

2920/101

**INTRODUCTION TO INFORMATION COMMUNICATION
TECHNOLOGY AND ETHICS**

November 2022

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** of the **EIGHT** 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** uses of computers in the mining industry. (4 marks)
 - (b) Explain **three** characteristics of mini computers. (6 marks)
 - (c) Elimu Institute intends to acquire computers by leasing. Explain **three** challenges the institute is likely to encounter. (6 marks)
 - (d) With the aid of a diagram, describe mesh computer network topology. (4 marks)
2.
 - (a) Outline **four** advantages of a wireless computer mouse. (4 marks)
 - (b) A student has been experiencing stress due to low academic grades. Explain **three** ways the student could manage this stress. (6 marks)
 - (c) Differentiate between *copyright* and *patent* as used in information communication technology legislation. (4 marks)
 - (d) Ziptech Company disposed their old computers in an open field. Explain **three** hazards this disposal could have on the environment. (6 marks)
3.
 - (a) Outline **four** causes of conflicts among employees in an organisation. (4 marks)
 - (b) A computer technician preferred to use a coaxial cable in a computer network. Explain **three** reasons for this preference. (6 marks)
 - (c) Anita an ICT student has been experiencing low self-esteem. Explain **three** possible causes that could have led to this. (6 marks)
 - (d) Figure 1 shows a computer port. Use it to answer the questions that follow.



Figure 1

- (i) Identify this port. (1 mark)
 - (ii) State **two** devices that could be connected through the port identified in (i). (1 mark)
 - (iii) Outline **two** advantages of the port identified in (i) (2 marks)
4.
 - (a) Outline **four** factors a company would consider before engaging in corporate social responsibility. (4 marks)
 - (b) Differentiate between *collaborative* and *accommodative* conflict management approaches. (4 marks)
 - (c) Explain **three** circumstances that could necessitate the use of a light pen as a computer input device. (6 marks)
 - (d) Goldy Company hired a system designer. Explain **three** roles that this computer personnel would play in the company (6 marks)

5. (a) Outline **four** disadvantages of a magnetic tape as a computer storage device. (4 marks)
- (b) Describe **three** features of second generation computers. (6 marks)
- (c) Paul has been selling pirated software. Explain **three** reasons that could have led to this unethical behaviour. (6 marks)
- (d) Differentiate between *defragmenter* and *compressor* utilities software. (4 marks)
6. (a) Outline **four** circumstances that could lead to the use of outsourcing method for software acquisition. (4 marks)
- (b) Describe **three** characteristics of optical storage devices. (6 marks)
- (c) Joyce, a programme uses an ergonomic seat in her office. Explain **three** benefits of using this seat. (6 marks)
- (d) Differentiate between *install* and *configure* as used in computer software. (4 marks)
7. (a) Outline **four** negative impacts of information communication technology to a college student. (4 marks)
- (b) Differentiate between *of-the-shelf* and *bespoke* software. (4 marks)
- (c) Freetech Company has implemented user authentication measures for data security. Explain **three** challenges the company is likely to encounter. (6 marks)
- (d) Helen, an ICT student possesses good interpersonal skills. Explain **three** such skills. (6 marks)
8. (a) Explain **three** advantages of a non-impact printer. (6 marks)
- (b) Differentiate between *intranet* and *extranet* as used in computer networks. (4 marks)
- (c) The following are examples of systems controls: *employee rotation, password, CCTV, locks, biometric and motivation*.
Classify each of these examples to its respective type of control. (6 marks)
- (d) Gaztech Company has put in place measures to reduce unethical behaviour in its information communication technology department. Explain **two** such measures. (4 marks)

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