

CHUKA



UNIVERSITY

UNIVERSITY EXAMINATIONS

**FIRST YEAR FIRST SEMESTER EXAMINATION FOR THE BACHELOR OF
SCIENCE DEGREE IN COMMUNITY DEVELOPMENT**

COSC 103: INTRODUCTION TO COMPUTER APPLICATIONS

STREAMS: BSC. (CDEV) Y1S1 (ODEL/SB)

TIME: 2 HOURS

DAY/DATE: WEDNESDAY 31/03/2021

8.30 A.M. – 10.30 A.M

INSTRUCTIONS: Answer ALL questions in section A and any other TWO in section B.

SECTION A (COMPULSORY - ANSWER ALL QUESTIONS IN THIS SECTION)

QUESTION ONE (30 MARKS)

- (a) Using the computer block diagram explain four basic functions of a computer system. (7 marks)
- (b) Discuss the operations of any two types of computer viruses. (4 marks)
- (c) Discuss three characteristics of computers (6 marks)
- (d) Outline at least four key features of fourth and fifth computing generations. (4 marks)
- (e) Explain the three categories of computers according to their functionalities. (6 marks)
- (f) Define the term Protocol as applied in computer networks and outline the functions of a communication protocol. (3 marks)

SECTION B: CHOOSE ONLY TWO QUESTIONS FROM THIS SECTION

QUESTION TWO (20 MARKS)

- a) State and explain **four** different types of computer registers. (8 marks)
- b) List and explain four Components of a communication network: (8 marks)

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- c) Discuss **two** fundamental categories of Computer software using suitable examples for each.
(4 marks)

QUESTION THREE (20 MARKS)

- (a) Computers have different uses in a business setting. Using relevant examples, discuss their various uses in a busy business setup. (10 marks)
- (b) Discuss the various applications of internet in our society today. (10 marks)

QUESTION THREE (20 MARKS)

- a). Explain the purpose of EACH of the following elements of a computer system: (6 marks)
- i. Accumulator
 - ii. ALU
 - iii. Control unit
 - iv. Data bus
 - v. RAM
 - vi. ROM
- b) Discuss the following forms of computer networks: LAN; WAN and MAN. (5 marks)
- c). Describe Star topology, Bus topology and Mesh network topologies, giving their advantages and limitations. (9 marks)

QUESTION FIVE (20 MARKS)

- a) The bus subsystem consists of three main parts. Name and explain the parts. (6 marks)
- b) List and explain any three types of computer operating systems. (6 marks)
- c) Using appropriate examples distinguish between input and output devices. (8 marks)
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