

1920/101
INTRODUCTION TO INFORMATION
COMMUNICATION TECHNOLOGY
July 2021
Time: 3 hours



THE KENYA NATIONAL EXAMINATIONS COUNCIL
CRAFT CERTIFICATE IN INFORMATION TECHNOLOGY
MODULE I

INTRODUCTION TO INFORMATION COMMUNICATION TECHNOLOGY

3 hours

INSTRUCTIONS TO THE CANDIDATE

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. (a) Define the term hardware as used in Information Communication Technology. (2marks)
- (b) Explain **one** use of a computer in the security industry. (2 marks)
2. (a) The second-generation computers were faster than the first-generation computers. Explain the technology that brought this difference. (2 marks)
- (b) Describe a computer bus. (2 marks)
3. The following are components of a computer system.
Memory stick, joystick, optical mark reader, printer, microfilm, plotter, digital scanner, camera.
 Classify each one of them as either input, output or storage device. (4 marks)
4. Jane, an ICT graduate, would like to buy a new output device. Outline **four** factors that she would consider. (4 marks)
5. Differentiate between *linker* and *loader* system utilities. (4 marks)
6. (a) Explain the term ergonomics as used in Information Communication Technology. (2 marks)
- (b) John has been experiencing wrist pain due to long hours of computer use. Outline **two** precautions he could have taken to avoid this pain. (2 marks)
7. (a) Outline **two** important reasons for blowing a computer. (2 marks)
- (b) Maisha Computer College has located its computer room on the first floor of a building while the classes are on the ground floor. Outline the most probable reason for this decision. (2 marks)
8. Describe **two** network topologies used in a Local Area Network. (4 marks)
9. A cashier in a microfinance institution records deposits and withdrawals in his computer. These records are later compiled and used to update files in the manager's computer.
 (a) Identify the type of file used by the cashier. (2 marks)
- (b) Describe the type of file in the manager's computer. (2 marks)
10. Distinguish between piracy and plagiarism as used in Information Communication Technology. (4 marks)

Trans Vacuum

DMA

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Copyright

Software watermark.

SECTION B (60 Marks)

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

11. (a) Outline **three** advantages of computer networks. ^{Research} - Communication - Share information (3 marks)
- (b) Distinguish between *intellectual property right* and *copyright* as used in Information Communication Technology. (4 marks)
- (c) A newly established technical institution connected their computers to the internet. Explain **four** crimes that the institution could be exposed to. (8 marks)
12. (a) Outline **three** stages in the data processing cycle. ^{Tapping - Cracking - Hacking} - Data file Records Database (3 marks)
- (b) Peter, an ICT expert, installed an operating system in a new computer.
- (i) Explain **two** ways through which this software could be classified. ^{Single user - Multi user} - (4 marks)
- (ii) Outline **three** functions of this software in a computer. ^{Large task} - (3 marks)
- (c) A company uses a networked printer in its offices. The printer starts printing when it authenticates the user through a biometric security system.
- (i) Identify the most appropriate security device to use. (2 marks)
- (ii) Outline **three** advantages of the device identified in (i). (3 marks)
13. (a) Outline **three** file access methods used in a computer. ^{Double click} (3 marks)
- (b) A technician intends to set up a computer network. Describe **two** types of cables he could use. ^{Coaxial cable - Twisted cable} (4 marks)
- (c) (i) Explain the term *write protection* with respect to diskettes. ^{Security} (2 marks)
- (ii) A student preferred to use a CD-RW to store information during a practical lesson. Explain **three** reasons that could have led to this preference. ^{for future} (6 marks)
14. (a) (i) Explain the term anti-virus software as used in Information Communication Technology. (2 marks)
- (ii) State **three** examples of anti-virus software available in the market. ^{Smadav - 360 Total Security} (3 marks)
- (b) Steve, an ICT expert, recommended the use of a page printer for document printing. Explain **three** reasons that could have led to this recommendation. (6 marks)
- (c) Distinguish between *mechanical* and *electronic* data processing methods. ^{Type writer - MS word} (4 marks)
15. (a) Outline **two** uses of computers in a hospital other than data storage. (2 marks)
- (b) (i) Tom, an ICT student, has access to the internet. Explain **two** possible negative impacts this access could have on him. ^{Doing research - share information with other people - facilities} (4 marks)
- (ii) A computer network in an organization consists of a central computer that controls the other computers. Outline **four** disadvantages of such a network. (4 marks)

- (c) Figure 1 shows two computer connectors. Use it to answer the questions that follow:



Figure 1

- (i) Identify the connectors labelled (i) and (ii). (2 marks)
- (ii) For each of the identified connectors, state the hardware device(s) that it connects. (3 marks)

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