1920/201
COMPUTER MAINTENANCE AND
SUPPORT (THEORY)
November 2016
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

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

Turn over

SECTION A (40 marks)

Answer ALL the questions from this section.

1. Differentiate between *attended* and *unattended* software installation. (4 marks)

2. Explain **two** reasons for shutting down a computer before replacing a faulty *Random Access Memory (RAM)* chip. (4 marks)

3. Outline **four** *activities* that should be carried out during *active computer maintenance*. (4 marks)

4. Explain **two** circumstances under which an organization may carry out *preventive* computer maintenance. (4 marks)

5. Describe **two** components of a computer *chipset*. (4 marks)

6. Distinguish between *trojan* and *exploit* computer viruses. (4 marks)

7. Moses was troubleshooting a computer that had a hard disk failure. Outline **four** possible causes of this problem. (4 marks)

8. Define each of the following terms as used in computer hardware inventory:

    (a) model number; (2 marks)

    (b) serial number. (2 marks)

9. Mouse is an input device that controls the movement of the cursor or pointer on a display screen. Outline **four** categories of this device that could be used with computers. (4 marks)

10. (a) Explain the term *master boot record (MBR)* as used in computers. (2 marks)

    (b) Describe the term *high performance computing (HPC)* as applied in computers. (2 marks)

SECTION B (60 marks)

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

11. (a) Explain each of the following types of disks as used in computer systems:

        (i)   restore disk;   (2 marks)

        (ii)   installation disk.   (2 marks)

    (b) Outline **five** measures that could be taken while handling *re-writable compact disks*.

                                                                       (5 marks)

    (c) Ann was required to troubleshoot a faulty motherboard of a laptop. Explain **two** tools that she could use.   (6 marks)

12. (a) Figure 1 shows signs that represent input/output ports in a computer system. Use it to answer the question that follows.
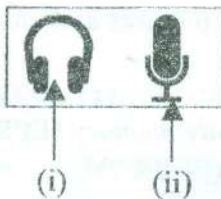

Figure 1

        Outline the function of the signs labeled (i) and (ii).   (4 marks)

    (b) Susan realized that her computer was not connecting to the Local Area Network. Explain **three** possible causes of this problem.   (6 marks)

    (c) List **two** examples of *non-impact printers*.   (1 mark)

    (d) Distinguish between *off-line* and *real-time* uninterrupted power supply (UPS) units.   (4 marks)

13. (a) Maureen was creating system backup files on a removable disk and an error *'file system not supported'* appeared on the screen of her computer.

        (i)   Explain the cause of the error message.   (2 marks)

        (ii)   Explain **two** methods of correcting the error in (i).   (4 marks)

    (b) A technician was setting CMOS for a new computer.

        (i)   Write the acronym CMOS in full.   (1 mark)

        (ii)   Outline **four** boot priority options that he could use.   (4 marks)

(c) Kate was troubleshooting a laptop that displayed a blank screen but when connected to an external monitor it displayed the graphical user interface. Explain **two** possible causes for this problem. (4 marks)

14. (a) Victor was required to back up the data in his company's computer system.

    (i) Outline **three** types of backup strategies that he could use. (3 marks)

    (ii) Explain **two** factors that he should consider while choosing a backup strategy. (4 marks)

(b) For each of the following situations, identify the appropriate troubleshooting method:

    (i) detach computer part to solve computer problem; (1 mark)

    (ii) check if computer is powering; (1 mark)

    (iii) find out the last user activities; (1 mark)

    (iv) repetitive computer part testing. (1 mark)

(c) Pauline wishes to identify *socket T* for her computer's processor. Explain **two** features of the socket that could guide her. (4 marks)

15. (a) Annette chose to use an external hard disk to store her pictures and videos. Outline **three** reasons for her choice. (3 marks)

(b) Differentiate between *erasable programmable read-only memory* (EPROM) and *electrical erasable programmable read-only memory* (EEPROM). (4 marks)

(c) Job was required to list functions of computer's *BIOS* during a job interview. Outline **four** functions that he could have listed. (4 marks)

(d) John was required to conduct computer typing lessons for staff in his company. Outline **four** categories of keyboard keys that he could mention. (4 marks)

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