed to link trailers. Draw the representation using AutoCAD software in 3D commands showing all the dimensions.

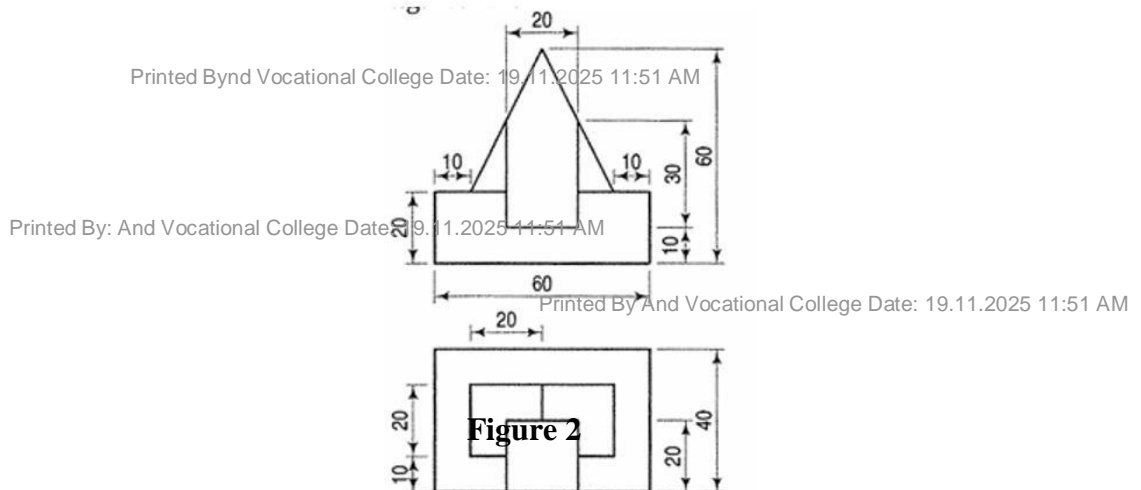
(20 Marks)



FigureD1ate: 19.11.2025 11:51 AM

12. Figure 2 below shows a casting design for a given mechanical tool. Construct the figure in isoection and include any FOUR major dimensions (Dimensions are in mm)

(20 Marks)



13. Figure 3 below shows a machined bracket designed by a mechanical production trainee in the workshop. Draw the following views in first angle projection including 4 major

Printed By: r t h Technical And Vocational College Date: 19.11.2025

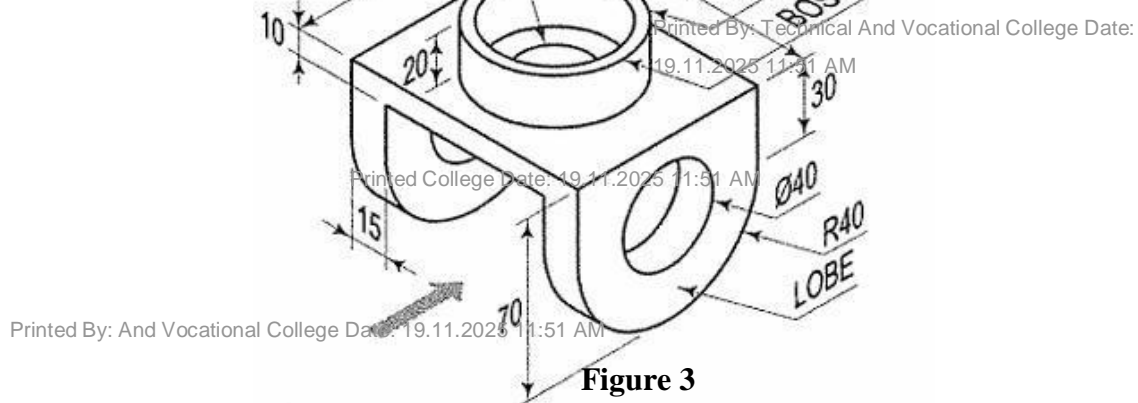
11:51 AM

(20 Marks)

- Front elevation in the direction of the arrow
- End elevation
- Plan.

Printed By: And Vocational College Date: 19.11.2025 11:51 AM

Printed By: Technical And Vocational College Date: 19.11.2025 11:51 AM



14. Figure 4 below represents an orthographic projection of a casting flange attached to suspension system of vehicle. Draw the oblique projection from the diagram given. (All dimensions are in mm)

(20 Marks)

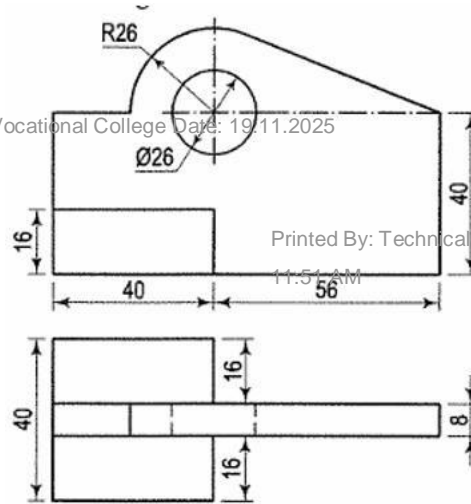


Figure 4