

CHUKA



UNIVERSITY

UNIVERSITY EXAMINATIONS

**FIRST YEAR EXAMINATION FOR THE AWARD OF POSTGRADUATE
DIPLOMA IN EDUCATION**

COSC 701: COMPUTER USE AND APPLICATION IN EDUCATION

STREAMS: PGDE

TIME: 3 HOURS

DAY/DATE: WEDNESDAY 31/03/2021

11.30 A.M. – 2.30 P.M

INSTRUCTIONS

- Answer Question **ONE** and any other **TWO** questions.
- Marks are awarded for clear and concise answers.
- **Note that only Question ONE (Section A) and the first TWO attempted questions in section B will be marked.**

SECTION A (COMPULSORY)

QUESTION ONE (30 MARKS)

- (a) While giving examples describe what types of data is acceptable in a spreadsheet cell **[6 Marks]**
- (b) List **FOUR** types of secondary memory storage **[4 marks]**
- (c) Differentiate between a laptop computer and a tablet **[2 marks]**
- (d) While giving examples in each differentiate between a spreadsheet programme and a word processor **[4 marks]**
- (e) Explain the role played by the following components within computer hardware;
- (i) Input devices **[2 Marks]**
- (ii) C.P.U **[2 marks]**

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- (f) Local area networks (LAN) are important resources when deployed in an institution.
- (i) Give **THREE** reasons why a school may want to set up a L.A.N [3 marks]
 - (ii) Describe **TWO** methods which an institution can employ to connect to the internet [4 marks]
- (g) Briefly discuss **THREE** advantages that a school may benefit from after they develop their own web portal [3 marks]

SECTION B: ANSWER ANY TWO QUESTIONS FROM THIS SECTION

QUESTION TWO (15 MARKS)

- (a) Briefly describe what a database is [2 Marks]
- (b) Briefly describe the role of the following objects of access database:
- (i) Table [2 Marks]
 - (ii) Form [2 Marks]
 - (iii) Query [2 Marks]
 - (iv) Report [2 Marks]
- (c) Describe the role of a database management System clearly stating **THREE** key functionalities it supports [5 Marks]

QUESTION THREE (15 MARKS)

- (a) With a well labelled diagram, discuss the various components that make up the computer system [9 Marks]
- (b) Computer Systems are exposed to a number of threats that can compromise the data held in them. Describe any **THREE** threats to computer Systems and possible countermeasures to each [6 Marks]

QUESTION FOUR (15 MARKS)

A word processor is an application program for manipulating characters, words and sentences to make them attractive and presentable. It incorporates very powerful formatting features in writing reports.

- (a) Give **TWO** features of Microsoft word and **TWO** features of Microsoft excel that are very useful to an English teacher in secondary school **[3 Marks]**

- (b) What is the relevance of the following word processing features during report writing;
 - (i) Tables **[3 Marks]**
 - (ii) Table of contents **[3 Marks]**
 - (iii) Bullets and numbering **[3 Marks]**
 - (iv) Page numbering **[3 Marks]**

QUESTION FIVE (15 MARKS)

- (a) You have been invited to present a paper on “Role of educational institutions in vision 2030” .You are supposed to prepare a PowerPoint presentation. Briefly discuss **FIVE** characteristics of a good PowerPoint presentation that you would factor as you prepare this presentation **[5 marks]**

 - (b) Recently, a number of learning institutions have abandoned use of blackboard and chalk and in place adopted use of PowerPoint presentations or a combination of both in delivering content to the learners. Justify this adoption **[5 marks]**

 - (c) One important application of internet in education sector is elearning.
 - (i) Briefly describe what elearning is **[2 Marks]**
 - (ii) Give **THREE** advantages of elearning over classroom interaction between a learner and a teacher **[3 Marks]**
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