

1920/201

COMPUTER MAINTENANCE AND SUPPORT

July 2019

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 from 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.

SECTION A (40 marks)

Answer **ALL** the questions in this section.

1. (i) Explain the term *pixel* as used in computer monitors. (2 marks)
- (ii) Describe *platter* as used in magnetic disks. (2 marks)
2. Differentiate between *DIMM* and *SIMM* as used in computer memory. (4 marks)
3. With the aid of examples, outline **two** roles of an address bus in a computer. (4 marks)
4. Outline **four** functions of a power *supply unit* in computers. (4 marks)
5. Explain **two** reasons for donating old computers to learning institutions. (4 marks)
6. Distinguish between *solid state memories* and *magnetic drives* in computers. (4 marks)
7. Explain **two** circumstances under which the main memory of a computer would be replaced. (4 marks)
8. Patricia was required to troubleshoot a computer monitor that was not displaying the graphical user interface after the POST. Outline **four** possible causes of the problem. (4 marks)
9. Explain **two** classifications of computers according to physical size and processing speed. (4 marks)
10. Davis intends to carry out computer literacy training to his employees. Explain **two** benefits the company could realize after training. (4 marks)

SECTION B (60 marks)

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

11. (a) Figure 1 shows ports used in a computer. Identify the ports labeled (i) and (ii) stating the I/O devices that connect to each. (4 marks)

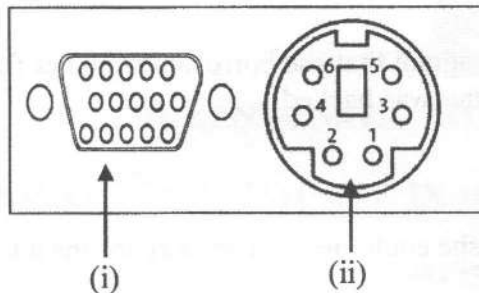


Figure 1

- (b) Paul was advised by his friend to replace a faulty processor for his computer. Explain **three** possible causes of the problem. (6 marks)
- (c) List **two** types of computer keyboard interfaces. (1 mark)
- (d) Distinguish between *xeon* and *core-i7 processors* as used in computers. (4 marks)
12. (a) Polly was required to adjust the clock of a computer. Outline **three** methods that she could have used. (3 marks)
- (b) Ben was called to assist his colleague whose USB mouse for a desktop computer could not move the pointer on the screen. Outline **four** possible guidelines that he could use to fix the problem. (4 marks)
- (c) High level formatting for storage disks is normally done by users. Outline **four** functions played by this type of formatting. (4 marks)
- (d) Differentiate between *safe mode* and *normal start-up modes* as used with computers. (4 marks)
13. (a) Doreen was required to identify different application software used in her company. List **four** examples of software that she could have identified. (4 marks)
- (b) Outline **five** safety measures that could be used to protect information stored in computers. (5 marks)
- (c) Explain **three** circumstances under which an organization should consider conducting an urgent computer maintenance exercise for its computers. (6 marks)

14. (a) Nelson inserted a flash disk in a computer to print out a stored document but the error message 'USB not recognized' appeared on the screen of his computer.
- (i) Explain the cause of the error message. (2 marks)
 - (ii) Explain **two** precautions he needs to take with such an error to safeguard his data. (4 marks)
- (b) Loise installed a computer game program that she borrowed from her friend but after one week she noted that her computer was hacked.
- (i) Identify this type of attack. (1 mark)
 - (ii) Explain **two** strategies that she could use as a remedy for the attack. (4 marks)
- (c) Ruth used attended software installation method to install an operating system on her computer. Outline **four** advantages that could have influenced her to use this method. (4 marks)
15. (a) A motherboard uses firmware on the BIOS chip.
- (i) Outline **three** functions of this firmware. (3 marks)
 - (ii) Explain **two** strategies that could be used to maintain performance of the firmware. (4 marks)
- (b) Alice was required to describe computer troubleshooting methods in a job interview. Outline **four** methods that she could have mentioned. (4 marks)
- (c) Figure 2 shows a part of a motherboard. Outline the function of each of the parts labeled (i) and (ii). (4 marks)

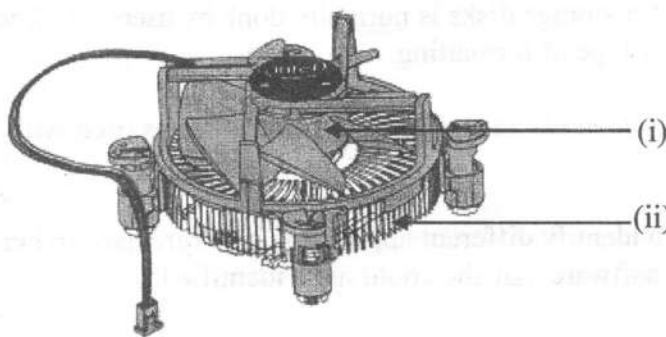


Figure 2

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