

1920/101

**INTRODUCTION TO INFORMATION
COMMUNICATION TECHNOLOGY**

July 2017

Time: 3 hours



THE KENYA NATIONAL EXAMINATIONS COUNCIL

CRAFT CERTIFICATE IN INFORMATION TECHNOLOGY

MODULE 1

INTRODUCTION TO INFORMATION COMMUNICATION TECHNOLOGY

3 hours

INSTRUCTIONS TO CANDIDATES

*This paper consists of **FIFTEEN** questions in **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 5 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* questions from this section.

1. (a) Explain the term *Information Communication Technology* as used in computers. (2 marks)
- (b) Describe data preparation as used in data processing. (2 marks)
2. (a) State **two** benefits that an organization gains by using computers. (2 marks)
- (b) Ann's computer has a memory capacity of 2 Gigabytes. Convert this memory capacity to Kilobytes. (2 marks)
3. Differentiate between *transposition error* and *transcription error* as used in data processing. (4 marks)
4. (a) Figure 1 and Figure 2 show devices used in computer networking. Identify the devices. (2 marks)

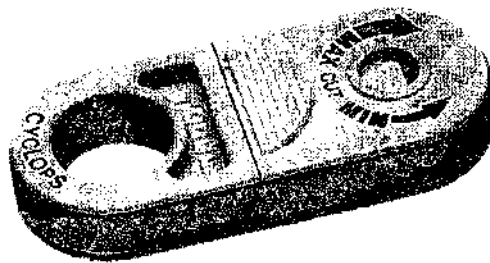


Figure 1

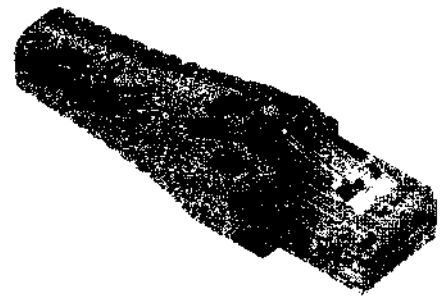


Figure 2

- (b) Outline **two** factors to consider when selecting a network topology. (2 marks)
5. (a) Outline **two** control measures that should be taken to safeguard computers in a laboratory from theft. (2 marks)
- (b) Describe the *fourth generation* computers. (2 marks)
6. (a) Outline **two** characteristics of computer viruses. (2 marks)
- (b) Explain the term *Trojan* as used in ICT. (2 marks)
7. (a) Outline an effect of high humidity on computer equipment in a computer laboratory. (2 marks)
- (b) State **two** laws contained in the Copyright Act. (2 marks)

8. (a) Figure 3 shows an icon on a computer desktop.

(i) Identify the icon.

(1 mark)



Figure 3

(ii) Outline the importance of this icon in a computer.

(1 mark)

(b) With the aid of an example, describe *job extinction* as used in computing.

(2 marks)

9. Peter has been tasked to acquire output devices. Describe a device that he would choose in order to prepare each of the following outputs:

(a) display notes on a wall during a conference;

(2 marks)

(b) maps of regions in a county.

(2 marks)

10. Figure 4 shows a computer interface cable. Use it to answer the questions that follow.

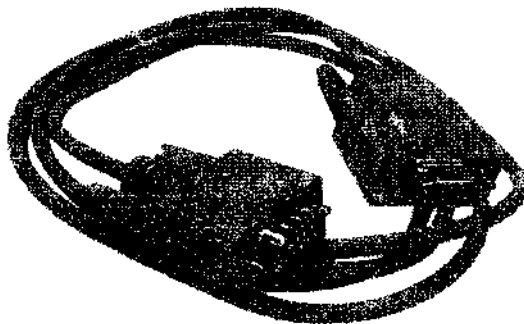


Figure 4

(a) Identify the cable.

(1 mark)

(b) Describe an area where the cable could be used.

(3 marks)

Turn over

SECTION B (60 marks)

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

11. (a) With the aid of an example, describe a *magnetic scanner* as used in computers. (3 marks)
- (b) Explain each of the following categories of computer system software:
- (i) utility; (2 marks)
 - (ii) multi-tasking Operating System; (2 marks)
 - (iii) networking Operating System. (2 marks)
- (c) Abdi, a computer technician in a college has bought general-purpose software for use by members of staff. Outline **three** advantages and **three** disadvantages of using general-purpose software. (6 marks)
12. (a) Outline the steps followed when installing a computer application software. (3 marks)
- (b) With the aid of an example in each case, explain the following terms:
- (i) software piracy; (3 marks)
 - (ii) plagiarism; (3 marks)
- (c) Explain **three** data processing methods. (6 marks)
13. (a) Peter would like to set up a computer network using star topology. Explain the role of each of the following components.
- (i) hub; (2 marks)
 - (ii) cables; (2 marks)
 - (iii) computers. (1 mark)
- (b) Faida has a chain of supermarkets and would like to introduce computers in his operations. Explain **two** possible uses of these computers. (4 marks)
- (c) With the aid of an example in each case, describe each of the following computer devices:
- (i) pointing device; (3 marks)
 - (ii) keying device. (3 marks)

14. (a) Distinguish between *computer hardware* and *computer software*. (4 marks)
- (b) (i) With the aid of an example, describe *firmware* as used in computers. (3 marks)
- (ii) The following is a list of computer software. Categorise them as either system software or application software.
Ms windows, Ms Word, CorelDraw, Norton Antivirus (2 marks)
- (c) With the aid of a diagram, name the parts of a *coaxial* network cable. (6 marks)
15. (a) (i) Outline **two** characteristics of modern computers. (2 marks)
- (ii) Figure 5 shows an electronic device. Justifying your answer, outline **one** area of its application. (3 marks)

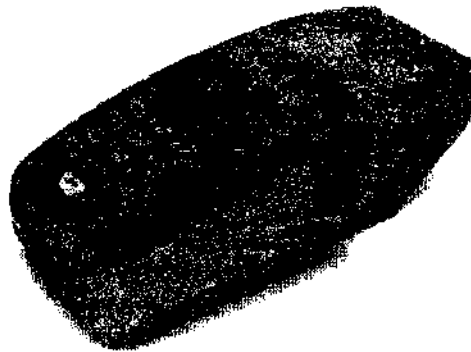


Figure 5

- (b) Mary works in an environment where power fluctuates. Explain **two** ways in which she would safeguard loss of documents created in a computer. (4 marks)
- (c) Allan, a computer technician has five computers and two printers and intends to interconnect them in a network using a bus configuration. With the aid of a diagram, describe this configuration. (6 marks)

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