

Name: _____ Index No. _____ / _____

1920/201

Candidate's Signature _____

COMPUTER MAINTENANCE AND SUPPORT

November 2015

Date: _____

Time: 3 hours



THE KENYA NATIONAL EXAMINATIONS COUNCIL

CRAFT CERTIFICATE IN INFORMATION TECHNOLOGY

MODULE II

COMPUTER MAINTENANCE AND SUPPORT

Theory

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 scores
A	1-10	40	
B	11	15	
	12	15	
	13	15	
	14	15	
	15	15	
Total Scores			

This paper consists of 12 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 from this section in the spaces provided.

1. Explain the role of each the following in computer maintenance:

(a) Uninterruptible power supply (UPS) (2 marks)

(b) Cotton swabs (2 marks)

2. (a) List **two** examples of computer motherboard form factors, other than BTX. (1 mark)

(a) State **three** characteristics of computer motherboard of a form factor named BTX. (3 marks)

3. State **two** differences between *mini tower* and *full tower* computer cases. (4 marks)

4. Explain **two** reasons that may cause a computer not to display the actual capacity of a secondary storage medium. (4 marks)

5. Convert each of the following storage units into their stated equivalent:

(a) 12536 bits to bytes; (2 marks)

(b) 1048576 bytes to megabytes. (2 marks)

6. Distinguish between *ROM* and *RAM* as used in computers. (4 marks)

10. Figure 1 shows a power supply unit. Use it to answer the questions that follow.

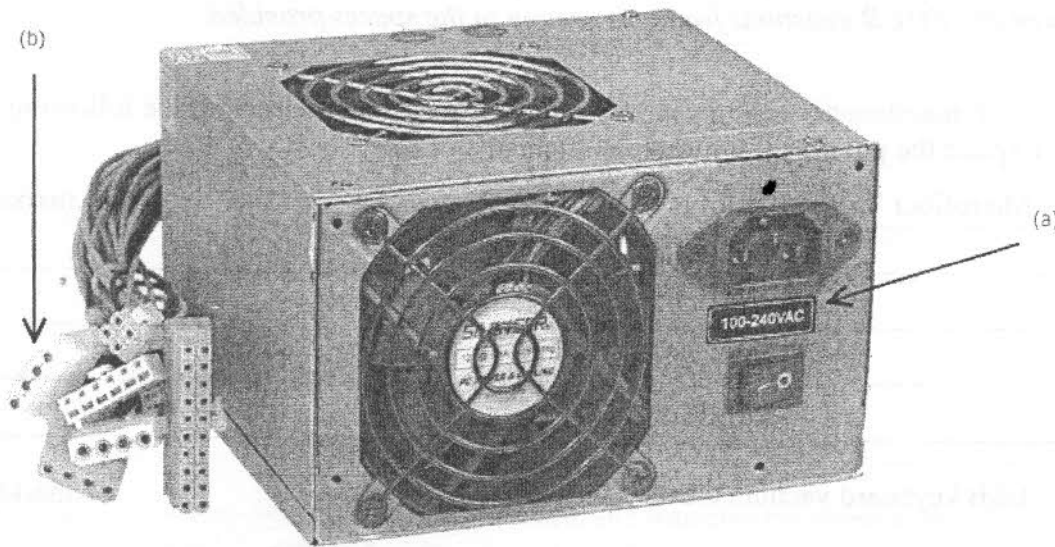


Figure 1

(a) State the function of the feature labelled (a). (1 mark)

(b) State the computer component which is powered by the terminal labelled (b). (1 mark)

(c) State **two** reasons that may cause the power supply unit to fail in a computer system. (2 marks)

Section B (60 marks)

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

11. (a) A computer maintenance technician has been advised to acquire each of the following items. Explain the possible use of each of the items.

(i) Microfiber lint free cloth; (2 marks)

(ii) USB keyboard vacuum cleaner; (2 marks)

(iii) Portable hard drive. (2 marks)

(b) With the aid of an example in each case, differentiate between *active* and *passive preventive maintenance* as used in computers. (6 marks)

(c) Outline the main function of each of the following mouse buttons:

(i) Left button;

(1 mark)

(ii) Right button;

(1 mark)

(iii) Scroll wheel.

(1 mark)

12. (a) When Lyne acquired a software, she was also provided with a documentation booklet. Explain **three** possible uses of this document. (6 marks)

(b) Outline **four** ways of controlling heat inside the systems unit of a computer. (4 marks)

- (c) Ann, a computer technician is intending to assemble a computer system unit.
 (i) List **four** tools that she will be required to have in order to realise her objective. (2 marks)

- (ii) Outline **three** precautions he should observe when handling the components during the assembling of the computer. (3 marks)

13. (a) Allan bought a computer which had no operating system installed. He was required to install MS Office suite, device drivers, antivirus, Linux OS and disk tools.

- (i) Explain the use of each of the following software in Allan's computer:
 I. device drivers; (2 marks)

- II. disk utilities. (2 marks)

- (ii) Outline **four** configurations that Allan may perform when installing the Operating system. (4 marks)

(iii) State the order in which the software should be installed. (1 mark)

(b) When Jane powered her computer, it attempted to boot from the DVD drive. She was advised to change the boot order at the BIOS.

(i) Write the Acronym BIOS in full. (1 mark)

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

(iii) State **three** other *boot options* that Jane may be required to choose from. (3 marks)

14. (a) When Moses was moving out of his residential home in town, he found out that he had a lot of electronic waste which he had to dispose.

(i) Outline **four** examples of these wastes. (2 marks)

15. (a) Lexit software company has opted to dedicate one of its web pages in its website for the software they have just developed.

(i) State **three** benefits that this approach will have over the manual booklets. (3 marks)

(ii) Other than the internet, state **two** other storage media which could be used to deliver content to the users. (2 marks)

(b) An office environment which has many computers and peripheral devices should be kept orderly and all the equipment maintained regularly.

(i) Explain the meaning of the term peripheral devices (2 marks)

(ii) State **two** categories of peripheral devices which could be available in the office and in each case give one example. (2 marks)

(c) Describe the following components of a Central Processing Unit:

(i) Arithmetic/logic unit (ALU); (2 marks)
