

CHUKA



UNIVERSITY

UNIVERSITY EXAMINATIONS

FIRST YEAR FIRST SEMESTER EXAMINATIONS FOR
POSTGRADUATE DIPLOMA IN EDUCATION

COSC 701: COMPUTER APPLICATIONS IN EDUCATION

STREAMS: PGDE

TIME: 3 HOURS

DAY/DATE: MONDAY 15/4/2019

2.30 P.M. – 5.30 P.M.

CANDIDATE 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 legibly on both sides of answer sheet.
4. Mobile phones are not allowed in the exam room.

SECTION A (COMPULSORY)

QUESTION 1 (COMPULSORY) [30 MARKS]

- a) Describe FIVE benefits of computer networks, which have been connected to the internet, in learning institutions. (5 marks)
- b) Explain FOUR rules / precautions that one would consider in designing a PowerPoint presentation to deliver your report to an audience (4 marks)
- c) Differentiate between a “dot matrix printer” and a “plotter”, clearly pointing an application area of each in learning institution. (4 marks)
- d) “Cloud computing” is a terminology associated with modern data storage in schools: -
 - i. Describe the term “cloud computing” (2 marks)
 - ii. Explain THREE benefits of cloud computing to schools (3 marks)
- e) At postgraduate level, it is necessary for one to use online services through the use of a web browser. Explain what a web browser is; hence name FOUR web browser that are available in schools. (4 marks)

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- f) A certain school wanted to acquire a library information system, to be used in their library. Explain FOUR methods through which they can use to acquire their system. (4 marks)
- g) With the help of a diagram, briefly describe the parts of a computer CPU. (4 marks)

SECTION B (ANSWER TWO QUESTION FROM THIS SECTION)

QUESTION 2 [15 MARKS]

- a) Below is a spreadsheet extract from Microsoft Excel. Use it to answer the following questions.

1	Reg.No	Surnam	Ma	En	Kis	Averag	Ma	Positio
	.	e	t	g		e	x	n
2	A1	Akinyi	56	45	76			
3	A2	Beatrice	34	56	89			
4	A3	Mwangi	67	78	43			
5	A4	Kalisto	34	76	56			
6	A5	Kiplimo	23	89	56			

- i) Other than Microsoft excel, Name TWO spreadsheet application software (2 marks)
 - ii) Write a formula to give the average mark for Beatrice. (2 marks)
 - iii) Write a formula to give the Maximum (Max) mark for Mwangi. (2 marks)
 - iv) Write a formula to give the position of student Kalisto. Assuming the student with the highest mark becomes position 1. (2 marks)
 - v) Write the procedure of sorting the list such that the student with the highest mark becomes the first in the list. (2 marks)
- b) Discus how fingerprint login could be used to monitor student behaviour in schools. (5 marks)

QUESTION 3 [15 MARKS]

- a) Highlight FOUR benefits that one will get from using a computer in writing reports as compared to handwritten reports. (4 marks)
- b) Describe THREE differences between Operating system and application software (6 marks)
- c) Explain what a software suite is; hence name two software suites available in schools and their applications. (5 marks)

QUESTION 4 [15 MARKS]

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- a) The Government of Kenya rolled out free tablets to public primary schools in Kenya
- i) Explain FOUR advantages of these tablets compared to desktop computers in E-learning. (4 marks)
 - ii) Explain THREE unethical behaviours that could be propagated by these tablets in schools. (3 marks)
 - iii) Explain TWO advantages of these tablets to schools. (2 marks)
- b) Explain FOUR advantages of electronic databases over manual filing system of education records. (6 marks)

QUESTION 5 [15 MARKS]

- a) Outline the steps of designing the following in Microsoft access databases.
- i) Table (2 marks)
 - ii) Query (to return all students name with more than 300 marks) (2 marks)
 - iii) Form (3 marks)
- b) Discuss FOUR precautions that one should take before online payment of school fees. (8 marks)
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