

CHUKA



UNIVERSITY

UNIVERSITY EXAMINATIONS

ODEL

EXAMINATION FOR THE AWARD OF DEGREE OF BACHELOR OF COMMERCE
COSC 103: INTRODUCTION TO COMPUTER APPLICATIONS

STREAMS: Y1S2

TIME:2 HOURS

DAY/DATE: FRIDAY 6/12/2019

11.30 A.M – 1.30 P.M

INSTRUCTIONS:

- Answer **QUESTION 1** and any other **TWO QUESTIONS** from section B.
- Write your answers **legibly** and use your time wisely.

SECTION A (COMPULSORY)

Question One: Compulsory [30 marks]

- (a). Briefly describe the Von-Neuman Computer Architecture. [4marks]
- b) Explain the following terms and provide an example of each type:
- | | | |
|----------|----------------------------|-----------|
| (a.i). | Batch processing
marks] | [2 |
| (a.ii). | Real time processing | [2 marks] |
| (a.iii). | Transaction processing | [2 marks] |
| (a.iv). | Interactive processing | [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 57 to its binary equivalent. [2 marks]
- 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 [20MKS]

- 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. [5marks]
- 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. [5marks]

QUESTION 3 (20 MARKS)

- (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 [5marks]
 - ii. Other than using a formula, write a function in MS Excel that will calculate the average mark for each student

[5marks]

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

[10marks]

QUESTION 4 (20 MARKS)

- a. Using a well labeled diagram, explain the role of the various functional components of a computer

marks]

[10

- 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

[10marks]

QUESTION 5 (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). Convert decimal 49 to its binary equivalent. [4 marks]

- (c). Explain the two major differences between main memory and secondary memory in a computer system. [6 marks]
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