CHUKA   **UNIVERSITY**

UNIVERSITY EXAMINATIONS

FIRST YEAR EXAMINATION FOR THE AWARD OF DEGREE OF BACHELOR OF EDUCATION ARTS

COSC 103: INTRODUCTION TO COMPUTER APPLICATIONS

STREAMS: BED (ARTS) YIS2 P/T   **TIME: 2 HOURS**

DAY/DATE: WEDNESDAY 15/04/2020   **11.30 AM – 1.30 PM**

INSTRUCTIONS:

- Answer ALL questions in section A and any other TWO questions from section B.
- Do not write on this question paper

SECTION A (COMPULSORY)

Question One Compulsory (30 marks)

(a). Explain three advantages of using computers in processing tasks. [3 marks]

(b). Explain three measures a computer user is required to take to ensure security of data stored in a computer system. [3 marks]

(c). Explain three methods of dealing with computer viruses. [3 marks]

(d). Explain the difference in functionality between spreadsheet software and word processing software. [3 marks]

(e). Explain what is operating system software? Give two examples. [3 marks]

(f). Define uniform resource locators (URLs) and provide any two examples? [3 marks]

(g). Convert 235_{10} to its binary equivalent. [3 marks]

(h). Explain what is a Local area network (LAN)? [3 marks]

(i). Mr. Ali was working on a database file, after closing Ms Word application; she realized that she had forgotten where she saved her work. Suppose he asks you for assistance, what advise would you give him to find the file? [3 marks]

(j). Ms. Gloria a purchasing assistant is to purchase an office computer, outline some of the main features she should consider? [3 marks]

SECTION B (ANSWER TWO QUESTIONS FROM THIS SECTION)

Question Two (20 marks)

(a) Discuss for signs that show that a computer may be infected by a virus. [4 marks]

(b) All web browsers provide users with a variety of tools that enable them to navigate through complex collections of web pages. State any two and explain the function for each.
[4 marks]

(c) Perform the following number conversions. [6 marks]
   (i). 100111.011_2 to decimal equivalent
   (ii). 533_{10} to its binary equivalent

(d) Fred is the head of a local Network consulting company. His company has won a contract to design and develop a network for a middle level college in Chuka. Explain three advantages the college will gain by implementing the network. [6 marks]

Question Three (20 marks)

(a). Define the following terms:
   (i). Bit [2 marks]
   (ii). System software [2 marks]

(b). Discuss four security precautions that one should take in online shopping and in any other online activities. [8 marks]

(c). Social sites such as Facebook and twitter are currently very popular in our society. Discuss two advantages and two disadvantages of these sites. [8 marks]

Question Four (20 marks)

(a). Distinguish between Intranets and extranets [4 marks]

(b). Explain two uses of the log in prompt for user name and password in a computer system.
[4 marks]

(c). Although portable computer are without any doubt useful, briefly describe some common criticisms against this category of computers. [6 marks]

(d). The table below shows bonus points for staff members at GoodLuck Limited.

Index	A Name	B Month 1	C Month 2	D Month 3	E Month 4
1	James	48	89	65	89
2	Mary	54	76	68	80
3	Korir	17	88	76	86
4	John	99	60	65	58

Use the information above to answer the questions below.

(i). Write a formula and function in MS Excel that would calculate the mean score for Mary. [2 marks]

(ii). Write a function in MS Excel that would compute the highest score in month 3.
[2 marks]

(iii). Explain the features of a simple IF function in Microsoft Excel. [2 marks]

Question Five (20 marks)

a) Discuss two advantages of using Microsoft PowerPoint over Microsoft word in creating a presentation for a large group of people. [4 marks]

b) Briefly explain four differences between RAM and the Hard disk in a computer system.
[4 marks]

c) Explain three advantages of electronic spreadsheets over manual filing systems [6 marks]

d) Describe three factors that should be considered when buying a printer. [6 marks]