

CHUKA



UNIVERSITY

UNIVERSITY EXAMINATIONS

CHUKA AND EMBU CAMPUSES

EXAMINATION FOR THE AWARD OF DIPLOMA IN COMPUTER SCIENCE

COSC 0261: E-SYSTEMS

STREAMS: DIPLOMA (COMPUTER SCIENCE)

TIME: 2 HOURS

DAY/DATE: THURSDAY 23/09/2021

11.30 A.M – 1.30 P.M.

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**INSTRUCTIONS:**

- Answer question ONE and TWO other questions
- Do not write anything on the question paper
- This is a closed book exam, No reference materials are allowed in the examination room
- There will be NO use of mobile phones or any other unauthorized materials
- Write your answers legibly and use your time wisely.
- Marks are awarded for clear and concise answers.

**QUESTION ONE (30 Marks)**

- Define the following terms as used in E-Systems
  - E-commerce (2 marks)
  - Patents (2 marks)
  - Firewall (2 marks)
- Name any three entities that make up the digital economy (3 marks)
- List any three sectors where e-commerce technology is applied (3 marks)
- what is the fundamental difference between traditional signatures and digital signatures (2 marks)
- Name any three types of online malls (3 marks)
- explain the two principal ways of connecting to the internet (4 marks)
- Differentiate between SEM and SEO (4 marks)
- List two platforms that a business can use to establish a digital presence (2 marks)

- i) List three examples of call-to-action features on an ecommerce website (3 marks)

**SECTION B (Answer any TWO questions)**

**QUESTION TWO (20 Marks)**

- a) With an aid of a diagram; describe three major Local Area Network topologies. (12 marks )  
b) Explain four challenges facing implementation of electronic payment systems. [8 marks]

**QUESTION THREE (20 Marks)**

- a. Discuss the following types of E searches
- i. Web search (3marks)
  - ii. Enterprise search (3marks)
  - iii. Desktop search (3marks)
- b. Differentiate between mash up and social book marking (4marks)
- c. State any three limitations of E-Auction (3marks)
- d. Outline **four** benefits of Electronic Data Interchange. (4 marks)

**QUESTION FOUR (20 Marks)**

- a. Lowlands a newly established 3-star hotel at Ndagani has approached you to design and develop for them an e c-commerce site. Discus five website development tools that you will use for the project. (10 marks)
- b. Explain five factors that fuel the growth and development of electronic commerce. (10 marks)

**QUESTION FIVE (20 Marks)**

- a. Discuss the following concepts in relation to Intellectual Property Assets (10 marks)
- I. Patents
  - II. Trademarks
  - III. Copy rights
- b. Discus five types of attacks that can be carried out on a business enterprises network (10 marks)
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