



TECHNICAL UNIVERISTY OF MOMBASA

Faculty of Engineering & Technology

DEPARTMENT OF COMPUTER SCIENCE & INFORMATION TECHNOLOGY

UNIVERSITY EXAMINATION FOR:
BACHELOR OF SCIENCE IN INFORMATION TECHNOLOGY

BIT 2318: INFORMATION SYSTEMS AUDIT

END OF SEMESTER EXAMINATION

SERIES: AUGUST 2013

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** and any other **TWO** questions

Maximum marks for each part of a question are as shown

This paper consists of **TWO** printed pages

Question One (Compulsory)

- a) Demonstrate the steps an audit organization should follow in Information Technology Audit. **(10 marks)**
- b) Discuss any **FOUR** issues that should be considered by a system auditor at post implementation review stage before preparing the audit report. **(8 marks)**
- c) As a system auditor, what control measures will you check to minimize threats, risks and exposures in a computerized systems. **(6 marks)**

- d) As a information system auditor explain how you can use the COBIT framework as a guide when auditing an enterprise (4 marks)
- e) Explain the purpose of information system audit policy (2 marks)

Question Two

- a) (i) What do you understand by “Risk Assessment”? (2 marks)
(ii) Discuss any **THREE** areas that are to be explored to determine the risk. (6 marks)
- b) State and explain **FOUR** commonly used techniques to assess and evaluate risks in an enterprise (8 marks)
- c) What do you understand by the term disaster? (2 marks)
- d) Suggest any **TWO** procedural plans for disaster recovery. (2 marks)

Question Three

- a) State and briefly explain the contents of a Standard Information System Audit Report. (10 marks)
- b) What are the audit tools and techniques used by a system auditor to ensure that disaster recovery plan is in order? Briefly explain them. (10 marks)

Question Four

- a) What do you understand by software process maturity (2 marks)
- b) Discuss **FOUR** levels of software process maturity of capability maturity model (CMM) (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:
 - (i) Establishing management framework
 - (ii) Documentation (4 marks)
- d) A company is engaged in the stores taking data activities. Whenever input data error occurs, the entire stock data is to be reprocessed at a cost of ksh 50,000. The management has decided to introduce a data validation step that would reduce errors from 12% to 0.55 at a cost of ksh 2,000 per stock taking period. The time taken for validation causes an additional cost of ksh 200.
 - (i) Evaluate the percentage of cost benefit effectiveness of the decision taken by the management (4 marks)
 - (ii) Suggest any two preventive control measures to avoid errors for improvement.(2 marks)

Question Five

As a system Auditor, discuss control measures to be checked at the following stages of system development. (20 marks)

- (i) Problem identification
- (ii) Analysis
- (iii) System design
- (iv) System acquisition
- (v) System administration

