Name: _____ Index No. _____/_____

1920/201
COMPUTER MAINTENANCE AND SUPPORT
July 2015
Time: 3 hours

Candidate's Signature _____

Date: _____

THE KENYA NATIONAL EXAMINATIONS COUNCIL

CRAFT CERTIFICATE IN INFORMATION TECHNOLOGY

MODULE II

COMPUTER MAINTENANCE AND SUPPORT

3 hours

INSTRUCTIONS TO CANDIDATES

Write your name and index number in the spaces provided above.
Sign and write the date of examination in the spaces provided above.
*This paper consists of two sections; **A** and **B**.*
*Answer **ALL** the questions in **Section A** on the spaces provided on the question paper.*
*Answer **any FOUR** of the **FIVE** questions in **Section B** on the spaces provided on the question paper.*
Candidates should answer the questions in English.

For Examiner's Use Only

Section	Question	Maximum score	Candidate's score
A	1-10	40	
B	11	15	
	12	15	
	13	15	
	14	15	
	15	15	
	Total score		

This paper consists of 10 printed pages.

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

 Turn over

SECTION A (40 marks)

*Answer **ALL** the questions from this section in the spaces provided.*

1. (a) Write the following computer acronyms in full.

(i) CRT; (1 mark)

(ii) LCD. (1 mark)

(b) Outline the **two** types of buses in a System Unit of a computer system. (2 marks)

2. Outline **two** differences between *primary storage* and *secondary storage* as used in computer. (4 marks)

3. Name **four** components found in the computer System Unit. **(4 marks)**

4. Describe a form of maintenance, which may be carried out on each of the following components of a computer system:

(a) Software; (2 marks)

(b) Data. (2 marks)

5. State **two** differences between *Mini-ITX* and *ATX* Motherboard form factor. (4 marks)

6. Lupita installed an NTFS operating system on a computer running on FAT 32 Operating system. She intends to revert back to FAT 32 in order to install older software and its data, which is in compatible to the new NTFS operating system.

(a) Write the acronym *FAT* and *NTFS* in full. (2 marks)

(b) Outline the procedure she would follow to revert back. (2 marks)

7. Explain **two** ways in which computer viruses can cause loss of data in a computer. (4 marks)

8. Outline the function of each of the following tools when assembling a computer system.

(a) Flashlight; (2 marks)

(b) Tweezers. (2 marks)

9. Explain **two** ways in which electronic waste could be managed by an organisation dealing with computer repairs. (4 marks)

10. (a) Explain the function of BIOS in a computer system. (2 marks)

(b) State **two** precautions that would be put in place to safeguard a computer against power fluctuation. (2 marks)

SECTION B (60 marks)

*Answer **FOUR** questions from this section in the spaces provided.*

11. (a) Tim has two computers; one with a processor labelled *Core i3*, and the second, *Core i7*. State **three** technical advantages that the processor labelled Core i7 would have. (3 marks)

(b) State **three** differences between *Rambus dynamic random access memory* and *synchronous dynamic random access memory* as used in computers. (6 marks)

(c) Susan bought a new DVD writer. When she opened the package, she noted several small booklets accompanying the DVD writer. Explain **three** uses of the information contained in the booklets. (6 marks)

12. (a) While manning the help desk, Sharon got a call from accounting department. One of the users had lost a file that she had saved to her hard drive. The user could recall the file name and the directory where she had stored the file. Explain **two** file attributes that she may use to recover the lost file. (4 marks)

(b) Peter, a computer technician, prefers using a flash memory to other removable storage devices. Outline **five** reasons for his preference. (5 marks)

(c) Other than installing an antivirus, explain **three** ways through which an organisation could prevent computers form getting infected with viruses. (6 marks)

13. (a) Explain the use of *barcodes* in the management of hardware inventory in an organisation. (3 marks)

(b) Figure 1 shows a component in a computer system. Use it to answer the questions that follow.

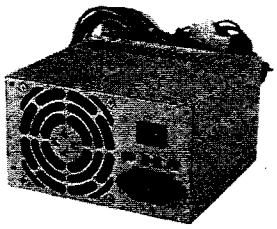

Figure 1

(i) State the function of the component. (1 mark)

(ii) Outline **three** precautions that should be put in place to protect the component from damage while in use. (3 marks)

(c) David intends to remove a motherboard from one computer and mount it in a different computer. Explain **four** precautions that he would take in the process. (8 marks)

14. (a) Your organisation has acquired new networked laser printer and you have been tasked to installed it. Outline the steps that would be followed in order to have every user in the organisation use the printer. (5 marks)

(b) Paula, a technician observed the following error messages during the installation of software to various computers. Explain the cause of each error:

(i) Drive not ready; (2 marks)

(ii) No boot device present; (2 marks)

(iii) Cannot read CAB Files. (2 marks)

(c) Figure 2 shows a section of a computer hard disk. Use it to answer the questions that follow:

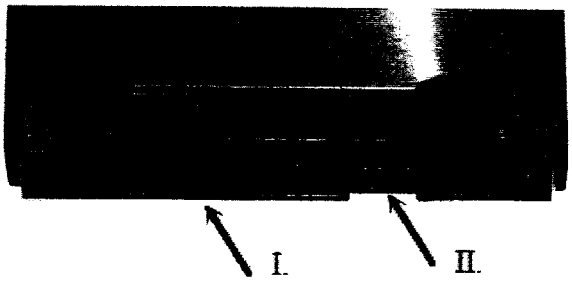

Figure 2

(i) Identify the parts labelled I and II. (2 marks)

(ii) **Outline two safety precautions when handling the disk** (2 marks)

15. (a) John observed that his computer processor fan tends to run faster during hot seasons:

(i) Explain the reason for this behaviour. (2 marks)

(ii) Outline **two** problems that may be caused by this behaviour. (2 marks)

(iii) State **one** way to minimise the challenges that may be brought about by this behaviour. (2 marks)

(b) Mlango Technical Training Institute received a donation of used computers. The Institute's technician was advised to upgrade some of the computers. State **three** components in the computers that could be upgraded, giving a reason for your answer in each case. (9 marks)