1920/101
INTRODUCTION TO INFORMATION
COMMUNICATION TECHNOLOGY
July 2022
Time: 3 hours

THE KENYA NATIONAL EXAMINATIONS COUNCIL

CRAFT CERTIFICATE IN INFORMATION TECHNOLOGY

MODULE I

INTRODUCTION TO INFORMATION COMMUNICATION TECHNOLOGY

3 hours

INSTRUCTIONS TO CANDIDATES

This paper consists of two sections: A and B
Answer All the questions in section A and any FOUR of the FIVE 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.

Turn over

SECTION A (40 marks)

Answer ALL the questions in this section.

1. Outline **four** uses of computers in oil refinery industry. (4 marks)

2. Describe **two** limitations of batch processing system. (4 marks)

3. A computer technician installed antivirus software to a computer. Explain **two** functions of this software. (4 marks)

4. Differentiate between *shielded* and *unshielded* twisted pair cable. (4 marks)

5. Outline **four** advantages of sequential file access method. (4 marks)

6. Alice created a computer file during data processing. Describe **two** types of files that she could have created. (4 marks)

7. With the aid of a diagram, describe a star computer network topology. (4 marks)

8. Outline **four** benefits of using a Magnetic Ink Character Reader (MICR) as a computer input device. (4 marks)

9. Describe **two** characteristics of a computer hard disk. (4 marks)

10. Hope insurance Company has acquired a super computer for its operations. Outline **four** uses of this computer to the company. (4 marks)

SECTION B (60 marks)

Answer any FOUR questions from this section.

11. (a) (i) Outline **three** factors that could affect the clarity of voice output from a computer. (3 marks)

   (ii) The following are computer input devices;

   Keyboard, Mouse, Touch screen, Track ball.

   Classify each as either pointing or keying. (2 marks)

   (b) Differentiate between *software* and *live ware* as used in computers. (4 marks)

   (c) Protech Company has initiated the use of a professional code of conduct. Explain **three** benefits of using this document to the organisation. (6 marks)

12. (a) Outline **three** circumstances that could necessitate the use of a light pen as a computer input device. (3 marks)

   (b) Describe **two** benefits of a contoured chair to a computer user. (4 marks)

   (c) (i) Describe **two** functions of the central processing unit (CPU). (4 marks)

   (ii) Caren has installed a power surge protector on her home computer. Explain **two** functions of this device. (4 marks)

13. (a) Outline **four** characteristics of 2nd generation computers. (4 marks)

   (b) Helen intends to buy computer hardware. Explain **two** factors she could have put into consideration when selecting the hardware. (4 marks)

   (c) (i) A law firm intends to computerise its operations. Outline **three** areas the firm is likely to computerise. (3 marks)

   (ii) Differentiate between *compiler* and *interpreter* utility programs. (4 marks)

14. (a) Explain **two** reasons that could lead to the use of real time data processing mode. (4 marks)

   (b) Dave, a programmer intends to develop in house software for his company. Explain **three** advantages of this software to the company. (6 marks)

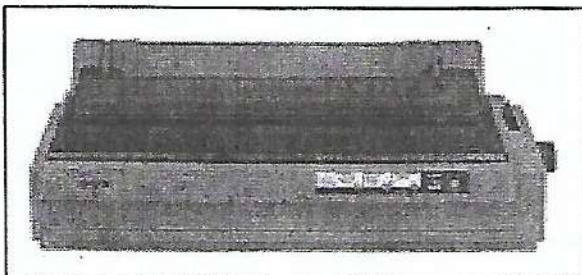   (c) Figure 1 shows a computer output device. Use it to answer the questions that follow:

Figure 1

   (i) identify the device in Figure 1. (1 mark)

(ii)   explain **two** reasons for the popularity of the device.   (4 marks)

15.   (a)   Describe *mechanical data processing* method as used in computing.   (2 marks)

    (b)   Riztech Company intends to secure its data. Outline **three** methods the company could use to secure these data.   (3 marks)

    (c)   Differentiate between a *CD* and *DVD* computer storage devices.   (4 marks)

    (d)   A company has installed a ring computer network topology. Explain **three** challenges the company is likely to encounter from using this network.   (6 marks)

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