061004T4ICT ICT ASSISTANT LEVEL 4 IT/OS/ICT/CC/03/4/A REPAIR AND MAINTAIN A COMPUTER. March/April 2023

Time: 2 hours



THE KENYA NATIONAL EXAMINATIONS COUNCIL

WRITTEN ASSESSMENT

2 hours

INSTRUCTIONS TO CANDIDATE

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

Answer **ALL** the questions in section **A** and **B**.

Candidates should answer the questions in English,

This paper consists of FIVE (5) 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 the questions in this section. Each question contains 1 mark.

| 1. | Which | of the following is not a network hardware device? |
|----|--|---|
| | A. | Network interface card |
| | B. | Hub |
| | C. | Bridge |
| | D. | Processor |
| 2. | The ma | ain printed circuit board which contains sockets that accept additional boards is the |
| | | .board |
| | A. | Sound board |
| | B. | Video board |
| | C. | Motherboard |
| | D. | Surf board |
| 3. | The power protection device that includes a battery and provides a few minutes of power is | |
| | referre | d to as: |
| | A. | Surge suppressor |
| | B. | Line conditioner |
| | C. | Generator |
| | D. | UPS |
| 4. | Which | of the following storage devices can be connected to a USB port? |
| | A. | The CD and DVD |
| | B. | diskette |
| | C. | Flash disks |
| | D. | Local disk (C:) |
| 5. | Hardw | are devices that are connected to the computer are collectively referred to as |
| | | devices |
| | A. | Peripherals |
| | B. | Storage |
| | C. | Input |
| | D. | Output |
| | | |

- 6. Which of the following would be a logical first step in troubleshooting a computer?
 - A. Check the computer CMOS
 - B. Define the circumstances of the problem
 - C. Call the vendor
 - D. Define what applications are being used
- 7. When troubleshooting a faulty monitor, which of the following would be a first step?
 - A. Check its connections to the computer system unit and power source.
 - B. Use a meter to check the CRT and internal circuitry for continuity.
 - C. Power down the monitor, then turn it on again to see if that corrects the problem.
 - D. Power down the computer, then turn it on again to see if that corrects the problem.
- 8. On a leased line installation, a functional external modem was not showing a carrier detect light. Where is the problem most likely to be?
 - A. In the modem.
 - B. In the phone line.
 - C. In the computer.
 - D. In the DTC equipment.
- 9. The following is a list of controllers, which one supports an external CD-ROM drive?
 - A. ESDI.
 - B. ARLL.
 - C. MFM.
 - D. SCSI.
- 10. Which of the statements below best describes a fragmented hard disk?
 - A. The platters are bad.
 - B. Data files are corrupted.
 - C. Clusters of data are damaged.
 - D. Files are not stored in consecutive clusters.

SECTION B (40 MARKS)

Answer all the questions. Marks for each question is indicated in brackets ()

- 11. (a) James was working on a computer which had a lot of dust inside. Outline **TWO** ways of cleaning it. (2 marks)
 - (b) List **TWO** other essential tools found in a computer repair workshop. (2 marks)
- 12. Outline **FIVE** major steps followed when installing a hard Disk in a computer. (5 marks)
- 13. Primary memory is a working storage that can be accessed directly by the processor.

Outline **TWO** types of this memory.

(2 marks)

14. (a) Differentiate between *CD-RW* and *CD-R* storage devices.

(4 marks)

- (b) Explain each of the following terms as used in computer repair and maintenance.
 - (i) Troubleshoot.

(2 marks)

(ii) Upgrade.

(2 marks)

(iii) Assemble.

(2 marks)

15. (a) The following is a list of ports used to connect computer devices. Identify the port and name the most appropriate device that be connected to each port: (6 marks)

(i)



(ii)



(iii)



(b) Moraa an ICT trainer inserted a flash disk into a computer to print out a stored document but the error message "usb not recognized" appeared on the computer screen. Outline the possible causes of this error message. (3 marks)

- 16. An ICT technician bought a refurbished computer and realized it was taking too long to boot. Identify **THREE** possible causes of this problem. (3 marks)
- 17. Overheating of a computer is an indication of a fault in a computer system.
 - (i) Explain the type of fault;

(2 marks)

(ii) Outline **THREE** measures to be undertaken to rectify this fault.

(3 marks)

18. Mr. Alfred went to a computer repair shop to upgrade his RAM. He noticed that the technician wore some gloves when upgrading the memory. Outline **TWO** functions of the gloves. (2 marks)

THIS IS THE PRINTED LAST PAGE.

IT/OS/ICT/CC/03/4/A
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