

CHUKA



UNIVERSITY

**UNIVERSITY EXAMINATIONS
CHUKA AND EMBU CAMPUSES**

EXAMINATION FOR THE AWARD OF DIPLOMA

COSC 0102: INTRODUCTION TO COMPUTER APPLICATIONS

STREAMS:

TIME: 2 HOURS

DAY/DATE: FRIDAY 07/11/2018

11.30 A.M – 1.30 P.M

INSTRUCTIONS:

- Answer question **ONE** and **TWO** other questions
- Do not write anything on the question paper
- This is a **closed book exam**, no reference materials are allowed in the examination room
- There will be **NO** use of mobile phones or any other unauthorized materials
- Write your answers legibly and use your time wisely.

Question one (30 marks)

- a. Name three storage devices used to store digital data in institutions. [3 marks]
- b. Using an illustrative diagram, describe the main functional units of a computer system. [6 marks]
- c. Describe three advantages of using spreadsheet application and give any spreadsheet software application you would recommend for use. [4 marks]
- d. List three factors used in classification of computers [3 marks]
- e. Giving an example, describe briefly the difference between system application and application software. [6 marks]
- f. Highlight three characteristics of a computer that make it good for information processing. [3 marks]
- g. State what the following shortcuts are used for in Microsoft word:
 - i. CTRL+C [1 mark]

- ii. CTRL+X [1 mark]
- iii. CTRL+V [1 mark]
- h. Give two differences between RAM and ROM. [2 mark]

Question two (20 marks)

- a. Discuss five main functions of an operating system. [10 marks]
- b. Use the following system properties of a computer to answer the questions below.

Device name	DESKTOP-3GAAS5G
Processor	Intel(R) Core(TM) i7-3687U CPU @ 2.10GHz 2.60 GHz
Installed RAM	4.00 GB (3.87 GB usable)
Device ID	B0561965-E74A-4880-8651-288125F9E21F
Product ID	00331-10000-00001-AA290
System type	64-bit operating system, x64-based processor
Pen and touch	No pen or touch input is available for this display

Rename this PC

Windows specifications

Edition	Windows 10 Pro
Version	1803
Installed on	6/14/2018
OS build	17134.345

- i. What is the speed of the processor? [2 marks]
- ii. What is the capacity of primary memory? [2 marks]
- iii. Name the operating system installed in this computer? [2 marks]
- c. Although computers are without any doubt useful, explain two disadvantages of using computers. [4 marks]

Question three (20 marks)

- a. Explain five ways used to care and maintain computers. [10 marks]
- b. You are staff of an upcoming company and the management asks you to give the specification in order to procure the computers, explain five specifications that you would recommend to be considered. [10 marks]

Question four [20 marks]

- a. While giving an example in each case, list three types of data that is acceptable in a spreadsheet cell. [6 marks]
- b. Today's world is almost dependent on computers, discuss four computer applications in our modern society. [8 marks]

- c. While giving an example, distinguish between a web browser and a search engine.

[6 marks]

Question five (20 marks)

- a. The table below shows a mark sheet for a computer class at Chuka High School.

	A	B	C	D	E
	NAME	OPENER EXAM	MID TERM EXAM	END TERM	TOTAL
1	Risho	22	12	40	
2	Eva	18	15	38	
3	Alex	20	20	20	
4	Ann	14	17	30	

Use the information above to answer the questions below.

- i. Write a function in MS Excel that would calculate the total score for Ann. [2 marks]
 - ii. Write a function in MS Excel that would compute the average score for all students. [2 marks]
 - iii. Write a function that will compute the minimum and maximum marks for Mid Term Exam. [4 marks]
 - iv. Write a function to calculate the total number of students appearing for Computer class. [2 marks]
- b. Explain four advantages why an organisation may want to set up a L.A.N [8 marks]
- c. Define what is a Database Management System. [2 marks]
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