



**JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE AND TECHNOLOGY**  
**SCHOOL OF INFORMATICS & INNOVATIVE SYSTEMS**  
**UNIVERSITY EXAMINATION FOR THE DEGREE OF BACHELOR OF BUSINESS**  
**ADMINISTRATION WITH IT**  
**4<sup>TH</sup>YEAR 1<sup>ST</sup> SEMESTER 201/2016 ACADEMIC YEAR**  
**KISII CAMPUS-PART TIME**

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**COURSE CODE: SCS 436**

**COURSE TITLE: INTERNAL CONTROL AND SECURITY ISSUES**

**EXAM VENUE:**

**STREAM: (BBA )**

**DATE:**

**EXAM SESSION:**

**TIME: 2 HOURS**

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**Instructions:**

- 1. Answer Question ONE (COMPULSORY) and ANY other 2 questions**
- 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 ONE

- a) Describe the following types of internet security threats and provide their respective counter measures
- i) Exploiting software bugs [3 Marks]
  - ii) Denial of service [3 Marks]
  - iii) TCP hijacking [3 Marks]
  - iv) Packet sniffing [3 Marks]
  - v) Social problems [3 Marks]
- b) Describe different types of security control requirement for the following levels
- i). Physical control [4 Marks]
  - ii). Technical control [4 Marks]
  - iii). Administrative control [4 Marks]
- c) Discuss the key challenges a firm may face in conducting information system audit [6 Marks]

### QUESTION TWO

- a) State why internal control of an information system infrastructure is so important for an organization [12 Marks]
- b) Discuss the role of computer as a tool under the following crime
- i). Fraud [2 Marks]
  - ii). Gambling [2 Marks]
  - iii). Pornography [2 Marks]
  - iv). Piracy [2 Marks]
  - v). Harassment [2 Marks]

### QUESTION THREE

- a) In reference to COSO's internal control framework, discuss the relevance of the following five inter-related standards for the entire information resource security.
- i) Risk assessment [3 Marks]
  - ii) Control activities [3 Marks]
  - iii) Information and communication [3 Marks]
  - iv) Monitoring [3 Marks]

- b) State FOUR main issues an organization have to consider when implementing information system security policies [8 Marks]

**QUESTION FOUR**

- a) Define the following terms in regards to information system security
- i) Confidentiality [3 Marks]
  - ii) Integrity [3 Marks]
  - iii) Availability [3 Marks]
  - iv) Physical security for IT assets [3 Marks]
- b) Discuss the role of an information system auditor in information system functionality [8 Marks]

**QUESTION FIVE**

- a) Explain how the internet challenges the protection of:-
- i) Individual privacy [5 Marks]
  - ii) Intellectual property [5 Marks]
- c) State reasons why security of data and information is a serious concern for internet users [10 Marks]