



JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE AND TECHNOLOGY
SCHOOL OF INFORMATICS AND INNOVATIVE SYSTEMS
DEPARTMENT OF INFORMATION SYSTEMS AND TECHNOLOGY
UNIVERSITY EXAMINATION FOR THE DEGREE OF EDUCATION ARTS WITH IT;
EDUCATION SCIENCE WITH IT; SPECIAL NEEDS EDUCATION WITH IT;
BUSINESS ADMINISTRATION WITH IT & ACTUARIAL SCIENCE WITH IT
4TH YEAR 1ST SEMESTER 2017 / 2018 ACADEMIC YEAR
MAIN CAMPUS; KISUMU CAMPUS; KISII CAMPUS; NAMBALE LEARNING CENTRE

COURSE CODE: SCS 436

COURSE TITLE: INTERNAL CONTROLS AND SECURITY ISSUES

EXAM VENUE:

STREAM:

DATE: DECEMBER 2017

EXAM SESSION:

TIME: 2 HOURS

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 (30 MARKS)

- a) If access to the system is given to people who do not have a need for that access, then system data might be changed, added, or deleted inappropriately. What are some internal controls that would mitigate this risk? (2 Marks)
- b) Show the meaning of the following terminologies: (6 Marks)
 - i. Administrative controls
 - ii. Technical controls
 - iii. Physical implementation controls
- c) Briefly explain the three main sources of security requirements for organizations. (6 Marks)
- d) Briefly state the approver's role in documentation approvals. (2 Marks)
- e) Clearly define the term 'reconciliation' as used in information systems security. (2 Marks)
- f) Define the term Substantive testing as used in IS auditing. (2 Marks)
- g) Reviews of performance is a control activity practiced in almost all organizations. Describe what it means and list four activities undertaken to accomplish the objective of this control activity. (6 Marks)
- h) What is the difference between compliance testing and substantive testing? (4 Marks)

QUESTION TWO (20 MARKS)

- a) Using examples, differentiate between the following
 - i. Vulnerability and exposure. (2 Marks)
 - ii. computer virus and a threat (2 Marks)
- b) Explain how hackers can access a system (8 Marks)
- c) Explain four types of assets that are safeguarded in the working environment (8 Marks)

QUESTION THREE (20 MARKS)

- a) Discuss the measures for protection against fraud. (8 Marks)

- b) Explain three types of internal controls in an organization (6 marks)
- c) Explain types of risks and how they are controlled in an organization (6 marks)

QUESTION FOUR (20 MARKS)

- a) Discuss IDE and its importance in internal controls of an organization (10marks)
- b) State and explain the justifications that perpetrators of computer crime give. (10 Marks)

QUESTION FIVE (20 MARKS)

- a) Assume that you are attached in a computer lab and one of the requirement is to make sure the computers have good security features....in view of this
 - i. Explain how to come up with a password that people can secure the computers (6 marks)
 - ii. Explain some of the practices that are ethically wrong when using computers (6 marks)
- b) Discuss the steps in performing information systems audit. (8 Marks)