

CHUKA



UNIVERSITY

**FIRST YEAR EXAMINATION FOR THE AWARD OF DIPLOMA
COMPUTER SCIENCE**

COSC0261: E-SYSTEMS

TIME: 2 HOURS

DAY/DATE:.....

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
 - EDI (2marks)
 - Encryption (2marks)
 - Patents (2marks)
- Differentiate between SEM and SEO (4marks)
- List three platforms that a business can use to establish a digital presence (3marks)
- List three advantages of E-commerce (3marks)
- Name any three internet features on which the foundation of ecommerce is built(3marks)
- Discuss the Tension Between Security and Other Values during the development of ecommerce sites (4marks)
- List three examples of call-to-action features on an ecommerce website (3marks)
- list any two programming languages used for website development (2marks)
- list two types of electronic payment systems (2marks)

SECTION B (Answer any TWO questions)

QUESTION TWO (20 Marks)

- a. Discuss The key infrastructures components that are needed to support EC applications (10marks)
- b. Discuss the search query process as performed by a search engine (10marks)

QUESTION TWO (20 Marks)

- a. **Discuss how the following tools can be used to enhance security on an e-commerce site** (12marks)
 - i) Firewalls
 - ii) IDS
 - iii) VPN
- b. Explain four factors that fuel the growth and development of electronic commerce. (8marks)

QUESTION FOUR (20 Marks)

- a. Discuss the following e commerce models
 - i. B2B (3marks)
 - ii. C2B (3marks)
 - iii. C2C (3marks)
- b. Discuss the three entities that make up the WWW architecture (6marks)
- c. Discuss the classification of computer networks according to geographical coverage (5marks)

QUESTION FIVE

- a. Discuss the following concepts in relation to Intellectual Property Assets (12 marks)
 - i) Patents
 - ii) Trademarks
 - iii) Copy rights
 - iv) Franchise
- b. Explain four challenges facing implementation of electronic payment systems. [8 marks]

