



Machakos University

ISO 9001:2015 Certified 

University Examinations for 2021/2022 Academic Year

SCHOOL OF ENGINEERING AND TECHNOLOGY

DEPARTMENT OF COMPUTING AND INFORMATION TECHNOLOGY

First Year Second Term Examination for

Diploma in Information Communication Technology

2920/101: INTRODUCTION TO ICT AND ETHICS

DATE: 27/03/2023

TIME: 11:30 – 2:30 PM

INSTRUCTIONS

Answer any five questions

QUESTION ONE (20 MARKS)

- a) Explain the importance of computer networking in an organization. (4 marks)
- b) ICT policy should be appropriately enforced to ensure efficient utilization of ICT in an organization.
Explain two enforcement measures that could be used. (4 marks)
- c) State two circumstances that could lead an organization to develop a data protection policy document. (2 marks)
- d) Outline two reasons for time management skill to a college student. (2 marks)
- e) Umoja Counselling Centre has been handling many domestic conflict management issues among its employees. Explain two possible causes of this conflicts. (4 marks)
- f) Pentabyte Company carried out a corporate social responsibility activity in the local market. Explain two benefits the company would accrue from this. (4 marks)

QUESTION TWO (20 MARKS)

- a) Outline two properties of a twisted pair cable. (2 marks)
- b) Describe two reasons that could necessitate the use of computer networks in organizations. (4 marks)
- c) Jackline was advised to procure copyrighted software for their company. Explain two benefits the company could realize from implementing the advice. (4 marks)
- d) Describe two disadvantages of domestic conflicts to University students. (4 marks)
- e) Differentiate between *privacy* and *confidentiality* as used in ICT. (2 marks)
- f) Identify two people skills that a receptionist should possess. (2 marks)
- g) Explain the term *emotions* as used in life skills. (2 marks)

QUESTION THREE (20 MARKS)

- a) Explain two advantages of embracing of ICT ethics in organizations. (4 marks)
- b) Josef was advised to patent his information technology innovation. Explain two reasons for this advice. (4 marks)
- c) A supervisor uses reactive techniques to manage workplace conflicts. Explain two likely outcomes of this technique. (4 marks)
- d) Maryann suffers from depression. Describe two symptoms that she may exhibit. (4 marks)
- e) An organization uses *avoid-avoid* conflict resolution strategy. Explain two problems associated with this strategy. (4 marks)

QUESTION FOUR (20 MARKS)

- a) Explain two ways in which computer viruses are spread. (4 marks)
- b) Describe two impacts of computer viruses in the computer industry. (2 marks)
- c) Outline two symptoms of a computer virus infection. (2 marks)
- d) Distinguish between a *switch* and a *bridge* computer network devices. (4 marks)
- e) ABC Company has put into place measures to reduce unethical behaviour in its information communication technology department. Explain two such measures. (4 marks)
- f) Outline four benefits of effective time management to an employee. (4 marks)

QUESTION FIVE (20 MARKS)

- a) Ujenzi College intends to secure its data. State two measures the college could implement. (2 marks)
- b) Differentiate between *intranet* and *extranet* as used in computer networks. (4 marks)
- c) Jadiel has been selling pirated software. Explain two reasons that could have led to this unethical behaviour. (4 marks)
- d) Focus Company is in the process of implementing a company's data protection act. Outline two benefits the company will accrue from implementing this move. (2 marks)
- e) Brazam, an ICT student possess good interpersonal skills. Explain two such skills. (4 marks)
- f) Differentiate between *collaborative* and *accommodative* conflict management approaches. (4 marks)

QUESTION SIX (20 MARKS)

- a) With aid of a diagram, describe mesh computer network topology. (4 marks)
- b) A computer technician preferred to use a coaxial cable in a computer network. Explain two reasons for this preference. (4 marks)
- c) Distinguish the terms *copyright* and *patent* as used in information communication legislation. (4 marks)
- d) A student has been experiencing stress due to low academic grades. Explain two ways the student could manage this stress. (4 marks)
- e) Outline four causes of conflicts among students in a learning institution. (4 marks)

QUESTION SEVEN (20 marks)

- a) An institution is in the process of installing a Local Area Network (LAN). State two benefits that the institution may derive from installing this network. (2 marks)
- b) Explain two advantages of the ring network topology. (4 marks)
- c) Some organizations install pirated software in their computers. Identify two measures that a software developer may put in place to prevent such piracy. (2 marks)
- d) Identify four offences covered by the cybercrime laws of Kenya. (4 marks)
- e) Josephina an ICT student has been experiencing low self-esteem. Explain two possible causes that could have led to this. (4 marks)
- f) State four factors an organization would consider before engaging in corporate social responsibility. (4 marks)

QUESTION EIGHT (20 marks)

- a) Explain the term data security. (2 mark)
- b) Identify two ways of improving data security in a learning institution. (2 marks)
- c) Outline two risks that may be associated with lack of data privacy in an organization. (2 marks)
- d) Explain two benefits of a computer network to an organization. (4 marks)
- e) The fibre optic cables have gained widespread popularity despite the existence of satellite links. Identify two reasons for this popularity. (2 marks)
- f) Define each of the following computer crimes.
 - i. eavesdropping (1 mark)
 - ii. fraud (1 mark)
- g) State two measures that may be taken to detect computer crimes in an organization. (2 marks)
- h) Virginia, a counsellor has been invited by Ujuzi Institute to give lecture on ways of managing emotions. Explain two approaches she would mention. (4 marks)