

073204T4PLM

PLUMBING LEVEL 4

CON/OS/PL/CC/03/4/A

APPLY TECHNICAL DRAWING

July/August 2024



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

WRITTEN ASSESSMENT

2 HOURS

INSTRUCTIONS TO CANDIDATE

1. This paper consists of two sections; **A** and **B**
2. Answer **ALL** the question as guided in each section
3. Marks for each question are as indicated in the brackets
4. You are provided with a separate answer booklet to answer the questions
5. Do not write in this question paper

This paper consists of FIVE (5) printed pages

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

SECTION A: (10 MARKS)

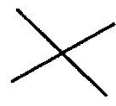
Answer all questions in this section. Each questions carry one mark.

1. The following views are used in orthographic projection EXCEPT _____.
 - A. Front
 - B. Side
 - C. Rear
 - D. Top
2. While drawing a perpendicular line through a point which is nearer to the middle of a given line, _____ is cut at two points on the line.
 - A. A circle
 - B. A square
 - C. A rectangle
 - D. An arc
3. A set square can be used to set out the following angles EXCEPT.
 - A. 30
 - B. 45
 - C. 60
 - D. 80
4. The following statements are true APART from?
 - A. A pentagon is a plane figure bounded by four sides
 - B. A hexagon is a plane figure bounded by six sides
 - C. A heptagon is a plane figure bounded by seven sides
 - D. An octagon is a plane figure bounded by eight sides
5. In which way would you observe proper care of drawing instruments?
 - A. Sharpen and store your pencils properly after use
 - B. Use measuring tools to cut the paper
 - C. Dropping tools and Equipment's on floor
 - D. Have same container for making tools.
6. Centre lines, section lines are drawn using ___ pencil.
 - A. H
 - B. 2H

- C. 3H or 4H
 - D. HB
7. Which of the following common units of measurements is used in technical drawing?
- A. Millimeter
 - B. Centimeter
 - C. Inch
 - D. Foot
8. The dimension on the drawing reads 4mm while the true dimension is 40mm. What scale has been used?
- A. 1:10
 - B. 1:100
 - C. 1:40
 - D. 1:1000
9. The following are components of title block EXCEPT.
- A. Title of drawing
 - B. Paper size
 - C. Date
 - D. Scale
10. Details in drawings are represented using.....
- A. Plans
 - B. Scales
 - C. Symbols
 - D. Color

SECTION B: (40 MARKS)

Attempt all questions in this section.

11. A scale drawing is a representation of an object or place that retains its proportions but is adjusted in size according to a specific ratio. Give ONE importance of using a scale in technical drawing. (1 Mark)
12. Technical drawing Lines are used for different purposes to provide specific information for designers, manufacturers among others. State the application of the types of lines given below as used in drawing.
- a. Thin short dashes. (1 Mark)
 - b. Thick continuous lines. (1 Mark)
 - c. Thin continuous lines. (1 Mark)
13. It is very important to take good care of tools, equipment, and materials at all times. Outline FOUR drawing equipment and explain the care for each. (4 Marks)
14. Title blocks are used to record all important information necessary for the working drawings. State FOUR contents you are likely to insert in a title block. (4 Marks)
15. A polygon is a plane figure bounded by more than four straight sides. Outline FOUR types of polygons. (4 Marks)
16. Outline the properties of the following types of lines.
- a.  (1 Mark)
 - b.  (1 Mark)
 - c.  (1 Mark)
17. Construct a line of length 7cm and divide it into 3 equal parts. (3 Marks)
18. Using a compass and a ruler only, construct an angle of 75° . (4 Marks)
19. Construct a pentagon given a diagonal of 8 cm. (6 Marks)
20. Orthographic projection is a means of representing three-dimensional objects in two dimensions. Using the given figure 1, draw the object in its first angle orthographic projection. (8 Marks)

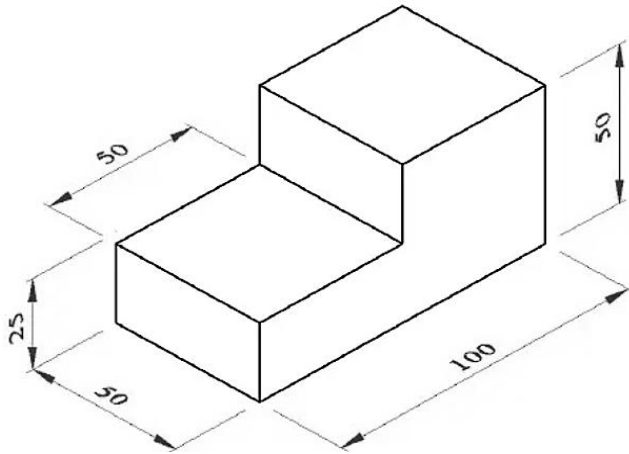


Figure 1

THIS IS THE LAST PRINTED PAGE.