

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)
- ✓ (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 marks)
- 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;
- ✓ (ii) defragmenter;
- ✓ (iii) ✓ disk partition. Keys board
Large storage
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)

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Handwritten calculations and notes at the bottom of the page, including the number 3 and various arithmetic operations.