



**UNIVERSITY EXAMINATIONS  
THIRD YEAR EXAMINATION FOR THE AWARD DEGREE OF POST  
GRADUATE DIPLOMA IN EDUCATION**

**COSC 701: COMPUTER APPLICATION IN EDUCATION**

**STREAMS: SB**

**DAY/DATE: FRIDAY 6/12/2019**

**TIME: 2 HOURS**

**8.30 A.M – 10.30 A.M**

**INSTRUCTIONS:**

1. Answer **all questions** in section A and any other **two questions** from section B.
2. No Reference Material is allowed in the exam Room.
3. Write on Both sides of answer sheet.
4. All Mobile phones should be switched off in the exam room.

**SECTION A (COMPULSORY)**

**QUESTION 1 (COMPULSORY) [30 MARKS]**

- a) Explain the following terminologies as used in computer applications
  - i) Binary
  - ii) Information
  - iii) Online
  - iv) Technology
  - v) Header
  - vi) Port(6marks)
- b) Using a well labelled block diagram, describe a computer processor (5marks)
- c) Highlight five benefits of using SPSS package over Microsoft Excel in research institutions. (5marks)
- d) Name TEN computer storage devices that are likely to be used in learning institutions (5marks)
- e) Explain five functions of an operating system in mobile phones. (5marks)
- f) With reference to databases, answer the following questions: -
  - i) What is a primary key (2marks)
  - ii) Explain two benefits of primary key in databases (2marks)

**SECTION B (ANSWER TWO QUESTION FROM THIS SECTION)**

**QUESTION 2 [15 MARKS]**

- a) At postgraduate level, it is necessary for one to use a search engine. Explain what a search engine is; hence name FOUR search engines that are available in schools. (4marks)

- b) Outline the steps of performing the following task in word processing.  
Inserting page numbers on the bottom left hand side of the page, beginning from page 10. (3 marks)
- c) Explain the need of the following types of computer networks in universities.
- i) LAN
  - ii) WAN
  - iii) MAN
  - iv) CAN
- (8 marks)

**QUESTION 3 [15 MARKS]**

- a) Name five wireless network communications media used in modern communication (5marks)
- b) Outline the steps that one would use to create a two-slide presentation, such that the first slide takes 5mins then moves to the second slide on a slideshow. (5marks)
- c) Explain the use of the following items in database management system
- i. Forms
  - ii. Tables
  - iii. Queries
  - iv. Reports
  - v. Field names
- (5marks)

**QUESTION 4 [15 MARKS]**

- a) Add the following storage spaces giving your answer in Megabytes.  
200Mb + 1Tb + 5 Gb  
(3marks)
- b) Explain five advantages of using ICT in learning institutions (5marks)
- c) Define the following computer terminologies: -
- i) Documentation (1mark)
  - ii) Referencing (1mark)
  - iii) APA referencing (1mark)
- d) Using APA referencing, reference a 5<sup>th</sup> edition book written by Ken Wanyama and Peter Opiyo, named a world of psychology, written in 2002 and published at kinyago publishers. The book was retrieved from www.books.com (4marks)

**QUESTION 5 [15 MARKS]**

- a) A certain school administrator wanted to buy either a 'laser jet printer' or a 'dot matrix printer'. Explain TWO characteristics of each printer, in order to assist the school administrators in making a decision. (4marks)
- b) If you right-click a folder in a computer, a pop-up menu will appear with a number of links. Explain THREE links that are contained on the pop up menu. (3marks)

- c) Explain THREE similarities between Operating system and application software  
(6marks)
  
- d) Explain TWO disadvantages of computers to schools  
(2Marks)

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