



MACHAKOS UNIVERSITY

University Examinations for 2018/2019

SCHOOL OF ENGINEERING AND TECHNOLOGY

DEPARTMENT OF COMPUTING AND INFORMATION TECHNOLOGY

FIRST YEAR SECOND SEMESTER EXAMINATION FOR

DIPLOMA IN ICT

INFORMATION COMMUNICATION TECHNOLOGY AND ETHICS

DATE: 23/4/2019

TIME: 2.30-5.30 PM

INSTRUCTIONS

Answer any **FIVE** of the following **EIGHT** questions in the answer booklet provided
ALL questions carry equal marks.

QUESTION ONE (20 MARKS)

- 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)

QUESTION TWO (20 MARKS)

- a) Explain each of the following terms as used in computer devices:
 - i. Plug and play (4 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)
- ii Jonny was required to list functions of network operating system during an ICT exam. Outline four functions that he could have listed. (4 marks)

QUESTION THREE (20 MARKS)

- 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)

QUESTION FOUR (20 MARKS)

- 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)

QUESTION FIVE (20 MARKS)

- 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)

QUESTION SIX (20 MARKS)

- a) i Outline three precautions that could be taken while using removable disks on computers. (3 marks)
- ii 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)

QUESTION SEVEN (20 MARKS)

- 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)

QUESTION EIGHT (20 MARKS)

- 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)