



MACHAKOS UNIVERSITY

University Examinations for 2019/2020 Academic Year

SCHOOL OF ENGINEERING AND TECHNOLOGY

DEPARTMENT OF COMPUTING AND INFORMATION TECHNOLOGY

FIRST YEAR THIRD SEMESTER EXAMINATION FOR

DIPLOMA IN INFORMATION COMMUNICATION TECHNOLOGY

INTRODUCTION TO INFORMATION COMMUNICATION TECHNOLOGY

2920/101 INFORMATION COMMUNICATION TECHNOLOGY AND ETHICS

DATE: 17/12/2020

TIME: 11.30-2.30 PM

INSTRUCTIONS

Answer any **FIVE** of the following **EIGHT** questions in the answer booklet provided

ALL questions carry equal marks.

1. (a) (i) Outline three positive impact of ICT to college students in Kenya. (3 marks)
(ii) Distinguish between control bus and data bus as applied in computers. (4 marks)
- (b) Explain three benefits of corporate social responsibility (CSR) to organizations. (6 marks)
- (c) (i) Outline three reasons that could necessitate the use of computer networks in organizations. (3 marks)
(ii) Peter intends to install application packages on his laptop, outline four categories of application packages that he could install. (4 marks)
2. (a) Explain each of the following terms as used in computer devices:
(i) Plug and play (2 marks)
(ii) Device drivers
- (b) Differentiate between *computer operator* and *computer technician* as applied in ICT. (4 marks)
- (c) Julia, an intern was required to identify the types of non-impact printers in her company. Explain two types of printers that she could identify. (4 marks)

- (d) (i) With the aid of examples in each case, explain two types of computer random access memory. (4 marks)
- (iii) Jonny was required to list functions of network operating system during an ICT exam. Outline four functions that he could have listed. (4 marks)
3. (a) Differentiate between *microcomputers* and *mainframe* computers. (4 marks)
- (b) State four reasons that make some employees to lose their jobs when their employer installs a computerized system. (4 marks)
- (c) Ann facilitated a presentation on stress management to ICT staff in a certain organization. Explain three stress management strategies that she could have highlighted. (6 marks)
- (d) ICT policy should be appropriately enforced to ensure efficient utilization of ICT in an organization. Explain three enforcement measures that could be used. (6 marks)
4. (a) Outline three disadvantages of domestic conflicts to college students. (3 marks)
- (b) Explain three advantages of embracing of ICT ethics in organizations. (6 marks)
- (c) Maurice was advised to procure copyrighted software for their company. Outline five benefits the company could realize from implementing the advice. (5 marks)
- (d) With the aid of a diagram, explain the functional units of a computer system. (6 marks)
5. (a) Describe each of the following terms as used in operating systems:
- (i) Multiprogramming
- (ii) Multitasking (4 marks)
- (b) (i) List four secondary storage media of a computer system. (2 marks)
- (ii) Explain each of the following types of computer software:
- Applications software
 - Operating system
 - Utility program (6 marks)
- (c) Loise intends to disassemble a user computer in order to resolve a problem. Outline four precautions she needs to take before carrying out the task. (4 marks)
- (d) ABC Company Ltd. Intends to secure its data. Explain two measures the company could implement. (4 marks)
6. (a) (i) Outline three precautions that could be taken while using removable disks on computers. (3 marks)

- (iii) Differentiate between *ROM* and *EPROM* as used in computer. (4 marks)
- (b) Explain two benefits of computer ergonomics to an organization giving an example in each case. (4 marks)
- (c) Sally was required to identify examples of disk utility software on a computer. Outline four examples that she could have identified. (4 marks)
- (d) Paulina was required to initiate a social responsibility programme for her company. Outline five factors that she could consider other than cost. (5 marks)
7. (a) Outline four areas of applications of ICT in health sector. (4 marks)
- (b) The principal of a local institution has noted with concern the increased conflict among staff members.
- (i) Outline four signs that he could have observed. (4 marks)
- (ii) Explain two indicators that could have been used to determine whether it was constructive conflict. (4 marks)
- (c) Steve intends to use a switch to install a computer network with four computers and one printer in his house.
- (i) Draw the most probable network layout he could install. (4 marks)
- (ii) Explain two advantages of the network topology identified in (i). (4 marks)
8. (a) Explain each of the following terms as used in computers:
- (i) Thin client
- (ii) Virtualization (4 marks)
- (b) Bernard, an intern with a certain company noted incidences of unethical behaviours among staff members. Explain two unethical behaviours that he could have noted. (4 marks)
- (c) (i) Outline two opportunities that could be realized as a result of implementation of ICT hub in Kenya. (2 marks)
- (ii) Distinguish between *self awareness* and *self esteem* as applied to life skills. (4 marks)
- (d) (i) Define the term *asset financing* as used in computer acquisition. (2 marks)
- (ii) Edward has been invited for a job interview. Explain two communication skills that he could use during the interview. (4 marks)