

CHUKA



UNIVERSITY

UNIVERSITY EXAMINATIONS

**FIRST YEAR EXAMINATION FOR THE AWARD OF
DEGREE OF BACHELOR OF COMPUTER SCIENCE**

COSC 103 : COMPUTER APPLICATIONS

STREAMS:

TIME: 2 HOURS

DAY/DATE : TUESDAY 28 /09/ 2021

2.30 PM – 4.30 PM

INSTRUCTIONS:

1. Answer question **ONE** in SECTION A and any other **TWO** questions in SECTION B
2. Marks are awarded for clear and concise answers

SECTION A

Question One Compulsory - (30 MARKS)

- a) Explain how the following terms as applied in Computer information systems:
(10 marks)
 - i. Computer
 - ii. Information Technology
 - iii. Software
 - iv. Data
 - v. Computer Hardware
- b) Describe why a word processing application is important to an organization and state any two word processing software application you would recommend for use.
(4 marks)
- c) Perform the following operations (Show working)
 - i. Add 101110 binary numbers with 111011.
(2 marks)

- ii. Convert 47_{10} to binary. (2 marks)
- d) Using appropriate examples differentiate between Off-shelf software and Tailor-made software. (2 marks)
- e) Using a diagram, describe the Major parts, icons and tools found on a word application window (6 marks)
- f) Using a suitable diagram differentiate between a ring and a star topology. (4 marks)

SECTION B– Answer ANY two questions

QUESTION TWO (20 MARKS)

- a) Explain the impact of technology in: (10 marks)
 - i) Health care.
 - ii) Education, Science and research
- b) Andersen a student at Chuka university was asked by his lecturer to identify and classify five type of computers, Explain how he will solve the problem. (10 marks)

QUESTION THREE (20 MARKS)

- a) Outline how you would perform the following (6 marks)
 - i) Italicize typed text.
 - ii) Centre align your text.
 - iii) Saving your word document for the first time.
- b) Distinguish between the following software applications categories (4 marks)
 - i) Presentation and desktop publishing software.
 - ii) Database and accounting software.
- c) Discuss the use of application softwares in computers in performing various operations. You must show one advantage of using this applications in operations you will state as

compared to manual operations.

(10marks)

QUESTION FOUR (20 MARKS)

- a) A computer as a collection of machines may be defined by the composition of its parts, explain these various parts of the computer. *Use a diagram to explain the parts.* (8 marks)
- b) Explain the difference between application software and System software. (4 marks)
- c) List four services provided by a software house. (4 marks)
- d) List any four types of system Software. (4 marks)

QUESTION FIVE (20 MARKS)

- a) EXPLAIN **TWO** benefits from the use of the internet. (4 marks)
- b) Explain **FOUR** things to avoid when working on a computer. (4 marks)
- c) Use the MS Excel sheet shown below to answer the questions that follow:

I18							
	A	B	C	D	E	F	G
1	student Name	Courses			Total Score	Average Score	Average Grade
2		COMP 101	COMP 102	COMP 103			
3	Gladys	65	45	48	158	#DIV/0!	
4	Kimaita	67	69	64		66.66666667	#NAME?
5	Chepkorol	45	70	55		56.66666667	
6	Kionyo	68	35	46		49.66666667	
7	Bob	90	56	89		78.33333333	
8	Gilbert	78	53	43		58	
9	Subject Average Score	69	55	#NAME?	#REF?		
10							
11		Grading System					
12		70 - 100	A				
13		60 - 69	B				
14		50 - 59	C				
15		40 - 49	D				
16		<40	F				

- i. Explain the possible causes of errors in the cells G4, E9, and F3. [6 marks]
- ii. Write a function to round the average score in cell F4 to 2 digits. [2 marks]
- iii. Using the grading system provided above, explain whether to get the average grade of student you will use a simple IF function or an embedded IF function. [2 marks]
- iv. Write a formula to calculate the total score of Bob. [2 marks]

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