

073206T4BLD

BUILDING TECHNOLOGY LEVEL 6

CON/OS/BUT/CC/04/6/A

Apply Workshop Technology Practices

March/April 2025



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

WRITTEN ASSESSMENT

Time: 3 HOURS

INSTRUCTIONS TO CANDIDATE

1. This paper consists of **TWO** sections: **A** and **B**.
2. Attempt **ALL** questions in section A and **ANY THREE** 3 questions in section B
3. Marks for each question are indicated in the brackets.
4. Candidates are provided with a separate answer booklet
5. **DO NOT** write on the question paper.

This paper consists of THREE (3) 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 (40 MARKS)

Attempt ALL the questions in this section.

1. One of the roles of a technician in the workshop is to ensure compliance to safety regulations. List FOUR safety precautions observed in the carpentry workshop. (4 Marks)
2. Tools and equipment are fundamental to workshop activities. Sketch a trowel, chisel and jointer as hand tools used in the workshop. (3 Marks)
3. Proper care and maintenance of tools are vital for their performance. Outline FOUR maintenance practices carried out on a pipe wrench. (4 Marks)
4. Machines in the workshop serve specific and critical roles. State FOUR functions of a thicknesser in a carpentry workshop. (4 Marks)
5. Protective measures are necessary when working with machines. Outline the uses of any FOUR PPE's donned when operating mechanical machines. (4 Marks)
6. Machines in the workshop are designed for specific functions. Identify TWO functions of a pipe bending machine. (2 Marks)
7. Concrete vibrator is a construction tool that enhances efficiency during concreting works. State FOUR functions of a concrete vibrator. (4 Marks)
8. Maintaining equipment ensures consistent and reliable performance. State THREE routine maintenance practices carried out on a block cutter. (3 Marks)
9. Fire safety is a critical consideration in any workshop. Identify FOUR types of fire extinguishers found in a workshop. (4 Marks)
10. Adhering to established rules ensures safe and efficient operation in the workshop. State FIVE workshop rules and regulations. (5 Marks)
11. Measuring instruments are crucial for ensuring accuracy in workshop tasks. Outline THREE parts of a veneer caliper. (3 Marks)

SECTION B (60 MARKS)

Attempt Any THREE Questions in This Section.

12. A clear understanding of different types of water pumps and the importance of their proper maintenance ensures optimal performance and longevity.
- a) Describe FOUR types of water pumps. (8 Marks)
 - b) Justify SIX maintenance practices carried out on pumps. (12 Marks)
13. Understanding the differences and internal functioning of engine-powered vehicles is essential for effective operation and troubleshooting.
- a) Compare and contrast a diesel and petrol engine. (12 Marks)
 - b) Analyze the functioning of a four-stroke engine. (8 Marks)
14. A reliable power supply and well-designed electrical circuits are the backbone of workshop operations as most machines and equipment require power for their operations.
- a) Explain FIVE sources of power supply in the workshop. (10 Marks)
 - b) Describe FIVE types of basic electrical circuits. (10 Marks)
15. Practical insights into tool functions and storage methods improve their usability and lifespan, while also promoting a productive and hazard-free workshop environment.
- a) Describe FIVE functions
 - b) Explain FIVE methods of safe storage of tools in the workshop. (10 Marks)