



**TECHNICAL UNIVERSITY OF MOMBASA**  
**INSTITUTE OF COMPUTING AND INFORMATICS**

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Select department

**UNIVERSITY EXAMINATION FOR:**

Type program name

**BIT 2318: INFORMATION SYSTEM AUDIT**

**END OF SEMESTER EXAMINATION**

**SERIES: APRIL 2016**

**TIME: 2 HOURS**

**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. Attempt Choose instruction.

**Do not write on the question paper.**

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**Question ONE**

- a) Demonstrate the steps audit organizations should follow in Information technology Audit. [6 Marks]
- b) Explain the following techniques used by IS auditors  
i. e-Crime  
ii. e- Forensic  
iii. IS Audit Research  
iv. IT fraud (8 Marks)
- C) 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 ]

**Question TWO**

a) Konzi Solutions has recently developed a core banking application software for the Real Bank Limited (RBL) which has more than sixty branches. One of the main distinguishing features of the new system is that it is able to provide online connectivity to all branches. Prior to implementing the application, management of RBL wants to know the measures taken by the Konzi Solutions for ensuring the availability of the system when multiple users will access it simultaneously. The management is also concerned about the change over strategies that can be adopted for replacing the existing system and the associated risks which may be faced during change over process.

i) Identify tests performed by Konzi Solutions to ensure that the system will remain available and its efficiency will not be compromised on account of simultaneous log in by a number of users. **(6 Marks)**

ii) List three major steps involved in change over from old to new system. **(3 Marks)**

iii) The risks which the management may face during the change over process.  
**(6 Marks)**

b) As an information system auditor explain how you can use the Certified Information Systems Auditor (CISA) framework as a guide when auditing an organisation.  
**(5 Marks)**

### **Question THREE**

The CEO of Simba Securities & Exchange Company is concerned about the rising number of frauds being reported in the industry specially those carried out by insiders. Recently another financial institution in the same region had suffered a loss of Sh. 10 million due to a fraud which was committed by a senior executive who was responsible for carrying out a number of key responsibilities related to information systems. The CEO has requested you to advise the company on prevention and detection measures against such threats to their information systems.

i) Discuss the principle of tying duties to employees in relation to fraud  
**(10 Marks)**

ii) Suggest best practices for preventing and detecting frauds that may be committed by key information systems personnel. **(10 Marks)**

### **Question FOUR**

The risk management process involves the identification and classification of assets, assessing the threats associated with the identified assets, identifying vulnerabilities or lack of controls and assessing the impact of the identified threats.

- i. Explain five types of information assets associated with information technology
- ii. Identify at least two threats associated with each asset.
- iii. Identify possible impact of the identified threats.
- iv. Explain controls for mitigating the risk associated with each threat.

**(20 Marks)**

**Question FIVE**

Mr. Diamond Kiba is conducting the information systems audit of Varied Services Limited (VSL). Some of the policies regarding users' account listed by the IT Manager are as follows:

- (i) Users' accounts are created by the system administrator only.
- (ii) Initial passwords are communicated to the users confidentially.
- (iii) Password must follow a complex syntax.
- (iv) Users can not repeat their last seven passwords.
- (v) Users' accounts can only be unlocked by the system administrator on written request from the user.
- (vi) Logon IDs of employees who take more than one week's leave are made inactive on intimation from HR department.

a) Describe the manual tests that Mr. D. Kiba should perform to verify that the settings communicated by the IT manager are actually working. **(12 Marks)**

b) Explain audit tools and techniques used by a system auditor to ensure that disaster recovery plan is in order. **(8 Marks )**