

061005T4ICT

ICT TECHNICIAN LEVEL 5

IT/OS/ICT/CR/3/5

PERFORM COMPUTER REPAIR AND MAINTENANCE

July/August 2024



**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. Answer **ALL** the question as guided in each section
3. Marks for each question are as indicated in the brackets
4. You are provided with a separate answer booklet to answer the questions
5. Do not write in this question paper

This paper consists THREE (3) printed pages.

**Candidate 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. Kentric Company was trying to print their analysed project but the printer failed to print. Outline THREE possible causes of these problems. (3 Marks)
2. Computer repair encompasses on repair of hardware, software or network/Internet problems. Identify FIVE tools used to disassemble and assemble the computer. (5 Marks)
3. Jane carried out adaptive maintenance on her office computer. Outline FOUR circumstances that could have made her carry out the maintenance. (4 Marks)
4. ICT trainees want to classify computers in their laboratory. Identify THREE factors that they would consider while classifying the computers. (3 Marks)
5. A technician was troubleshooting a computer which had a hard disk failure. Outline FOUR possible causes of this problem. (4 Marks)
6. Computers have different specifications that enable the user to perform specific functions. Enumerate FIVE factors to consider when purchasing a personal computer. (5 Marks)
7. ICT facilities usually face crimes and threats that damage the hardware, software and data. State FOUR measures that Tom could apply to protect his personal computer from damage. (4 Marks)
8. Computer keyboards help the user to enter instructions into the computer. Outline FOUR categories of keys that Mercy can identify on her personal computer keyboard. (4 Marks)
9. Jackie has noticed that the Microprocessor of her computer is overheating. Outline FOUR possible causes of this problem. (4 Marks)
10. Identify **FOUR** disadvantages of FAT 16 to computers in a learning institution. (4 Marks)

SECTION B: (60 MARKS)

*Attempt **THREE** questions in this section*

11.

- a) During computer repair and maintenance practical, trainees found out that a computer had a faulty mother board. State all the steps they would follow while installing a new motherboard to the computer. (12marks)
- b) In a computer repair and maintenance class, the trainer taught about computer repair and latency. Explain each of the following terms.
 - i. Compute repair (2 Marks)
 - ii. Latency (2 marks)
- c) Trouble shooting is trying to find the existence of a problem in a computer. Discuss TWO factors to be considered when selecting troubleshooting technique. (4 Marks)

12.

- a) Trainees in a polytechnic are carrying out computer repair and maintenance in their laboratory. Explain FIVE safety Precautions they will have to observe during assembly and disassembly of the computers. (10Marks)
- b) Discuss THREE factors that Adril computer limited would consider before attempting to upgrade processors of their computers. (6 Marks)
- c) Distinguish between *booting up* and *boot loader* as applied in computer system. (4 Marks)

13.

- a) An organization usually performs software upgrades on their computer system after every 6 months. Discuss SIX reasons for performing the upgrades. (12 Marks)
- b) During a computer repair and maintenance class the trainees learned that BIOS is an inbuilt computer program. Explain FOUR functions of BIOS in a computer system. (8 Marks)

14.

- a) Power supply is a device that supplies power to various components of a computer. Describe FIVE functions of the power supply unit of a computer. (10 Marks)
- b) Computer testing is important after carrying out repair and maintenance. Discuss THREE testing methods that a technician would use to test the computer. (6 Marks)
- c) Kelly intends to buy a motherboard for his computer. Explain TWO types of motherboards found in computer systems (4 Marks)

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