

1920/101  
INTRODUCTION TO INFORMATION  
COMMUNICATION TECHNOLOGY  
March/April 2023  
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 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.



### SECTION A (40 Marks)

Answer **ALL** the questions in this section

1. (a) Outline **two** characteristics of third generation computers. (2 marks)  
 (b) Explain **two** challenges experienced when using computers for teaching in developing world. (2 marks)
2. (a) Outline **two** uses of social media in the health sector. (2 marks)  
 (b) A college administrator intends to buy computer monitors. Outline **two** factors he should consider before buying. (2 marks)
3. Distinguish between *transcription* and *transpositional* errors in data integrity. (4 marks)
4. (a) Joan, an ICT technician intends to set up a computer network in four offices each with a computer and a shared printer for all the offices. Describe the appropriate type of computer network that she could setup. (2 marks)  
 (b) With the aid of a diagram, explain a computer network topology set up using a switch. (2 marks)
5. (a) State **two** health problems to a user caused by poor lighting in a computer room. (2 marks)  
 (b) Explain **one** use of computers in the mining industry. (2 marks)
6. (a) State **four** types of computer viruses. (2 marks)  
 (b) Outline **two** symptoms exhibited by a computer infected with a virus. (2 marks)
7. (a) Outline **two** negative impacts of Information Communication Technology to the society. (2 marks)  
 (b) Outline **two** sources of Information Communication Technology legislation. (2 marks)
8. A company implemented logical measures to control access to its computer system. Explain **two** such measures. (4 marks)
9. Precious intends to acquire a computer operating system. Explain **two** considerations she could make before the acquisition. (4 marks)
10. The following are computer keyboard keys:  
*Esc, PageUp, Arrow keys, Shift, Home, Enter, CapsLock, End*  
 Classify each of the keys as either navigation or special keys. (4 marks)



**SECTION B (60 Marks)**

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

11. (a) Explain each of the following terms as used in computer software:
- (i) portability; (2 marks)
  - (ii) efficiency; (2 marks)
  - (iii) compatibility. (2 marks)
- (b) Farrel stored 12 GB of data as a backup using an auxiliary storage device. Outline **four** examples of such devices he could have used. (4 marks)
- (c) Dorcas installed a graphical user interface operating system software in a computer.
- (i) Outline **three** features of this software. (3 marks)
  - (ii) State **four** examples of this operating system software. (2 marks)
12. (a) Explain each of the following terms as used in Information Communication Technology ethics:
- (i) Plagiarism; (2 marks)
  - (ii) Piracy. (2 marks)
- (b) A school computer technician installed standard software into a computer. Outline **three** advantages of this software. (3 marks)
- (c) (i) An organization computerised its operations and employees resisted the change. Outline **two** reasons that may have led to this resistance. (4 marks)
- (ii) With the aid of a diagram, describe the functional organization of a Central Processing Unit (CPU) in a computer. (4 marks)
13. (a) (i) Explain **two** benefits of intranet to an organisation. (4 marks)
- (ii) Distinguish between *analogue* and *digital* computers. (4 marks)
- (b) Explain the term internet browser citing **two** examples. (3 marks)
- (c) Explain **two** circumstances that could necessitate an organization to install wireless network. (4 marks)
14. (a) (i) Outline **three** attributes of a computer file. (3 marks)
- (ii) Describe distributed data processing mode. (2 marks)
- (b) Transtech Company uses cloud computing technology for its data storage. Outline **four** advantages of using this technology. (4 marks)
- (c) With the aid of an example in each case, describe **two** data transmission modes. (6 marks)



15. (a) (i) State **two** types of magnetic scanners. (2 marks)
- (ii) Describe **two** categories of printers. (4 marks)
- (b) ViewComp Ltd acquired a computer that uses serial file organization method for its data storage. Explain **three** disadvantages of this method. (6 marks)
- (c) Tina has been experiencing wrist pain due to prolonged computer use. Outline **three** adjustments she needs to make to her work station to minimise the pain. (3 marks)

THIS IS THE LAST PRINTED PAGE.

