

# TECHNICAL UNIVERSITY OF MOMBASA

# INSTITUTE OF COMPUTING AND INFORMATICS

Select department

# **UNIVERSITY EXAMINATION FOR:**

BSIT/SEP 2012/J-FT Y4S2

# BIT 2318: INFORMATION SYSTEM AUDIT END OF SEMESTER EXAMINATION

**SERIES:**APRIL2016

TIME:2HOURS

DATE: Pick Date May 2016

### **Instructions to Candidates**

You should have the following for this examination

-Answer Booklet, examination pass and student ID

This paper consists of Choose No questions. AttemptChoose instruction.

Do not write on the question paper.

### **Question ONE**

- a) Discuss any three issues that should be considered by a system auditor at post implementation review stage before preparing the audit report. (6 Marks)
- b) Explain the following terms with reference to Information Systems Audit (4 Marks)
  - (i) Risk
  - (ii) Threat
  - iii) Vulnerability
  - (iv) Exposure
- b) As an information system auditor explain how you can use the COBIT framework as a guide when auditing an organization. (4 Marks )
- ii) Discuss any three areas that are to be explored to determine risks in IT Company. (6 Marks)
- c) State and explain four commonly used techniques to assess and evaluate risks in an enterprise.

(8 Marks)

d) Suggest any two procedural plans for disaster recovery.

(2 Marks)

## **Question TWO**

A. Explain three major technique employed by Telephone service providers to control fraud in mobile financial transaction

(6 Marks)

B. Discuss any two objectives and goals of Business Continuity planning. [4 Marks]

C. Describe the methodology of developing a Business Continuity Plan. [6 Marks]

D. Explain the following techniques used by IS auditors (4MKS)

i. e-Crime

ii. e- Forensic

iii. IS Audit Research

iv. IT fraud

### **Question THREE**

Automated Teller Machines (ATMs) have tremendous utility for banking customers. However, the concerned bank needs to carry out constant review and monitoring of the controls installed as a safeguard against fraudulent activities.

- A) Identify eight major tasks that should be performed during information systems audit of ATM and its overall mechanism. (8 Marks)
- B) An effective and efficient management of software/hardware inventory is generally carried out with the help of an automated mechanism known as Software Management System. Identify any Eight key capabilities of a Software Management System that helps in overall management of software/hardware inventory. (8 Marks)
- C) When an organization is audited for the effective implementation of ISO 27001 information Security management System, what are to be verified under the ISO. (4Marks)

### **Question FOUR**

a) The newly appointed CEO of Digital Corporation (DC) is of the view that the company's General Ledger (GL) application developed by a renowned software house suffers from many limitations.

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Some of its modules are of little use to the company. The CEO feels that cost incurred for development of software was very high besides he also has doubts on the accuracy of the data being produced. He has appointed RBC & Company to carry out an assessment of the effectiveness, efficiency and relevance of the system.

- i) Identify the documents which RBC's team would review to gain an understanding of the GL application. Also, explain briefly the importance of each of the identified document (4 Marks)
- ii) Identify and briefly explain the various types of controls which could satisfy RBC about the effectiveness of the system and the reliability of data. Explain how they would test their effectiveness. (10 Marks)
- b) Discuss any three objectives and goals of Business Continuity planning. (6 Marks)

### **Question FIVE**

- a) After a recent security breach of information systems in Mamboleo Enterprises, an emergency meeting was called by Board of Directors of the company in which members of executive management, steering committee and chief information security officer also participated. Unfortunately, instead of finding the root cause of security breach and determining future course of action for managing various risks to which the organization may be exposed to, the meeting was marred by finger-pointing.
- i) List major steps for a 'security incident handling and response' mechanism in an Organization. (7 Marks)
- ii) Identify at least **two** important responsibilities related to "Risk Management", for each of the following:
  - a. Board of directors
  - b. Steering committee
  - c. Executive Management

(6 Marks)

iii) Explain audit tools and techniques used by a system auditor to ensure that disaster recovery plan is in order. (7mks)