



KENYATTA UNIVERSITY

UNIVERSITY EXAMINATIONS 2010/2011

INSTITUTE OF OPEN LEARNING (IOL)

EXAMINATION FOR THE DEGREE OF BACHELOR OF SCIENCE
(INFORMATION TECHNOLOGY)

SIT 101: FOUNDATION OF INFORMATION TECHNOLOGY

DATE: Tuesday, 1st February, 2011

TIME: 8.00 a.m. 10.00 a.m.

INSTRUCTIONS:

Attempt Question one and any other two

Question One (Compulsory)

- a) Write a short description of the **history** and **evolution** of computers.
(4 marks)
- b) Expand the following and give a brief definition of each
 - (i) GUI
 - (ii) WWW
 - (iii) TCP/IP
- c) Define a computer virus and state any two symptoms of an infection
(3marks)
- d) Using valid examples differentiate between the following terms;
 - (i) Input and output devices (2 marks)
 - (ii) Operating software and Application software (2 marks)
 - (iii) Network and Internet (2 marks)

- e) Briefly explain any three benefits of computer networks (3 marks)
- f) Imagine you are a parent of children aged 9 and 13 years. What guidelines would you give them to ensure their safety when using internet?
- g) What are search engines and what are their functions? Name any **two** search engines (4 marks)

Refer to the passage below when answering question 2,3, or 4

Siminyu and Charlene are University students at Kenyatta University Mombasa. They are planning to start a partnership business in Mombasa which specializes in selling cars to firms all over the country. An IT consultant advises them to buy some computers and a printer to computerize the administration of the business. Since both of them are computer illiterate they are encouraged to enroll for computer literacy training.

QUESTION 2 (20 MARKS)

- a) Briefly explain any four factors they need to consider when purchasing computers (8 marks)
- b) Since you are the IT constant, give answers to the following questions they have raised to you
 - i. What is computer literacy? (2 marks)
 - ii. Why is computer literacy so important? (2 marks)
 - iii. List and explain four reasons that make computers to be regarded as being so powerful? (8 marks)

QUESTION 3 (20 MARKS)

They discover that most of the times their confidential and vital information is easily accessed by their employees. Sometimes this information is either missing

or appears corrupted. You advise them to secure their information and install antivirus.

- a) One of the ways to secure data on computers is by having regular backups. Briefly describe what you understand by this. (4 marks)
- b) Describe any 4 ways computer virus spread from one computer to another (6 marks)
- c) Discuss six health issues associated with prolonged use of computer (6 marks)
- d) What is the function of a cookie? How can cookies affect your privacy? (4 marks)

QUESTION 4 (20 MARKS)

Their business picks up very fast and they decide to buy more computers to implement a local Area network (LAN) to link all the computers. They are told that they need Network Interface Card (NIC) in order to connect to the network.

- a) What is NIC and why is it important in data communication in LAN (4 MKS)
- b) Using diagrams show any three network topologies (6 marks)
- c) Give four reasons why a network is better than a stand alone machine (8 marks)
- d) Give two disadvantages of using LAN in an organization (2 marks)

Wishing you breakthrough