

2920/101
INTRODUCTION TO INFORMATION
COMMUNICATION
TECHNOLOGY AND ETHICS
July 2019
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 FIVE questions in the answer booklet provided.
ALL questions carry equal marks.
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.

1. (a) (i) State **two** equipment other than computers, that are likely to be found in the ICT department of a typical organisation. (2 marks)
- (ii) Students use *snap-chat* to communicate. Outline **two** challenges they are likely to face. (2 marks)
- (b) Kisima Company intends to network all its computers. Explain **two** disadvantages of this move to the company. (4 marks)
- (c) Jacky had the following devices in the computer laboratory.
Keyboard, printer, plotter, speaker, scanner, mouse, trackball, monitor
- (i) Classify them as either input or output devices. (4 marks)
- (ii) Describe the function of a plotter. (2 marks)
- (d) A lecturer at Masomo Bora Technical is preparing a lesson on the topic *emotions*. Explain **three** positive ways of expressing emotions that could be included in the lesson. (6 marks)
2. (a) Explain **three** uses of Information Communication Technology in a college. (6 marks)
- (b) (i) With an aid of a diagram, describe a bus topology. (4 marks)
- (ii) State **two** advantages of the topology described in (i). (2 marks)
- (c) The management of Sweet Land Company intends to use *preventive approach* to manage conflicts among its employees. Explain **three** methods they could use to achieve this. (6 marks)
- (d) On a particular day, a secretary performed the following activities in the office.
Opening and reading office email messages.
Calling friends with office phone.
Hosting a relative in the office.
Printing internal Memo for meetings.
- Classify each of the activities as either ethical or unethical. (2 marks)
3. (a) Outline **four** physical security measures that a company could implement in their ICT department. (4 marks)
- (b) Explain **three** challenges an organisation could face when engaging in social responsibility. (6 marks)
- (c) Sadic company is contemplating replacing the off-the-shelf with tailor made software. Explain **three** benefits that the company would realise from this move. (6 marks)
- (d) Outline **four** reasons that could lead to unethical behaviour in Information Communication and Technology. (4marks)
4. (a) State **two** roles of each of the following computer personnel:
- (i) programmer;
- (ii) database administrator. (4 marks)
- (b) Goldy Company Limited developed an ICT policy. Explain **three** benefits the company would accrue from this. (6 marks)

- (c) Explain the function of each of the following computer keyboard keys:
- (i) Prt Scr;
 - (ii) Home. (4 marks)
- (d) With the aid of a block diagram, describe the functional components of a computer system. (6 marks)
5. (a) (i) Kiboko Company Limited uses an impact printer for printing. Outline **two** challenges the company would face by using such a printer. (2 marks)
- (ii) Distinguish between a *router* and *bridge* as used in computing. (4 marks)
- (b) (i) Explain the importance of self awareness to a college student. (2 marks)
- (ii) Bilal Company Limited has trained its employees on resolving family conflicts. Explain **two** benefits of this training to the company. (4 marks)
- (c) Distinguish between *leasing* and *outsourcing* methods of software acquisition. (4 marks)
- (d) The management of Zackies Ltd. uses information communication and technology legislations in their company. Explain **two** sources of such legislations. (4 marks)
6. (a) State **four** characteristics of fourth generation computers. (2 marks)
- (b) (i) Faida Co. Ltd. has been experiencing a lot of conflict between workmates. Outline **two** causes of such conflicts. (2 marks)
- (ii) Distinguish between *magnetic* and *optical* storage devices giving an example in each case. (6 marks)
- (c) The management of Fre-ex Company has a life skill training programme for its staff. Explain **three** benefits the company would realise from this training. (6 marks)
- (d) Explain **two** circumstances that would make a student prefer to use an LCD monitor to a CRT monitor. (4 marks)
7. (a) Outline **four** characteristics of a super computer. (4 marks)
- (b) Explain each of the following types of conflict resolution:
- (i) Approach - approach;
 - (ii) Approach - avoid. (4 marks)
- (c) (i) Describe the term *ergonomics* as used in Information Communication Technology. (2 marks)
- (ii) Differentiate between *micro* and *mini* computers. (4 marks)
- (d) Galnic Company has opted to use electronic money transfer to pay its suppliers instead of cash.
- (i) Explain **two** benefits the Company would realise from this move. (4 marks)
 - (ii) Outline **two** challenges the company is likely to face. (2 marks)

8. (a) Outline **four** unethical behaviours that are common to computer technicians while executing his duties. (4 marks)
- (b) Pasha, an ICT Manager, intends to buy software for her organisation. Explain **three** factors she should consider. (6 marks)
- (c) Titus, a computer user, has been experiencing back pain as a result of using a computer. Outline **four** precautions that he could take to resolve this. (4 marks)
- (d) (i) Zawadi Company is planning to clean up the neighbouring town as part of its social responsibility. Explain **one** importance of this exercise to the company. (2 marks)
- (ii) Differentiate between *distress* and *eustress* as types of stress. (4 marks)

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