THE KENYA NATIONAL EXAMINATIONS COUNCIL
DIPLOMA IN INFORMATION COMMUNICATION TECHNOLOGY

MODULE 1
MANAGEMENT INFORMATION SYSTEMS
3 hours

INSTRUCTIONS TO CANDIDATES

Write your name and index number in the spaces provided above.
Sign and write the date of examination in the spaces provided above.
Answer any FIVE of the EIGHT questions in this paper in the spaces provided.
Candidates should answer the questions in English.

For Examiner’s Use Only

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This paper consists of 16 printed pages.
Candidates should check the questions paper to ascertain that all the pages are printed as indicated and that no questions are missing.

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Turn Over
1. (a) Distinguish between *technical approach* and *social-technical approach* as used in management information systems. (4 marks)

(b) During a management information systems lesson Mr. Kibe discussed different ways in which decision support systems support managers. Explain three such ways that could have been mentioned. (6 marks)

(c) Explain three reasons that would cause an organization adopt cloud-computing technology in its operations. (6 marks)
(d) Distinguish between structured and unstructured decisions as applied in management. (4 marks)

2. (a) Outline four benefits of group decision support systems (GDSS). (4 marks)

(b) Lynn chose to use the direct procurement method to purchase a management information system. Explain three reasons that could have influenced her choice. (6 marks)
(c) Explain three types of information systems maintenance methods. (6 marks)

(d) Differentiate between business process re-engineering and total quality management as used in management information systems. (4 marks)

3. (a) Outline four characteristics of information society as applied in management information systems. (4 marks)
(b) Describe each of the following types of information systems:

(i) office automation system; (2 marks)

(ii) executive support system. (2 marks)

(c) Theca Company intends to purchase a real time transaction process system for its operations. Explain three features that they should consider in the selection. (6 marks)
(d) Different methods could be adopted during the file conversion phase from a manual system to a computerized system. Explain three such methods. (6 marks)

4. (a) Explain two circumstances that would force a manager to use an open decision making method. (4 marks)

(b) Differentiate between copyright and intellectual property as used in information systems ethics. (4 marks)
(c) Chute Company has installed an e-payment system for its operations. Explain three security control measures that should be put in place.  

(6 marks)

(d) ABC Company has installed an information system to gain a competitive advantage over its competitors. Explain three ways the system would assist the company.  

(6 marks)
5. (a) Putty Companies have installed a global positioning system (GPS) in their fleet of vehicles. Explain two benefits of this system to the company. (4 marks)

(b) Jude Company intends to train its users on a newly introduced management information system. Explain three reasons for this move. (6 marks)
(c) Differentiate between *spoofing* and *sniffing* as applied in computer systems security.

(4 marks)

(d) Crisper intends to write a report on the causes of management information systems failure in an organization. Explain three such factors that he could include in the paper.

(6 marks)

6. (a) Outline four benefits of *work breakthrough structure* as a project management technique.

(4 marks)
(b) Juke Company, which deals with the production of music and films, is faced with a high rate of piracy. Explain three measures that they could put in place to solve the problem. (6 marks)

(c) Explain two circumstances that would cause an organization to outsource some of its services. (4 marks)
(d) Marcela Company installed the Internet component in its management information system. Explain three ethical issues that the company should sensitize its users on. (6 marks)

7. (a) Outline four characteristics of strategic decisions as used in management information systems. (4 marks)

(b) Distinguish between deterministic and probabilistic systems as applied in management information systems. (4 marks)
(c) Josh, the systems analyst for Kiambi Company, intends to install a computer based information system. Explain three components of this kind of system. (6 marks)

(d) Explain three characteristics of MIS information. (6 marks)
8. (a) Jane, has advised the managers for Rubio Company to purchase a *tailor made* information system. Explain three reasons for her advice. (6 marks)

(b) Ruby has been presented with the following features of an information system. Use it to answer the questions that follow.

- Access to internal and external data
- What-if analysis
- Ad hoc queries
- Drill down
- Project tracking
- Colour business graphics
- Network connections, e-mail access
- High security

(i) Identify the information system described above; (1 mark)

(ii) Identify the level in management where it is applied; (1 mark)
(iii) Outline two functions of this system to an organization.  

(c) Jota Supermarket has installed an enterprise resource planning system (ERP) for its operation. Explain three benefits of this system to the supermarket.  

(d) Jack Company has incorporated artificial intelligence systems in its operations. Explain three benefits of this system to the company.