



MACHAKOS UNIVERSITY

University Examinations for 2022/2023 Academic Year

SCHOOL OF ENGINEERING AND TECHNOLOGY

DEPARTMENT OF COMPUTING AND INFORMATION TECHNOLOGY

SECOND YEAR SECOND SEMESTER EXAMINATION FOR

BACHELOR OF SCIENCE (CLOUD COMPUTING AND INFORMATION SECURITY)

BACHELOR OF SCIENCE (INFORMATION TECHNOLOGY)

BACHELOR OF EDUCATION

SIT 160: INFORMATION SYSTEMS

DATE: 18/4/2023

TIME: 8:30 – 10:30 AM

Instructions: Answer Question ONE and any other TWO Questions.

QUESTION ONE (30 MARKS)

- a) New information systems quite often play a major role in the support of planning objectives of an organization. Management participation is required for better evaluation and control of new systems
 - i. explain THREE forms of competitive strategies which Information Technology would address (9 marks)
 - ii. Name THREE benefits associated with new Information Systems (6 marks)
 - iii. List FIVE ethical and societal dimensions to the development and use of Information Technology (10 marks)
- b) Differentiate between structured and unstructured decision making. (5 marks)

QUESTION TWO (20 MARKS)

- a) Explain the meaning of management information system. (4 marks)
- b) Discuss why information has greater value to decision maker if it is available when needed. (4 marks)
- c) Explain TWO advantages of using a password in MIS (4 marks)
- d) Discuss the various phases of system development life cycle (SDLC). (8 marks)

QUESTION THREE (20 MARKS)

- a) Information systems are classified according to the information usage in an organization. Based on the above information, discuss THREE types of information systems. (6 marks)
- b) Discuss the advantages of MIS in a business (6 marks)
- c) Use a diagram to discuss the levels of decision making in MIS (8 marks)

QUESTION FOUR (20 MARKS)

- a) Differentiate between the following;
 - i) Deterministic and Probabilistic systems. (4 marks)
 - ii) Closed and Open systems. (4 marks)
- b) Describe TWO common challenges in the MIS implementation. (4 marks)
- c) Explain FOUR types of maintenance that a system may undergo in its lifespan (8 marks)

QUESTION FIVE (20 MARKS)

- a) Discuss THREE functions of a decision support system (DSS) (6 marks)
- b) Describe THREE features of a strategic information system (6 marks)
- c) Outsourcing can be defined as the process of turning partially or fully an organization's IT services to external entities. Discuss the merits and demerits of outsourcing the IS function in an organization. (8 marks)