

CHUKA



UNIVERSITY

UNIVERSITY EXAMINATIONS

FIRST YEAR EXAMINATION FOR THE AWARD OF BACHELOR OF COMMERCE

COSC 105: COMPUTER APPLICATIONS IN BUSINESS

STREAMS: B COMM. Y1S2

TIME: 2 HOURS

Candidate's Instructions

- Answer QUESTION ONE and any other TWO questions.
- This is a CLOSED BOOK exam. No reference materials are allowed in the exam room.
- No mobile phone is allowed in the exam room (*make sure to switch it off and leave it with the invigilator if you carried one*).
- Write your answers legibly and use your time wisely
- Time **2 hours**

SECTION A (COMPULSORY) [30 MARKS]

QUESTION ONE (COMPULSORY) [30 marks]

(a) Define the following terms:

- (i) Computer network (2 marks)
- (ii) Information security (2 marks)
- (iii) Computer software (2 marks)
- (iv) Byte (2 Marks)

(b) Discuss the differences in functionalities between RAM and hard drive of a computer system. [4 marks]

(c) Discuss at least Two differences between LAN and WAN types of computer networks [4 Marks]

(d) Outline at least THREE benefits that a business can gain from using Social Media Platforms such as Facebook, Twitter and Instagram [6 Marks]

(e) Perform the following operations (show your working)

- i) Convert 11001101_2 to decimal. [2 marks]
 ii) Convert 1000_8 to binary. [2 marks]

(f) Give two examples of system software and two examples of application software. [4 marks]

SECTION B (ANSWER ONLY TWO QUESTIONS FROM THIS SECTION)

QUESTION TWO [20 marks]

- a) (i) What is a network topology? (2 Marks)
 (ii) With a suitable diagram, describe any **THREE** types of network topologies. (9 marks)
- b) Define the following terms as used in computer networks :
 i) IP Address (2 Marks)
 ii) Domain Name (2 Marks)
- c) Outline at least **FIVE** various methods/ways /techniques an organization can put in place to protect its systems (5 marks)

QUESTION THREE [20 marks]

- a) i) Define E- Commerce (2 marks)
 ii) Discuss any **FOUR** business models of E-commerce. (8 marks)
- b) Explain any **FIVE** benefits a microfinance institution will gain by implementing a computer network infrastructure within their premises.(10 Marks)

QUESTION FOUR [20 marks]

(a) Use the MS Excel sheet shown below to answer the questions that follow:

	A	B	C	D	E	G	H
1	Admission Number	Name	MATH	COMPUTER	ENGLISH	AVERAGE	GRADE
2	A1/2021	Carlos	80	78	84		
3	A2/2021	Linda	67	75	90		
4	A3/2021	Aguero	98	83	65		

5	A4/2021	Chloe	89	66	77		
6	Max						
7	Min						
8	Total						

a) Write the formula for the following :

- i) The totals for Math, Computer and English for each display (3 marks)
- ii) The average for Each of the students (4 Marks)
- iii) The Maximum for Math, Computer and English for each display (3 marks)
- iv) The Minimum for Math, Computer and English for each display (3 marks)
- v) Suppose we have a grading system where average scores for each student are graded as follows :
 - A : 70-100
 - B : 60-69
 - C : 50-59
 - D : 40-49
 - E : < 40

Develop a Nested IF function to automatically generate the grades for each of the students. (7 marks)

QUESTION FIVE [20 marks]

- (a) State and explain any **FIVE** uses of the internet as requirement for starting a Small and Medium Enterprise(SME) [10 marks]
- (b) Explain at least **FIVE** Roles Big Data is playing in shaping and influencing how business is done currently in the world. [10 marks]