

2920/101

**INTRODUCTION TO INFORMATION COMMUNICATION  
TECHNOLOGY AND ETHICS**

**March/April 2023**

**Time: 3 hours**



**THE KENYA NATIONAL EXAMINATIONS COUNCIL**

**DIPLOMA IN INFORMATION COMMUNICATION TECHNOLOGY**

**MODULE I**

**INTRODUCTION TO INFORMATION COMMUNICATION TECHNOLOGY AND ETHICS**

**3 hours**

**INSTRUCTIONS TO CANDIDATES**

*This paper consists of **EIGHT** questions.*

*Answer any **FIVE** questions in the answer booklet provided.*

*Candidates should answer the questions in English.*



**This paper consists of 3 printed pages.  
Candidates should check the question paper to ascertain that all the  
pages are printed as indicated and that no questions are missing.**

1. ✓ (a) Outline **four** advantages of outsourcing acquisition method. (4 marks)
- (b) ✓ Explain **two** characteristics of the third-generation computers. (4 marks)
- (c) A computer laboratory has been secured using facial recognition. Explain **three** limitations of this system. (6 marks)
- 8 (d) ✓ (i) With the aid of a diagram, describe peer to peer computer network. (4 marks)
- (ii) Outline **two** characteristics of the network in d (i). (2 marks)
2. ✓ (a) ✓ Outline **four** benefits of self-awareness to a college student. (4 marks)
- (b) ✓ Shelyn, a Module II student, prefers using an impact printer. Explain **three** reasons that could have led to this preference. (6 marks)
- (c) Distinguish between *intra-group* and *inter-group* conflict. (4 marks)
- 4 (d) ✓ Explain **three** circumstances that could make an organisation fail in its corporate social responsibility. (6 marks)
3. (a) ✓ Explain **two** benefits of copyright. (4 marks)
- 6 (b) An organisation intends to develop its ICT legislation. Explain **three** sources of these legislation. (6 marks)
- (c) ✓ Differentiate between *data bus* and *address bus* as used in computers. (4 marks)
- (d) Heztech Technical institute has launched a virtual learning programme for its students.
- (i) Explain **two** challenges of this programme to the students. (4 marks)
- (ii) Outline **two** opportunities that this programme could create. (2 marks)
- 4 (a) Outline **four** advantages of a light pen as an input device. (4 marks)
- (b) Dan suffers from low self-esteem. Explain **three** symptoms that he could be exhibiting. (6 marks)
- (c) Distinguish between *twisted pair* and *fibre optic* cables as used in networking. (4 marks)
- (d) Mark uses pirated software in his laptop. Explain **three** reasons that could have led to this use. (6 marks)
5. ✓ (a) (i) Define repetitive strain injury as used in ergonomics. ✓ (2 marks)
- (ii) Outline **two** symptoms exhibited by a computer user suffering from repetitive strain injury. (2 marks)
- 0 (b) ✓ Explain **three** benefits of time management to a student. ✓ (6 marks)
- 4 (c) ✓ Differentiate between *ink jet* and *laser* printers. (4 marks)
- (d) Employees at Geztech Company have work related conflicts among themselves. 6 Explain **three** possible causes of these conflicts. (6 marks)



6. ✓ (a) Explain **two** features of system software. 500  
3  
15000 (4 marks)
- (b) ✓ Distinguish between *withdrawing* and *smoothing* conflict resolution techniques. (4 marks)
- 20 (c) Reztech Company intends to acquire a mainframe computer. Explain **three** benefits the company will accrue from this computer. (6 marks)
- (d) ✓ An organisation has a responsibility of protecting the confidentiality of its data. Explain **three** safeguarding measures that could be put in place to achieve this. (6 marks)

7. ✓ (a) Outline **three** uses of computers in an engineering firm. data  
decision (3 marks)
- (b) Explain each of the following terms as used in ICT:
- (i) ✓ compiler; Keys board
- (ii) ✓ defragmenter; Large storage
- (iii) ✓ disk partition. mouse (6 marks)
- (c) ✓ Distinguish between *laptop* and *tablet* computers. (4 marks)
- (d) Figure 2 shows a computer storage device. Use it to answer the questions that follow.



Figure 2

- (i) Identify this device. (1 mark)
- (ii) Explain **three** characteristics of the device identified in (i) (6 marks)

8. ✓ (a) Outline **four** duties of a network administrator. (4 marks)
- (b) ✓ Explain **three** circumstances that necessitates information privacy in an organisation. (6 marks)
- (c) The following are computer keyboard keys:  
*Home, Tab, Enter, End, Insert, Ctrl, Alt, Page Up.*  
Classify each of these keys as either navigation or special. (4 marks)
- (d) An organisation uses an in-house software. Explain **three** disadvantages of this software. (6 marks)

THIS IS THE LAST PRINTED PAGE.

Handwritten calculations and notes at the bottom of the page, including the number '3' and various arithmetic operations like '21.24 / 14.6', '21.47 / 14.6', and '15000 / 100'.