



KENYATTA UNIVERSITY

UNIVERSITY EXAMINATIONS 2011/2012

**SECOND SEMESTER EXAMINATION FOR THE DEGREE OF
BACHELOR OF SCIENCE IN COMPUTER SCIENCE**

SCT 305: INFORMATION SYSTEMS MANAGEMENT I

DATE: TUESDAY 10TH APRIL 2012

TIME: 8.00 A.M. - 10.00 A.M.

INSTRUCTIONS

- Students from Computing and Information Technology to attempt questions in Section I.
- Students from Electronic and Electrical Engineering department to attempt questions in Section II

SECTION I (COMPUTER SCIENCE STUDENTS)

Attempt question One and any other Two Questions from the same questions

Answer Question 1 and any other two questions

Question 1

- a) A frequently cited requirement for all Information Systems projects is that they ought to help increase the 'fit' between business strategy and technology.
- i) Explain this requirement (4 marks)
 - ii) List two measures that could be taken to help increase the 'fit'. (4 marks)
- b) Despite large scale investments in information systems in organizations, it is still not clear the extent to which investment in information systems benefit organizations. Suggest and briefly explain five possible reasons that can explain this 'productivity paradox'. (10 marks)
- c) Managers in charge of the IS function are required to ensure that IS resources are used in a legally and ethically acceptable manner. In this context:

- i) Distinguish between 'legal' and 'ethical'. (4 marks)
- ii) Give two examples of unethical use of information systems. (4 marks)
- iii) List four principles commonly used in resolution of ethical quandaries. (4 marks)

[Total: 30 Marks]

Question 2

- a) With the aid of suitable illustrations, describe a generic approach to acquisition of information systems software. (12 marks)
- b) Identify and briefly explain four common considerations in a software 'make-or-buy' decision.

[Total: 20 Marks]

Question 3

- a) 'As the significance of IS function increases, so does the need to identify a more appropriate location for the function and a more appropriate internal structure'.
 - i) Trace the changing perspectives on location of the IS function. (8 marks)
 - ii) Describe the changing role of the Chief Information Officer (CIO). (6 marks)

(6 Marks)

- b) Describe three risks that an organization exposes itself to by outsourcing some or all of its IS function.

[Total: 20 Marks]

Question 4

Today's highly computerized and networked organization demands a much increased level of attention to IS security measures.

- a) Justify the above statement in light of newly available applications, technology options and organizational practices. (10 marks)
- b) For any five named security challenges, clearly describe measures that could be implemented to reduce organizational risk and vulnerability. (10 marks)

[Total: 20 Marks]

- d) i) Differentiate between project management and project manager (3 marks)
- ii) Give two benefits of project management to an organization (2 marks)
- e) Describe any two organizational strategies (4 marks)

Question Two(15 marks)

- a) Define the term management (15 marks)
- b) Explain any two levels of management (4 marks)
- c) Describe five Management functions (10 marks)

Question Three (15 marks)

- a) Define the following terms as used in Computer security
 - i) Confidentiality
 - ii) Integrity
 - iii) Attacks (6 marks)
- b) With examples, describe three forms of security. (9 marks)

Question Four (Marks)

- a) Explain five advantages of Human Resource Development to an Organization. (7 marks)
- b) i) Define the term computer audit (2 marks)
- ii) Give six advantages of auditing to an organization (6 marks)

Question Five (15 marks)

- a) Define the following terms giving one example in each case
 - i) Organizational strategy
 - ii) Organizational objectives (5 marks)
- b) Discuss various organizational objectives (10 marks)

Question 5

“Fail to Plan, plan to fail” is a famous old military saying, which nevertheless has relevance with respect to information systems planning.

- a) What is Information Systems planning? (4 marks)
 - b) Identify and briefly explain four major reasons why IS planning is an important exercise. (8 marks)
 - c) Outline a generic process of IS planning pointing out the key activities and challenges of each stage or phase of IS planning. (8 marks)
- (Total: 20 Marks)**

SECTION II (SOFTWARE ENGINEERING)

Attempt question One and any other Two questions from the same section

Question One (30 marks)

- a) Define the following terms
 - i) Security policy
 - ii) Management information systems
 - iii) Systems
 - iv) Information
 - v) Procedures (5 marks)
- b) Clearly differentiate between the following terms (10 marks)
 - i) Front office and Back office
 - ii) Dependability and security
 - iii) Supervision and Leadership
 - iv) Human resources and Human resource development
 - v) Long-range planning and strategic planning
- c) Define three aspects of computer security (6 marks)