MACHAKOS UNIVERSITY

University Examinations for 2016/2017

SCHOOL OF ENGINEERING AND TECHNOLOGY

DEPARTMENT OF COMPUTING AND INFORMATION TECHNOLOGY

FOURTH YEAR SECOND SEMESTER EXAMINATION FOR DEGREE IN BACHELOR OF SCIENCE IN COMPUTER SCIENCE

SCO 423: INFORMATION SYSTEMS AUDITING

DATE: 6/6/2017 **TIME: 2:00 – 4:00 PM**

INSTRUCTIONS

Answer Questions ONE and Any Other Two Questions

QUESTION ONE (COMPULSORY) (30 MARKS)

a) Define contingency planning and explain its need in business continuity. (4 marks)

b) Using a well-drawn bulls-eye model, explain policy centric Decision making (4 marks)

c) Assume that you have been employed as an IT auditor in a company. Develop IT policy document for the company and audit check list that you can use to audit the IT policies. (7 marks)

d) Using a diagram, explain three security goals used in information security. (6 marks)

e) Discuss COBIT framework under the following subheadings. (9 marks)

i) Business focus

ii) Process orientation

iii) IT resources

QUESTION TWO (20 MARKS)

a) Explain three components of contingency planning (CP). (6 marks)

b) State the steps to be undertaken by contingency planners to ensure continuity across all CP processes. (6 marks)

c) Use a well labelled diagram to show contingency plan implementation timeline. (8 marks)

QUESTION THREE (20 MARKS)

a) State four testing strategies that can be used to test contingency plans. (4 marks)

b) Explain any four steps of computer forensics. (8 marks)

c) Explain any four technical controls when dealing with physical security (8 marks)

QUESTION FOUR (20 MARKS)

a) Explain any four ways of authenticating users before they are allowed to use a system. (8 marks)

b) State any five incident containment strategies as used in disaster recovery. (5 marks)

c) Using a diagram, show major tasks in contingency planning. (7 marks)

QUESTION FIVE (20 MARKS)

Develop a single contingency plan for Machakos University College Information, under the following sub-headings. (20 marks)

a) Incident Response

b) Disaster Recovery.

c) Business Continuity Planning using business impact analysis.

d) Prepare and execute a test of contingency plans.