



THE MOMBASA POLYTECHNIC UNIVERSITY COLLEGE

(A Constituent College of JKUAT)

Faculty of Engineering & Technology

DEPARTMENT COMPUTER SCIENCE & INFORMATION TECHNOLOGY

HIGHER DIPLOMA IN COMPUTER STUDIES – HDIP 10A

ECT 3112: ICT SECURITY & AUDITING

END OF SEMESTER EXAMINATIONS

SERIES: DECEMBER 2011

TIME: 2 HOURS

Instructions to Candidates:

You should have the following for this examination

- *Answer Booklet*

This paper consist of **FIVE** questions in **TWO** sections **A & B**

Answer question **ONE (COMPULSORY)** and any other **TWO** questions

Maximum marks for each part of a question are as shown

This paper consists of **THREE** printed pages

SECTION A (COMPULSORY)

QUESTION ONE (20 Marks)

- a) Define information security auditing [1marks]
- b) Describe the significance of Risk Analysis to an IT auditor. [1mark]
- c) Describe the term audit planning [1mark]
- d) Briefly explain the functions of ISACA in IS auditing [3 Marks]
- e) Discuss the term fraud and outline how an IS auditor can detect frauds within organizations [4 Marks]
- f) Briefly explain the roles an auditor would play in the various levels of systems development. [6 Marks]
- g) Explain the objectives of the COBIT framework. [4Marks]

SECTION B (ANSWER ANY TWO QUESTIONS)

QUESTION TWO (20 Marks)

- a) Explain the concept of IT governance stating areas of great concern covered therein. [6 Marks]
- b) You have been appointed to head the audit of the Nairobi city council cemetery scandal. Assuming computer systems were used when committing the crime, outline an acceptable evidence gathering process you would adopt maintaining all the acceptable principles. [4 Marks]
- c) Describe the term audit planning and state the operations undertaken when planning an appropriate IS audit. [4 Marks]
- d) Define CAATS. [2marks]
- e) Explain the **four** main functions of most CAATs software. [4 Marks]

QUESTION THREE (20 Marks)

- a) What is information forensic [2 mark]
- b) Discuss **three** situations which may require the use of computer forensics when performing IS audit. [6 Marks]
- c) There are basic steps to the computer forensics: state and describe every step in the computer forensic process [5marks]
- d) The auditor should select the most appropriate procedure for the audit objective. Explain these procedures. [6marks]
- e) Define IT governance [1mark]

QUESTION FOUR (20 Marks)

- a) Describe the audit methodology [4marks]
- b) State and explain risk and control issues in an organization [6marks]
- c) Describe the following security concepts in relation to information auditing [6marks]
- i. Availability
 - ii. Confidentiality
 - iii. Integrity
- d) Describe **four** of the main categories of electronic crimes. [4 Marks]

QUESTION FIVE (20 Marks)

- a) Describe **three** types of audit [6marks]
- b) Discuss different mechanism of disaster recovery planning (DRP) [6marks]
- c) Define E-commerce and give **four** advantages of E-commerce [5marks]
- d) State **one** and **two** legal and ethical issues respectively [3marks]