

UNIVERSITY EXAMINATIONS

1ST SEMESTER 2022/2023 ACADEMIC YEAR

**FIRST YEAR EXAMINATION FOR THE DEGREE OF
BACHELOR OF SCIENCE (COMPUTER SCIENCE)**

COMP 111: INTRODUCTION TO COMPUTER APPLICATIONS

STREAM: R

TIME: 2 HRS

DAY: MONDAY [11.30AM – 1.30PM]

DATE: 05/12/2022

THIS QUESTION PAPER CONSISTS OF THREE (3) PAGES

PLEASE DO NOT OPEN UNTIL THE INVIGILATOR SAYS SO.

INSTRUCTIONS: - Answer question ONE (compulsory) and any other TWO**QUESTION ONE (30 MARKS)**

- (a) Define a computer [3 marks]
- (b) Outline any TWO ways a user may output data from a computer. [2 marks]
- (c) Differentiate between data and information. [2 marks]
- (d) What is cloud storage? [2 marks]
- (e) Define software. [2 marks]
- (f) Outline one data security threat. [2 marks]
- (g) Explain TWO reasons why computer networks are important. [2 marks]
- (h) Differentiate between the internet and the World Wide Web (www). [4 marks]
- (i) Identify TWO ways in which the technology improved from the first generation computers to the second generation computers. [4 marks]
- (j) Define an operating system and give one example. [3 marks]
- (k) Outline TWO keyboard shortcuts and what they are supposed to do. [4 marks]

QUESTION TWO (20 MARKS)

- (a) Explain the following terms as used in networking: [6 marks]
 - (i) IP address
 - (ii) ISP
 - (iii) Modem
- (b) Discuss THREE ways in which you can prevent unauthorized access of computer data. [6 marks]
- (c) Outline FOUR types of application software and give one example of each. [8 marks]

QUESTION THREE (20 MARKS)

- (a) Outline how computers may be classified according to how they represent numbers. [6 marks]
- (b) Explain the two types of storage and give one example of each [6 marks]
- (c) What is a monitor? [2 marks]
- (d) Discuss how the following factors affect the quality of a monitor: [6 marks]
 - (i) Resolution
 - (ii) Dot pitch
 - (iii) Refresh rate

QUESTION FOUR (20 MARKS)

- (a) Explain how different data types such as text, graphics and sound are represented internally in a computer [2 marks]
- (b) Outline THREE number systems that a computer makes use of [6 marks]
- (c) With the aid of a diagram, discuss the basic operation of a computer [8 marks]
- (d) Below are the specifications for a laptop. What FOUR things can be determined about the laptop? [4 marks]

13", 2.3GHz Quad-Core Intel Core i5, 8GB RAM, 256 GB SSD

QUESTION FIVE (20 MARKS)

- (a) (i) Define malware [2 marks]
(ii) Describe THREE types of malware [6 marks]
- (b) Describe any THREE types of user interfaces [6 marks]
- (c) Discuss THREE reasons why computer networks are important [6 marks]