



MACHAKOS UNIVERSITY

University Examinations for 2021/2022 Academic Year

DIRECTORATE OF TVET

THIRD YEAR FIRST TERM EXAMINATION FOR

DIPLOMA IN INFORMATION COMMUNICATION TECHNOLOGY

MANAGEMENT INFORMATION SYSTEMS

DATE: 26/7/2022

TIME: 8.30-11.30 AM

INSTRUCTIONS

Answer any five questions

QUESTION ONE (20 MARKS)

- a) Describe the following terms in the context of Information Systems.
 - i. Social-technical system. (4 marks)
 - ii. Business Process Re-engineering. (4 marks)
 - iii. E-government. (4 marks)
- b) Once an information system (IS) has been constructed and tested it needs to be delivered to the users and made operational. State four activities done during the implementation of an IS. (4 marks)
- c) Describe two properties of an expert system. (4 marks)

QUESTION TWO (20 MARKS)

- a) Define the term *office automation* as used in management information systems. (2 marks)
- b) Outline two objectives of office automation. (2 marks)
- c) Differentiate between *semi-structured* and *unstructured* approaches to decision making process. (4 marks)
- d) Explain two reasons that may cause an information system project to fail. (4 marks)
- e) With aid of a well-labelled block diagram, explain the components of an expert system. (8 marks)

QUESTION THREE (20 MARKS)

- a) A large supermarket intends to acquire an inventory control information system. Outline four criteria that the supermarket could use. (4 marks)
- b) Explain why builders of new information systems need to address implementation and change management. (6 marks)
- c) Explain why eliciting support of management and end users is so essential for successful implementation of information systems projects. (6 marks)
- d) The management of Lexcon Company Ltd has purchased a transaction processing system for its operations. Explain two functions of the system to the company. (4 marks)

QUESTION FOUR (20 MARKS)

- a) Describe two components of a Decision Support System (DSS). (4 marks)
- b) Explain how a Management Information System works. (4 marks)
- c) Outline four benefits of group decision support systems (GDSSs). (4 marks)
- d) Explain two reasons why information systems are so essential for running and managing a business today. (4 marks)
- e) With the aid of a diagram describe the decision making model as used in management information system. (4 marks)

QUESTION FIVE (20 MARKS)

- a) Define the following terms;
 - i. Techno stress (2 marks)
 - ii. Ergonomics (2 marks)
 - iii. Enterprise resource planning (ERP) (2 marks)
- b) Describe what a socio-technical systems perspective is in regard to information systems. (4 marks)
- c) Explain how Management Information Systems are transforming businesses. (4 marks)
- d) Explain the contribution of information systems in the decision-making or problem solving process. (4 marks)
- e) Identify two major factors that influence the structure of an information system. (2 marks)

QUESTION SIX (20 MARKS)

- a) Describe the three main levels of decision making within an organization, defining their characteristics and users. (8 marks)
- b) Outline the information characteristics for each level in a) above (4 marks)

- c) Explain two ways in which a MIS improves organizational performance. (4 marks)
- d) Outline four features of *information society* as applied in management information systems. (4 marks)

QUESTION SEVEN (20 MARKS)

- a) Explain two functions of information system resources in an organization. (4 marks)
- b) Describe the major characteristics of TPS, MIS, DSS, and ESS. (8 marks)
- c) Describe the relationships amongst TPS, MIS, DSS, and ESS. (8 marks)