1920/201
COMPUTER MAINTENANCE AND SUPPORT
November 2018
Time: 3 hours

THE KENYA NATIONAL EXAMINATIONS COUNCIL

CRAFT CERTIFICATE IN INFORMATION TECHNOLOGY

MODULE II

COMPUTER MAINTENANCE AND SUPPORT

3 hours

INSTRUCTIONS TO CANDIDATES

*This paper consists of **TWO** sections; **A** and **B**.*
*Answer **ALL** the questions in section A and any **FOUR questions** in section B in the answer booklet provided.*
Candidates should answer the questions in English.

This paper consists of 4 printed pages.

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

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SECTION A (40 marks)

Answer ALL the questions in this section.

1. Explain **two** factors that should be considered while disposing electronic waste. (4 marks)

2. Explain **two** classifications of computers based on functionality. (4 marks)

3. Outline **four** examples of output voltages in computer's power *supply un*it. (4 marks)

4. Computer-based training is a common phenomenon in many organizations. Explain **two** benefits that could be realized when using this training method. (4 marks)

5. Differentiate between *volatile* and *non-volatile* computer memory. (4 marks)

6. Lawrence was given a printer for domestic use. Explain **two** challenges he is likely to face with the printer. (4 marks)

7. Explain **two** circumstances under which a computer user would use a *virtual keyboard*. (4 marks)

8. Distinguish between a *sector* and a *track* as used storage media in computers. (4 marks)

9. Describe each of the following types of computer buses:

   (i) internal; (2 marks)

   (ii) external. (2 marks)

10. Explain each of the following terms as used in computer monitors:

    (i) resolution; (2 marks)

    (ii) backlight. (2 marks)

SECTION B (60 marks)

*Answer any **FOUR** questions in this section.*

11. (a) *IT support* is an indispensible service in any organization.

    (i) Outline **two** benefits of the service. (2 marks)

    (ii) Explain **two** methods that could be used to procure the service. (4 marks)

  (b) Zain was diagnosing a client computer that was extremely slow when opening and executing application programs.

    (i) Suggest the possible problem of the computer. (1 mark)

    (ii) Explain **two** strategies that he could use to solve the problem in (i). (4 marks)

  (c) Ruth was required to install a certain software in her computer. Outline **four** types of software installation that she could apply. (4 marks)

12. (a) When procuring a computer, more emphasis should be on the motherboard.

    (i) Outline **three** examples of expansion slots that could be found in the motherboard. (3 marks)

    (ii) List **four** factors that should be considered when selecting a motherboard, other than cost. (4 marks)

  (b) Janice was advised to perform a cold boot after troubleshooting a software problem with her computer. Explain **two** reasons that could have influenced her friend's advice. (4 marks)

  (c) Figure 1 shows a typical jumper switch in a motherboard. Outline the function of each of the parts labeled (i) and (ii). (4 marks)
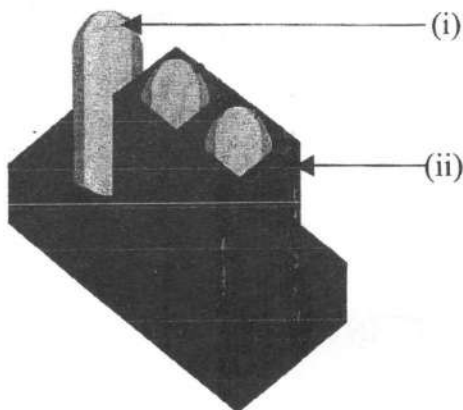

Figure 1

13. (a) Maria was diagnosing a computer that was not powering on. Outline **three** possible causes of the problem. (3 marks)

(b) Ryan was advised by his friend to increase the size of cache memory in his computer. Describe **two** reasons that could justify his friend's advice. (4 marks)

(c) High level formatting is rarely used in computers. Explain **two** conditions that could influence this type of formatting. (4 marks)

(d) Differentiate between *boot loader* and *linker* as used in computers. (4 marks)

14. (a) List **four** examples of utility software used in a computer. (4 marks)

(b) Outline **five** factors that should be considered when assembling a motherboard in a computer. (5 marks)

(c) Explain **three** circumstances under which a computer technician would update the hardware/software inventory records. (6 marks)

15. (a) Figure 2 shows ports used to connect a scanner to a computer. Outline the functions of the ports labelled (i) and (ii). (4 marks)
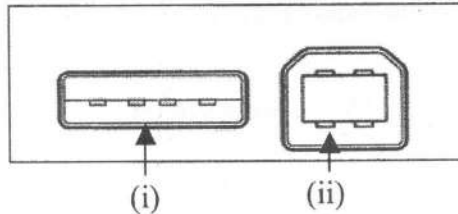

Figure 2

(b) Julia was required to write a technical report on a printer that was having frequent paper jams. Explain **three** possible causes for this problem that she could have highlighted in her report. (6 marks)

(c) List **two** categories of a computer keyboard keys. (1 mark)

(d) Distinguish between *parallel* and *pipeling* processing techniques as used in computers. (4 marks)

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