



Kasarani Campus
Off Thika Road
Tel. 2042692 / 3
P. O. Box 49274, 00100
NAIROBI
Westlands Campus
Pamstech House
Woodvale Grove
Tel. 4442212
Fax: 4444175

KIRIRI WOMENS' UNIVERSITY OF SCIENCE AND TECHNOLOGY
UNIVERSITY EXAMINATION, 2022/2023 ACADEMIC YEAR
FIRST YEAR, FIRST SEMESTER EXAMINATION
FOR THE DEGREE OF BACHELOR OF SCIENCE
(COMPUTER SCIENCE AND MATHEMATICS)

Date: 27th July, 2022
Time: 2.30m –4.30pm

KCS 100 - FUNDAMENTALS OF COMPUTING

INSTRUCTIONS TO CANDIDATES

ANSWER QUESTION ONE (COMPULSORY) AND ANY OTHER TWO QUESTIONS

QUESTION ONE (30 MARKS)

- a) Kiriri University intends to set up a local area network within its offices and the ICT manager has advised them to use a wireless connection. Explain two reasons that could have led to this advice. (4 marks)
- b) Distinguish between magnetic media and optical media as used in computer storage. (4 marks)
- c) Describe any three types of networks. (6 marks)
- d) What is the major difference between Ms Windows and Ms Word (3 marks)
- e) Differentiate between primary and secondary storage of data. Give three examples of back up storage. (5 marks)
- f) Define the following terms as used in Information Communication Technology
 - i) Data and Information (4 marks)
 - ii) Hardware and Software (4 marks)

QUESTION TWO (20 MARKS)

- a) Mary has a type writer and a computer in her office, explain to her four reasons why she should use a computer and not a typewriter. (4 marks)
- b) The Windows XP boot-up process comprises of several procedures, discuss them. (10 marks)
- c) State and describe three file organization techniques (6 marks)

QUESTION THREE (20 MARKS)

- a) There are three basic types of cable that are used in networking, discuss them giving their advantages (9 marks)
- b) Define the term file. (2 marks)
- c) Discuss three main types of Network topologies using diagrams. (9 marks)

QUESTION FOUR (20 MARKS)

- a) Discuss the components/ elements of a computer system. (12 marks)
- b) Highlight the two main network configurations used in computer giving two advantages of each. (8 marks)

QUESTION TWO (20 MARKS)

- a) Discuss the Von Nuemann Architecture of computers with a diagrammatic illustration. (10 marks)
- b) With examples, explain the two OS categorization according to number of users. (4 marks)
- c) Define the term secondary storage (backing storage) as used in computers highlighting its two types/categories. (6 marks)