CHUKA



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

COSC 103: INTRODUCTION TO COMPUTER APPLICATIONS

STREAMS: B.Sc (COMM DEV) Y1S2 - ODEL/SB TIME: 2 HOURS

DAY/DATE: WEDNESDAY 10/4/2019 2.30 P.M - 4.30 P.M.

INSTRUCTIONS

- Answer Question 1 (COMPULSORY) and any other TWO Questions from section B.
- Write your answers legibly and use your time wisely.
- Do not write anything on the question paper

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

QUESTION ONE: COMPULSORY [30 MARKS]

- (a) Briefly describe the Von-Newman Computer Architecture. [4 Marks]
- (b) Explain the following terms and provide an example of each type:
 - (i) Data[2 Marks](ii) Information[2 Marks](iii) Computer[2
 - (iii) Computer
 Marks]
- (iv)Memory [2 Marks]
- (c) What is an operating system? Give examples of commonly used operating systems in Kenya today. [3 Marks]
- (d) Explain the difference between copying and deleting a file. [3 Marks]
- (e) Provide a definition of application software, and provide three examples of this type of software. [4 Marks]
- (f) Convert decimal 47 to its binary equivalent. [2 Marks]

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(g) Discuss the three major types of computer network, citing the differences in each type

[6
Marks]

SECTION B: CHOOSE ONLY TWO QUESTIONS FROM THIS SECTION

QUESTION 2[20 MARKS]

(a) Outline the various output and input devices in a computer and state their functions.

[10]

Marks]

(b) Spreadsheet software uses both formula and functions in calculations. Distinguish between a formula and a function. In your answer, give distinguishing example between the two.

[5

Marks]

(c) After collecting data in the field, you are required to prepare a report on your findings which you will present to panel. Explain with relevant examples of software application that you will use, and how you will go about in making the final presentation and tools you may require to do so.

[5 Marks]

OUESTION 3

- (a) Given a sample Microsoft Excel sheet with data in Cells A3,B3,C3,D3,E3,AND F3 students Marks for six subjects:
 - i. Write a formula to calculate the total number of students [5 Marks] [=A3+B3+C3+D3+E3+ F3]
 - ii. Other than using a formula, write a function in MS Excel that will calculate the average mark for each student

[5

Marks]

[sum(A3: F3)]

iii. From your answers for the formula and functions above, explain why functions are more appropriate compared to a formula. [10 Marks]

OUESTION 4

- (a) Using a well labeled diagram, explain the role of the various functional components of a computer. [10 Marks]
- (b) Computers are prone to security threats from the outside world. Explain the various security threats to computers and measures necessary to protect data in these computers.

[10

Marks]

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QUESTION 5

(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 application of internet in our society today. [10 Marks]