



MACHAKOS UNIVERSITY

University Examinations for 2018/2019

SCHOOL OF ENGINEERING AND TECHNOLOGY

DEPARTMENT OF COMPUTING AND INFORMATION TECHNOLOGY

THIRD YEAR SECOND SEMESTER EXAMINATION FOR

BACHELOR OF SCIENCE (INFORMATION TECHNOLOGY)

SIT 307: MANAGEMENT INFORMATION SYSTEM II

DATE: 17/4/2019

TIME: 8.30-10.30 AM

INSTRUCTIONS

Answer **question ONE** and any other **TWO** questions.

QUESTION ONE (30 MARKS)

- a) State four dimensions of decision making (4 marks)
- b) Briefly explain the role of computers/information technology in an information system. (4 marks)
- c) Describe the term Strategic Information Systems as used in organizations (3 marks)
- d) Distinguish between structured and unstructured decisions. (4 marks)
- e) With a aid of a diagram, explain the pyramid structure of MIS (5 marks)
- f) One approach of defining the subsystems of MIS is according to the organizational functions which they support. Explain the major functional subsystems (10 marks)

QUESTION TWO (20 MARKS)

- a) Information systems (IS) have always been regarded as enablers for organizational transformation in ways that systems help in jobs automation, information processing and provide useful input for decision making. Discuss this statement in reference to decision making process in an organization (10 marks)

- b) Although some companies find difficulties in justifying their information systems Investment, other companies report significant benefits from their IS projects. Discuss the various techniques that an organization can use to justify an investment in information systems. (10 marks)

QUESTION THREE (20 MARKS)

- a) Describe MIS structure based on levels of hierarchy of management activity (6 marks)
- b) Using SIMON'S MODEL, describe the phases in the decision making process (8 marks)
- c) Mention any six (6) methods decision makers use for deciding among the alternatives (6 marks)

QUESTION FOUR (20 MARKS)

- a) Explain the following system concepts (10 marks)
- i. Decomposition
 - ii. Simplification
 - iii. Cybernetic systems
 - iv. Closed loop systems
 - v. Decoupling
- b) Using Nolan's model, explain six (6) stages of information system growth and their levels of control (10 marks)

QUESTION FIVE (20 MARKS)

- a) Explain the three- stage model of the planning process (6 marks)
- b) Using the appropriate diagram, describe the stages in life cycle approach to application system development (9 marks)
- c) **State the steps of decision making process according to RUBENSTEIN AND HABERSTROHS MODEL** (5 marks)