

061206T4CYB

CYBER SECURITY TECHNICIAN LEVEL 6

SEC/OS/CS/CR/01/6/A

PERFORM COMPUTER REPAIR AND MAINTENANCE

Nov/December. 2023



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

WRITTEN ASSESSMENT

Time: 3 hours

INSTRUCTIONS TO CANDIDATES

1. This paper has two sections **A** and **B**.
2. You are provided with a separate answer booklet.
3. Marks for each question are as indicated.
4. Do not write on the question paper.

This paper consists of 3 printed pages.

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

SECTION A: (40 MARKS)

*Attempt **all** questions in this section*

1. State the difference between preventive maintenance and corrective maintenance **(4 marks)**
2. State FOUR approaches for identifying performance issues in a machine.
(4 marks)
3. State the FOUR steps involved in diagnosing hardware and software in line with the standard operating procedure. **(4 marks)**
4. State FOUR functions of a SIMM Tester as a diagnosing tool. **(4 marks)**
5. List THREE possible causes of a computer starts up error that displays a "No Bootable Device"
(3 marks)
6. List FOUR personal Safety precautions when dismantling computer components. **(4 marks)**
7. Describe THREE steps for identifying and removing faulty hard disk from the system unit.
(3 marks)
8. Explain any THREE types of upgrades that can be applied to software. **(6 marks)**
9. State FOUR importance of continuous monitoring during the reassembly of components.
(4 marks)
10. List FOUR benefits of sharing the maintenance report with relevant parties of an organization
(4 marks)

SECTION B: (40 MARKS)

Attempt any two questions in this section

11. Mr. Livondo, a computer troubleshooting expert was demonstrating on the layout and the components mounted on the motherboard. He informed the students that there are expansion slots that are used to allow additional devices to be installed into the computer.
- a) Discuss any FOUR devices that can be added to the computer through expansion slots.
(8 marks)
 - b) Discuss FOUR factors that need to be considered when replacing a motherboard.
(8 marks)
 - c) State FOUR techniques for testing repaired or replaced components in a desktop computer.
(4 marks)
12. a) Explain FIVE ways of ensuring that safety procedures of protecting computer equipment from damage and data loss in a computer Laboratory.
(10 marks)
- b) Discuss the purpose of the following tools.
(10 marks)
- i. Multimeter
 - ii. Loopback Plug
 - iii. Power Supply Tester
 - iv. Windows Memory Diagnostic
 - v. Disk defragmenter
13. a) Explain FOUR reasons why following the manufacturer's manuals is important when dismantling components.
(8 marks)
- b) Explain THREE types of Operating System Installation that can be done by a computer repair technician.
(6 marks)
- c) Discuss THREE common incompatibilities that might occur between an operating system and hardware.
(6 marks)
14. a) Explain the FIVE elements that should be included in a comprehensive computer repair and maintenance report.
(10 marks)
- b) Discuss FIVE troubleshooting actions that Joan can take to increase the internet speed for the computer.
(10 marks)

END