

TECHNICAL UNIVERISTY OF MOMBASA

Faculty of Engineering & Technology

DEPARTMENT OF COMPUTER SCIENCE & INFORMATION TECHNOLOGY

UNIVERSITY EXAMINATION FOR DEGREE IN:

BACHELOR OF SCIENCE IN INFORMATION TECHNOLOGY BACHELOR OF TECHNOLOGY IN INFORMATION TECHNOLOGY (BSIT 11M/J-F2 BTIT 13J Y4 S2)

BIT 2318/EIT 4413: INFORMATION SYSTEM AUDIT

SPECIAL/SUPPLEMENTARY EXAMINATION SERIES: FEBRUARY 2015
TIME: 2 HOURS

Instructions to Candidates:

You should have the following for this examination

- Answer Booklet

This paper consists of **FIVE** questions. Attempt 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

Question One (Compulsory)

- **a)** Define the following terms:
 - (i) Data Espinage
 - (ii) Expert Systems
 - (iii) ERP
 - (iv) Information System Audit

(8 marks)

- **b)** Explain any THREE reason why auditors need to control and audit computers systems. **(3 marks)**
- c) Making high quality decision depends in part on the integrity of data quality of decision rules, explain any FOUR data integrity characteristics based on time dimensions (4 marks)
- **d)** List any TWO audit software's used by enterprises

(2 marks)

- e) State and explain any TWO commonly techniques used to assess and evaluate risks, polarization and ranking (4 marks)
- f) Explain briefly why ERP fits with E-commerce

(1 mark)

- **g)** Differentiate by explaining the following terms:
 - (i) Business Process Re-engineering and Business Continuity Planning
 - (ii) Mitigation Data Planning and Disaster Recovery Planning
 - (iii) Emergency Plan and Back-up plan
 - (iv) Hypothetical Testing and Component Testing

(8 marks)

Question Two

a) Explain any FOUR major objectives of Information System Auditing?

(8 marks)

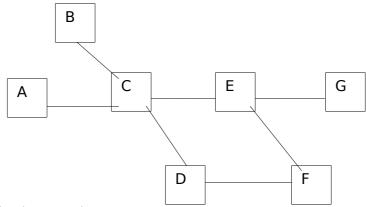
- **b)** Briefly explain the contribution of the following areas to information system auditing:
 - (i) Traditional Auditing
 - (ii) Information System Management

(4 marks)

c) Write a detailed note on the exceptions fear and ground realities that co-orperate management faces during BPR (Business Process Re-Engineering) (8 marks)

Question Three

- a) With a suitable diagram, explain system development life-cycle (SDLC) in Information System Audit and Control Development (10 marks)
- **b)** Study the diagram below as a technique used to test the functionality of n information system audit:



Answer the following question

(i) State the type of test used

(1 mark)

- (ii) List the pathway taken to cover the:
 - Branch coverage
 - Path coverage

(9 marks)

Question Four

- **a)** Explain FIVE matters covered by the information system Audit and control association's code of ethics (10 marks)
- **b)** Define mitigation, state the various steps taken for Risk Mitagtors

(10 marks)

Question Five

- **a)** For each of the following threats, give a control that might reduce exposures of an enterprise:
 - (i) Pirated software
 - (ii) Employee use of an organization's computer time for private purposes

- (iii) Violation of the licensing conditions pertaining to a proprietary database.
- **b)** List any TWO major points that should be covered during an audit of security controls over information systems function to asses the adequacy of hand-held fire extinguishers. **(2 marks)**
- **c)** Controls over computer operations govern the activities that directly support the data to day execution production system. Briefly write notes on the following types of control:
 - **(i)** Operation controls
 - (ii) Scheduling controls
 - (iii) Maintenance controls