



JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE AND TECHNOLOGY

SCHOOL OF INFORMATICS AND INNOVATIVE SYSTEMS

**UNIVERSITY EXAMINATION FOR THE DEGREE OF BACHELOR OF EDUCATION
SCIENCE**

MAIN CAMPUS

3RD YEAR 2ND SEMESTER 2017/2018 ACADEMIC YEAR

COURSE CODE: SCS 322

COURSE TITLE: ELECTRONIC COMMERCE

EXAM VENUE:

STREAM:BED SCIENCE

DATE:

EXAM SESSION:

TIME: 2.00 HOURS

INSTRUCTIONS:

- 1. Answer Question 1 in Section A (Compulsory) and ANY other two questions in Section B**
- 2. Candidates are advised not to write on the question paper**
- 3. Candidates must hand in their answer booklets to the invigilator while in the examination room**

QUESTION 1 (30 MARKS)

- a) State and explain THREE major applications of E-Commerce **(6 Marks)**
- b) The Internet was designed around two protocol standards the TCP and the IP.
Define (i) IP address
(ii) TCP **(2 Marks)**
- c) List down two benefits of Electronic Data Interchange (EDI) **(2 Marks)**
- d) Briefly discuss the following:
- e) SMTP and FTP. **(5 Marks)**
- f) IP-Internet protocol and HTTPS-Secure HTTP **(4 mks)**
- g) Digital Certificate. **(2 mks)**
- h) E – Procurement **(2 Marks)**
- i) What services does on-line banking provide for an Internet user? **(3 Marks)**
- j) Name the eight key ingredients of an E-commerce business model **(4 Marks)**

QUESTION 2 (20 MARKS)

- a) B2B and B2C models are examples of e-commerce models, using proper examples differentiate between the two. **(4 Marks)**
- b) Briefly explain how SSL protocol can be used to secure an e-commerce transaction. **(6 Marks)**
- c) Compare and contrast the traditional business with electronic commerce in an electronics shop business. **(10 Marks)**

QUESTION 3 (20 MARKS)

- a) Explain the different steps involved in the development of an e-commerce web site. **(10 mks)**
- b) Differentiate between internet and intranet **(4 mks)**
- c) State six advantages of intranet ? **(6 mks)**

QUESTION 4 (20 MARKS)

- a) Describe the following potential security attacks on an E-Commerce system **(10 Marks)**
 - (i) Denial of service
 - (ii) Buffer Overflow
 - (iii) SQL Injection
 - (iv) Phishing Scams
 - (v) Spamming
- b) State and explain **FIVE** security measures that can be used to counter the attacks named in (a) above **(10 Marks)**

QUESTION 5 (20 MARKS)

- a) E-Commerce and e-banking are closely related systems with interactions. Discuss **(5 Marks)**
- b) Payment technology is an important part of the capital flow in the development of e-commerce. Its development determines the fate of e-commerce directly. Discuss **(5 Marks)**
- c) The internet as a key driver for e-commerce is highly dependent on the TCP/IP protocol. Contrast between the OSI and TCP/IP model. **(10 Marks)**