061006T4ICT

ICT Technician Level 6

ICT/CU/IT/CR/6/6/A

Perform computer repair and maintenance

Nov. /Dec. 2022

THE KENYA NATIONAL EXAMINATIONS COUNCIL

WRITTEN ASSESSMENT

Time: 3 hours

easytvet.com

INSTRUCTIONS TO CANDIDATES

Maximum marks for each question are indicated in brackets ( ).

*This paper consists of **TWO** sections: A and B.*

Answer questions as per instructions in each section.

You are provided with a separate answer booklet.

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)

(Answer all the questions in this section)

1. Define the following terms as used in computer systems.   **(4 Marks)**

    i)   Adapter card

    ii) Bays

2. Explain the purpose of a power supply hardware component in a computer.   **(2 Marks)**

3. Differentiate between CPU *overclocking* and *throttling*   **(4 Marks)**

4. State the purpose of the following in a computer system.   **(2 Marks)**

    i)   CMOS

    ii) BIOS setup

5. Computer components perform better when kept cool. If the heat is not removed, the computer may run slower or components can be damaged. Explain **three** ways in which heat is regulated within a computer system.   **(6 Marks)**

6. List any **four** motherboard form factor.   **(4 Marks)**

7. State the function of the following in a computer system.   **(3 Marks)**

    i)   Operating system

    ii) RAM

    iii) Device driver

8. List any **four** types of drive interface technologies.   **(4 Marks)**

9. State any **four** reasons why it's important to update computer systems regularly.   **(4 Marks)**

10. Outline any **three** possible causes of Overheating of the computer Microprocessor.   **(3 Marks)**

11. List any **four** diagnostic tools in computer.   **(4 Marks)**

SECTION B: (60 MARKS)

(Answer any three questions in this section)

12. a) Define monitor resolution **(2 Marks)**

    b) Explain briefly any **three** factors involved in monitor resolution **(6 Marks)**

    c) List **four** technologies that are used in creating images in monitors and projectors. **(4 Marks)**

    d) Monitors have controls for adjusting the quality of the image. Explain **four** common monitor settings. **(8 Marks)**

13. a) Explain **three** power protection devices used to protect data and computer equipment. **(6 Marks)**

    b) Discuss at least **four** types of AC power fluctuations that can cause data loss or hardware failure. **(8 Marks)**

    c) Outline any **six** benefits of preventive maintenance. **(6 Marks)**

14. a) Discuss the troubleshooting process **(12 Marks)**

    b) Explain any **four** disk management tools **(8 Marks)**

15. a) Explain the purpose of the following commands in relation to operating system files. **(10 Marks)**

    i) Msconfig
    ii) Regedit
    iii) Msinfo32
    iv) Dxdiag
    v) Cmd

    b) Discuss any **five** measures you would undertake to keep computer systems secure. **(10 Marks)**