

CHUKA



UNIVERSITY

UNIVERSITY EXAMINATIONS

EXAMINATION FOR THE AWARD OF DIPLOMA  
IN COMPUTER SCIENCE

COSC 0102: INTRODUCTION TO COMPUTER APPLICATIONS

STREAMS: DIP. COMP. SCI , ANHE, CDEV, ECDE, PPMA (Y1S1) TIME: 2 HOURS

DAY/DATE: WEDNESDAY 24/03/2021

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. You are interested in purchasing of a notebook and you manage to come across an advertisement with the following specifications.

**Get notebook! Get notebook**

Acer Notebook

Features include:

Intel Celeron 2.8 GHz, 2 Gigabyte, 1 Terabyte,  
COMBO DVD , 56K, Wifi, touchpad, Red hat Linux.

**Required:**

- What operating system does the above notebook use? [2 marks]
- Which hardware component does 2 Gigabyte refer to? [2 marks]
- Which hardware component does 1 Terabyte refer to? [2 marks]
- What does this notebook use to connect to a network? [2 marks]

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- b. Differentiate between a field and a record [3 marks]
- c. List two functions of the ALU [2 marks]
- d. Discuss the application of computers in the following sectors [4 marks]
  - i. industries
  - ii. hospitals
- e. Nicholson, a computer student, intends to send an email to his friend. Outline two email applications that he would use to achieve his objective. [2 marks]
- f. State three advantages associated with the use of computers [3 marks]
  - a) Distinguish between Header and Footer and write the steps followed to insert them in a word document [4 marks]
  - b) What causes the following error messages in Microsoft excel [4 marks]
    - i. #####
    - ii. #REF!

### SECTION B {ANSWER ANY TWO QUESTIONS FROM THIS SECTION}

#### QUESTION TWO (20 MARKS)

- a. An upcoming organization uses a lot of files in keeping records; the organization wants to break down the paperwork and automate the basic routine jobs by interconnecting computers in the organization. What will be the business benefits of networking this organization? [10 marks]
- b. Explain four functions of operating system [4 marks]
- c. Describe TWO computer crimes taking place in society citing control measures that can be put in place to curb them. [4 marks]
- d. Outline the use of the following shortcut keys [2 marks]
  - i. Ctrl + C
  - ii. Ctrl + X

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

A	B	C	D	E	F
1	NAME	OPENER EXAM	MID TERM EXAM	END TERM	TOTAL
2	Risho	22	12	40	
3	Eva	18	15	38	
4	Alex	20	20	20	
5	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. Define a Web browser and give 3 examples of web browsers. [6 marks]
- c. Although computers are without any doubt useful, explain two disadvantages of using computers. [4 marks]

**QUESTION FIVE (20 MARKS)**

- a. Name two transmission media used in computer networks [2 marks]
- b. Discuss the advantages associated with the use electronic mail over traditional paper mail [8 marks]
- c. Explain each of the following word processing features. [6 marks]
  - i. Word Wrap
  - ii. Macros
  - iii. Mail Merge
- d. State FOUR features would be required to write the following statement as it is. [4 marks]

**Computers** are *essential* to business as H<sub>2</sub>O is to LIFE.

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