

071304T4EIN

ELECTRICAL INSTALLATION LEVEL 4

ENG/OS/EI/CC/02/4/A

Perform Workshop Processes

March/April 2025



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

WRITTEN ASSESSMENT

Time: 2 HOURS

INSTRUCTIONS TO CANDIDATE

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

This paper consists of FOUR (4) 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 question carries one mark

1. Personal protective equipment is safety gear worn to protect an individual from hazards.
Which attire can protect you from falling objects?
 - A. High visibility clothing
 - B. Safety boots
 - C. Ear muffs
 - D. Gloves
2. Safety is essential when working with electricity, which one is not a precaution to take when using electrical test instruments
 - A. Repair any machine while it is running
 - B. Wear appropriate PPE
 - C. Check leads for damage
 - D. Check instrument specified range and category
3. A tool is a device that can be used to accomplish a task. Which of the following tools can be used for making threads on a metal conduit?
 - A. Hammer
 - B. Screwdriver
 - C. Wrench
 - D. Stock and die
4. Most electrical hand tools such as pliers have an insulated handle to _____
 - A. Keep it clean
 - B. Help guard against shock
 - C. beautify it
 - D. Reduce wear and tear
5. You have been tasked to clean some instruments in the workshop. Which material should you use to clean an insulation resistance tester?
 - A. Sandpaper
 - B. Abrasive brush
 - C. Soft cloth
 - D. Steel wool

6. Hazardous workshop materials should be disposed off by _____
 - A. Throwing them into the general waste bin
 - B. Mixing them with regular waste
 - C. Following environmental health and safety (EHS) guidelines
 - D. Burning them outdoors
7. Faulty tools may cause harm. What is a common sign of a faulty tool?
 - A. Smooth operation
 - B. Unusual noises during use
 - C. Proper efficiency
 - D. Regular output
8. When performing calibration, one can find out how far a measurement device is from the standard. Which parameter should be checked against standard units?
 - A. Time only
 - B. Dimensions only
 - C. All operating parameters
 - D. Color of the tool
9. Why is it important to test repaired tools before use?
 - A. To check for aesthetic appeal
 - B. To ensure the repair was successful
 - C. To increase the weight of the tool
 - D. To avoid future repairs
10. An ohmmeter is an instrument that is used to measure _____
 - A. Resistance
 - B. Voltage
 - C. Current
 - D. Power

SECTION B (40 MARKS)

Attempt ALL questions in this section.

11. A company has purchased a number of tools and equipment and they are required to be stored. State TWO appropriate places where they can be stored. (2 marks)
12. For efficiency of the work output, tools are supposed to be maintained regularly. Describe FIVE ways a technician can use to maintain a drilling machine. (5 marks)
13. An equipment or instrument is considered to have failed when under some conditions. State THREE conditions under which an instrument is considered to have failed. (3 marks)
14. When working in a workshop, an accident may occur. List FOUR common causes of accidents. (4 marks)
15. In a workshop there are rules laid down to promote safety of personnel and equipment. Identify FOUR workshop safety rules and regulations. (4 marks)
16. Hazardous materials can cause harm if handled inappropriately. Record FIVE best practices for handling hazardous materials. (5 marks)
17. To ensure that tools are functional at all times, proper care must be taken. Outline FIVE routine maintenance that can be performed. (5 marks)
18. Your colleague has acquired a minor burn while in the workshop. State FOUR steps you will follow to administer first aid. (4 marks)
19. The regular use of tools and equipment leads to wear and tear or breakages. Write FIVE steps to repair faulty workshop tools or equipment. (5 marks)
20. Instruments are required to be calibrated regularly. List THREE reasons for calibration: (3 marks)