

CHUKA



UNIVERSITY

UNIVERSITY EXAMINATIONS

FIRS YEAR EXAMINATION FOR THE AWARD OF DEGREE OF POSTGRADUATE DIPLOMA IN EDUCATION

COSC 701: COMPUTER APPLICATIONS IN EDUCATION

STREAMS:

TIME: 2 HOURS

DAY/DATE: THURSDAY 06/12/2018

2.30 P.M. – 4.30 P.M.

CANDIDATE INSTRUCTIONS

- Answer all questions in section A and any other two questions from section B.
- No Reference Material is allowed in the exam Room.
- Write legibly on both sides of answer sheet.
- Mobile phones are not allowed in the exam room.

SECTION A (COMPULSORY)

QUESTION 1 (COMPULSORY) [30 MARKS]

- a) Organizations prefer to send documents on .pdf format as compared to .doc format. Explain what .pdf format is, hence outline THREE advantages of .pdf format. (5marks)
- b) Explain the procedure of adding headers and footers in Microsoft word (3marks)
- c) Explain THREE differences between computer processor and utility software (3marks)
- d) Explain THREE challenges that computer users are likely to face, if output devices attached to a computer are faulty. (3marks)
- e) Perform the following storage space addition: 3 GB + 20Mb + 20,000Kb. Provide your answer in Mb (3marks)

- f) A certain school's computers were always infected with computer virus. They sought your advice on what to do. Discuss FOUR measures that they should take to prevent their computers from being infected by viruses. (4marks)
- g) Explain FOUR factors you would consider when acquiring application software. (4marks)
- h) A certain learning institution chose to monitor students' movement behaviors using the RFID technology. Outline how this technology could be implemented; hence suggest TWO advantages of the technology. (5marks)

SECTION B (Answer two question from this section)

QUESTION 2 [15 MARKS]

- a) Kenneth wanted to add the contents of cells B1, B2 and B3, then show the results in cell B8 using the formula =B1+B2+B3.
- Write another formula other than the above to be entered in cell B8 to receive the correct solution (1mark)
 - If there happen to be an error in cell B8 after entering the formula. Explain THREE errors that are likely to be, clearly indicating how to correct the error. (6marks)
- b) School X wanted to install a computer network, but needed some clarifications before settling on some computer network.
- Explain what is a network topology (1mark)
 - Explain FOUR considerations for the school to consider before installing a computer network (4marks)
 - Outline THREE disadvantages of star network topology over bus topology (3marks)

QUESTION 3 [15 MARKS]

- a) Ken turned ON a computer connected through a UPS. The UPS then began making a ringing noise. Explain TWO possible causes for the noise, and suggest a possible remedy for the same. (4marks)
- b) Name SIX transitions that can be used to change from one slide to the next in Microsoft PowerPoint (3marks)
- c) Discuss FOUR disadvantages of e-mail communication to schools (4marks)

- d) Design two relational database tables, hence use the tables to explain the following terminologies (4marks)
- i) Primary key
 - ii) Foreign key
 - iii) Candidate key
 - iv) Relationship

QUESTION 4 [15 MARKS]

- a) Highlight THREE benefits of using computer in typing project proposals as compared to typewriters (3marks)
- b) Explain THREE benefits of CD over flash disk storage device. (3marks)
- b) Explain TWO ways through which one can advance from one slide to the other, hence write the steps of achieving for such advancements in Microsoft PowerPoint.(4marks)
- c) With the help of some explanations, classify the following software as application, system, or utility software. (5marks)
- i) Solaris
 - ii) Solitaire
 - iii) Facebook
 - iv) Avast
 - v) Linux-Suse

QUESTION 5 [15 MARKS]

- a) “Fourth generation computers are more effective and better than the earlier generations of computers”. Outline FOUR reasons for this reasoning. (4marks)
- b) Outline THREE disadvantages of hierarchical databases (3marks)
- c) Michael has a 60pages pdf document. He wants to print two copies of the following pages 2,3,4,7,8,9,45,47,48 on printer3 in collate. Explain the steps Michael will use to print the pages. (5pages)
- d) Explain TWO computer network transmission medium, naming an example in each transmission medium. (3marks)
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