

061006T4ICT

ICT TECHNICIAN LEVEL 6

IT/OS/ICT/CR/6/6

PERFORM COMPUTER REPAIR AND MAINTENANCE

JULY/AUGUST 2023



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

WRITTEN ASSESSMENT

TIME: 3 HOURS

INSTRUCTIONS TO CANDIDATE

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

This paper consists of 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: (40 MARKS)

Attempt ALL questions in this section.

1. State the following acronyms in full (4 Marks)
 - a) BIOS
 - b) CMOS
 - c) EEPROM
 - d) UPS
2. Differentiate between track ball and joystick (2 Marks)
3. Mr. Jackson intends to use USB port instead of a parallel port to connect peripheral devices on his computer. Outline FOUR merits of USB port. (4 Marks)
4. Explain the functions of each of the following keys during the Power- on Self-Test process in a computer system.
 - a) Esc (2 Marks)
 - b) F10 (2 Marks)
 - c) Ctrl+Alt+Delete (2 Marks)
5. Highlight FIVE factors that should be considered when selecting a troubleshooting technique (5 Marks)
6. Enumerate FOUR benefits an institution gains by conducting regular computer maintenance. (4 Marks)
7. Tom, a technician acquired a software which was accompanied with technical documentation, State THREE reasons why he should apply the document. (3 Marks)
8. Define each of the following terms as used in computer hardware inventory.
 - i) Model number (2 Marks)
 - ii) Serial number (2 Marks)
9. Outline FOUR possible causes of a hard disk failure (4 Marks)
10. Distinguish between a motherboard and a daughterboard. (4 Marks)

SECTION B: (60 MARKS)

Attempt any THREE (3) questions in this section

11.

a) Explicate how you would troubleshoot a PC with the following symptoms; (10 Marks)

- i) PC appears dead
- ii) PC sometimes halts during booting
- iii) Smell burnt parts or odours
- iv) PC powers down unexpectedly

b) Software maintenance is the process of modifying and updating the software according to the customer's requirements. Explain FOUR types of software maintenance. (10 Marks)

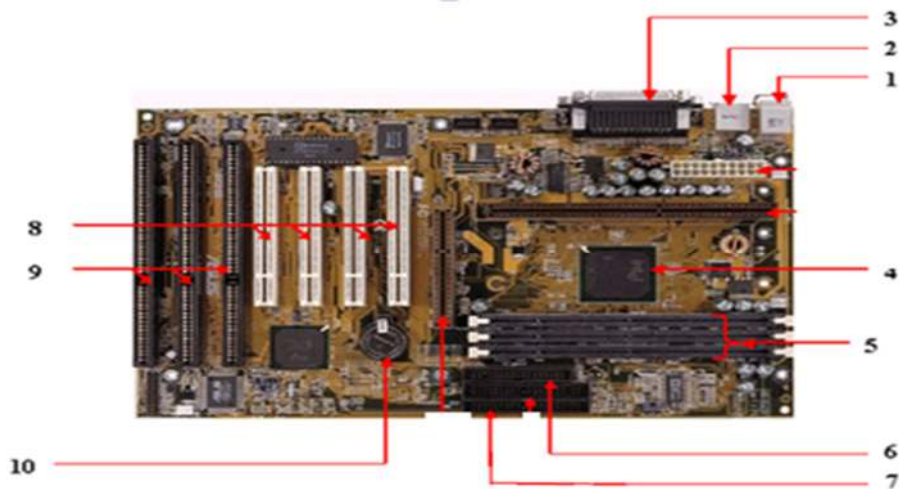
12. An ICT technician from Kibawe technical Institute intends to train learners through PC repair and maintenance;

- i) Identify FIVE safety precautions he should guide the learners to observe when repairing and servicing computer systems (10 Marks)
- ii) Enumerate TEN important tools required for repair and maintenance. (10 Marks)

13.

a) Identify the following parts of a computer motherboard stating their functions.

(10 Marks)



- b) NTFS is used in modern computers. Outline FOUR features that could be promoting its popularity. (4 Marks)
- c) Elaborate THREE circumstances under which a computer technician would update the hardware or software inventory records. (6 Marks)

14.

- a) Jayson an ICT technician from XYZ Company noted that the printer being used within the organization was having frequent paper jam. Explain THREE possible causes of this problem. (6 marks)
- b) Outline FOUR possible ways of controlling heat inside a systems unit of a computer. (4 Marks)
- c) Outline FOUR advantages of using attended software installation method. (4 Marks)
- d) Mrs. Florence intends to purchase a high quality personal computer, highlight SIX factors she should consider when placing the order. (6 Marks)