



**JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE AND TECHNOLOGY**  
**SCHOOL OF BUSINESS & ECONOMICS**  
**UNIVERSITY EXAMINATION FOR DEGREE OF BACHELOR OF BUSINESS**  
**ADMINISTRATION WITH IT**  
**3<sup>RD</sup> YEAR 2<sup>ND</sup> SEMESTER 2016/2017 ACADEMIC YEAR**  
**BUSIA LEARNING CENTER**

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**COURSE CODE: SCS 436**

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

**EXAM VENUE: STREAM: (BBA – FINANCE)**

**DATE: EXAM SESSION:**

**TIME : 2.00 HOURS**

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**Instructions:**

- 1. Answer Question one (Compulsory) and any TWO 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.**
- 4. Question ONE carries 30 marks and the rest 20 Marks each**

### **QUESTION ONE 30 MARKS**

- a) Computer crimes are a pervasive threat to society caused by criminals and irresponsible behaviour. State and explain five definitions of computer crimes as given by the AITP model of crime act (10marks)
- b) Authentication, authorization, and encryption are used in everyday life. Briefly describe how they are all used in booking and taking an airplane flight. (10 marks)
- c) A secret password, known only to the user, allows an administrator to feel confident of that user's identity even though users still make their password insecure. List four ways that users make their password insecure (4marks)
- d) Information security is a set of mechanisms by means of which your information security objectives can be defined and attained. Briefly identify six roles it plays in an organization (6 Marks)

### **QUESTION TWO 20 MARKS**

- a) Outline three computer crimes giving one measure that can be applied to protect the computer against each crime. (6marks)
- b) List any four common hacking tactics and security exploits within information systems (4marks)
- c) Computer forensics is the scientific collection; examination, authentication, preservation, and analysis of data held on or retrieved from computer storage media. Discuss three issues it deals with (6Marks)
- d) Differentiate between the following cipher text and description as used in computer security (4marks)

### **QUESTION THREE 20 MARKS**

- a) Briefly discuss three physical security precautions that are taken to safeguard information systems from damage (6marks)
- b) Errors and accidents are types of threats experienced by information systems. List four such errors (4marks)
- c) Describe how secret key encryption is used by a subscriber in payment of pay TV transmissions (6 Marks)
- d) Outline any four programs that are not considered computer viruses (4marks)

### **QUESTION FOUR 20 MARKS**

- a) Businesses have an array of technologies for protecting their information resources. List four tools for security management that organizations are using (6marks)

- b) Your organization intends to employ an information security officer. Propose four skills required for this security positions. (4marks)
- c) Explain two ways of protecting data and information against unauthorized access (4marks)
- d) What do you understand by the term Risk Management? What four types of risks does it deal with (6marks)

**QUESTION FIVE 20 MARKS**

- a) Define a computer virus and list five effects of computer viruses (5marks)
- b) Briefly discuss three crimes that can be done using information systems (6marks)
- c) List four ethical behaviours that employees should adhere to when using information systems (4marks)
- d) Outline all the five steps for performing an IT audit (5marks)