

073204T4MSN

MASONRY LEVEL 4

CON/OS/MA/CC_P/0 in te d/4 Printed By: And Vocational College **Measure and Calcula**

te Objects' Parameters November/December 2025

Printed By: Technical And Vocational College Date: 21.11.2025

07:18 AM



Printed By: Technical And Vocational College Date: 21.11.2025 07:18 AM

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

WRITTEN ASSESSMENT

Printed By: And Vocational College

Date: 21.11.2025 07:18 AM

TIME: 2 HOURS

INSTRUCTIONS TO CANDIDATE

Printed By: Technical And Vocational College Date:
21.11.2025 07:18 AM

1. This paper consists of **TWO** sections **A** and **B**.

Printed By: B Technical And Vocational College
Date: 21.11.2025 07:18 AM

2. Answer the questions in each section.

Printed By: B Technical And Vocational College
Date: 21.11.2025 07:18 AM

3. Marks for each question are indicated in the brackets.

Printed By: B Technical And Vocational College
Date: 21.11.2025 07:18 AM

4. You are provided with a separate answer book to answer the questions.

Printed By: B Technical And Vocational College
Date: 21.11.2025 07:18 AM

5. Do not write on the question paper.

Printed By: Technical And Vocational College Date: 21.11.2025

07:18 AM

Technical And Vocational College

This paper consists of FOUR (4) printed pages.

Date: 21.11.2025 07:18 AM

**Candidate 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 the questions in this section. Each question carries one mark

1. A rectangular was which geometric shape? (1mark)

- A. Cube
- B. Cuboid
- C. Cylinder

Printed By: Technical And Vocational College Date:
Prism
21.11.2025 07:18 AM

2. The radius of a circular column is an example of: (1 mark)

- A. Object parameter
- B. Job specification
- C. Measurement error
- D. Workplace policy

Printed By Technical And Vocational College

Date: 21.11.2025 07:18 AM

3. Which tool is best for checking the vertical alignment of a wall? (1 mark)

Printed By: Technical And Vocational College Date:
21.11.2025 07:18 AM

- A. Spirit level
- B. T-square
- C. Measuring tape

Printed By: Technical And Vocational College

4. A measuring tape is marked in centimeters but the job requires meters. What should you do? (1 mark)

Printed By: And Vocational College Date:
21.11.2025 07:18 AM

- B. Multiply by 100
- C. Divide by 100
- D. Subtract 100

Printed By: And Vocational College Date: 21.11.2025 07:18 AM

5. To confirm that a digital caliper before use, you should
Printed By: Technical And Vocational College Date: 21.11.2025 07:18 AM

- A. Shake it
- B. Test it against a known standard
- C. Drop it
- D. Check its color

Printed By Technical And Vocational College

Date: 21.11.2025 07:18 AM

6. If a beam length is measured as 2.6 m but mistakenly recorded as 26 m, the error is due to: (1 mark)

Printed By: B And Vocational College
Date: 21.11.2025 07:18 AM

- A. Wrong tool
- B. Wrong system of measurement
- C. Recording error

Printed By: B And Vocational College Date:
21.11.2025 07:18 AM

7. Which formula is used to calculate the volume of a cylinder? (1 mark)

Printed By: th Technical And Vocational College Date:
21.11.2025 07:18 AM

- A. $V=\pi r^2 h$
- B. $V=2\pi r h$
- C. $V=4\pi r^2$
- D. $V=\pi r^3$

8. A mason rechecks his calculations after completing them. This action shows: (1 mark)

- A. Time wasting

Printed By Technical And Vocational College

Date: 21.11.2025 07:18 AM

- B. Compliance with policy
- C. Self-checking computations
- D. Tool maintenance

9. Specifications for measurement are mainly obtained (1 mark)

Printed By: Technical And Vocational College

Date: 21.11.2025 07:18 AM

- A. Drawings and job specifications
- B. Bosses only
- C. Friend's advice
- D. Shop catalogues

10. Which PPE should be worn when taking measurements on site? (1 mark)

Printed By: nical And Vocational College

- A. Gloves, safety boots, helmet
- B. Sunglasses and cap
- C. Tie and jacket

Printed By: B And Vocational College Date: 21.11.2025
07:18 AM

SECTION B (40 MARKS)

Attempt ALL Questions in This Section

11. A wall has a length of 3 m, and a thickness of 0.25 m. Calculate the amount of concrete required to build this wall. (3 marks)

12. A round pillar has a diameter of 0.4 m and a height of 2.5 m. Find its volume in cubic meters. (3 marks)

13. A mason recorded the length of a beam as 350 cm. The job card requires the measurement in meters. State the correct value. (2 marks)

14. You are given a steel tape and a spirit level for site measurements. Explain how you would check one of these tools for accuracy before starting work. (4 marks)

15. During measurement work on site, you are issued with a steel tape and a plumb line. Describe how you would care for these tools to keep them in good condition. (4 marks)

16. A mason measured the length of a lintel as 450 cm, but the supervisor required the measurement in meters. Rewrite the measurement correctly and explain why such conversions are important. (3 marks)

17. A floor slab measures 4 m by 2.5 m. Calculate its surface area in square meters. (2 marks)

18. A student measured a wall and calculated its area as 12 m^2 , but on rechecking, the correct answer was 15 m^2 . Explain what went wrong and why it is important to always recheck calculations. (4 marks)

19. On a construction site, measurement results are often written down in a record book.

Explain FOUR good practices for documenting these results correctly. (4 marks)

20. A water tank has a radius of 1.4 m and a height of 4 m. Work out its capacity in liters. (3 marks)

21. Systems of measurement (metric and imperial) must be identified and converted according to job requirements. Differentiate between the metric and imperial systems of measurement, giving one example. (4 marks)

22. Measuring and calculation instruments are maintained according to manufacturer's instructions. Outline TWO ways of maintaining measuring instruments. (4 marks)