

2920/302

MANAGEMENT INFORMATION SYSTEMS

July 2016

Time: 3 hours



THE KENYA NATIONAL EXAMINATIONS COUNCIL

DIPLOMA IN INFORMATION COMMUNICATION TECHNOLOGY

MODULE III

MANAGEMENT INFORMATION SYSTEMS

3 hours

INSTRUCTIONS TO CANDIDATES

Answer any FIVE of the following EIGHT questions in the answer booklet provided.

ALL questions carry equal marks.

Candidates should answer the questions in English.

This paper consists of 4 printed pages.

Candidates should check the question paper to ascertain that all the pages are printed as indicated and that no questions are missing.

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1. (a) Outline **three** functions of a Management Information Systems in an organization. (3 marks)
- (b) Explain **three** challenges that an organization using a modern Management Information Systems face when dealing with ethical issues. (6 marks)
- (c) A school Information Technology project is at the planning stage. Explain **three** activities that would be carried out at this stage. (6 marks)
- (d) A certain organization decided to outsource some of its information system's services.
 - (i) Outline **two** possible reasons for this approach. (2 marks)
 - (ii) Outline **three** benefits that the organization would derive from this approach. (3 marks)
2. (a) An Insurance Company intends to undertake an Information System project. Outline **four** challenges that a manager is likely to face while planning for it. (4 marks)
- (b) (i) Outline **four** areas in which an Enterprise Resource Planning System could be used in a government organization. (4 marks)
- (ii) Outline **four** goals of a transaction processing system to an organization. (4 marks)
- (c) Explain **two** goals of optimal information technology resources utilizations. (4 marks)
- (d) A light industry uses Management Information Systems in its tactical level of operations. Explain **two** functional tasks of this Management Information Systems in each of following areas:
 - (i) Production; (2 marks)
 - (ii) Accounting. (2 marks)
3. (a) (i) Outline **two** factors that affect decision making in an organization. (2 marks)
- (ii) Anewty Ventures Ltd intends to hire a consultant to assist in establishment of effective decision-making process. Outline the decision-making process cycle that the consultant would use in order to achieve the goal. (7 marks)
- (b) Explain **two** reasons that have led to slow growth of information societies in developing nations. (4 marks)
- (c) Many organizations are opting to use mobile phones for their business processes. Outline **three** challenges that they would face from this approach. (3 marks)
- (d) Distinguish between *executive information system* and *decision support system* as used in Management Information Systems. (4 marks)
4. (a) Explain **two** circumstances that could necessitate maintenance of information system. (4 marks)
- (b) Many organizations keep on acquiring new information system for their operations. Explain **three** reasons for this. (6 marks)
- (c) Apexet Company Ltd has an IS project that is in progress. Explain **two** circumstances that would make the project to halt before its scheduled completion time. (4 marks)
- (d) With the aid of a diagram, describe **three** distinctive levels of management in an organisation indicating in each case an appropriate information system. (6 marks)

5. (a) Differentiate between *choosing process* and *monitoring process* during acquisition of an information system. (4 marks)
- (b) The support of top management is necessary for success of an information system in organization. Explain **three** roles that they play during the planning phase. (6 marks)
- (c) An information system designer in an institution has been tasked to develop a secure internet connection. Outline **four** mechanisms the designer would put in place to ensure security of data. (4 marks)
- (d) Explain **three** circumstances that would lead an organization to automate its processes. (6 marks)
6. (a) Outline **two** factors that may influence the cost of maintaining an information system in an organization. (2 marks)
- (b) Differentiate between *critical success factor* and *downsizing* as used Management Information Systems planning methodologies. (4 marks)
- (c) Mopha Enterprises Ltd recently embarked on business process re-engineering (BPR). Explain **three** characteristics that the company would exhibit after a successful BPR. (6 marks)
- (d) Table 1 shows details of activities undertaken in an MIS project. Use it to answer the questions that follow.

Activity	Preceded by	Optimistic time	Most likely time	Pessimistic time
A	-	3	8	13
B	A	14	16	24
C	-	13	18	29
D	-	6	16	26

Table 1

- (i) Calculate the mean time for each activity. (2 marks)
- (ii) Construct a network diagram clearly indicating the critical activities. (6 marks)
7. (a) Explain **one** purpose of a project management software in each of the following activities:
- (i) monitoring; (2 marks)
- (ii) reporting. (2 marks)
- (b) A Government institution is planning to set up a new department to oversee. Its resources. Explain **two** categories of resources that the new department would consider. (4 marks)
- (c) Explain **three** threats to a business that may result from computer crimes. (6 marks)
- (d) A manager in an entertainment industry intends to use data driven decision support system to design a new product. Describe **three** characteristics that this system should possess. (6 marks)

8. (a) Explain the importance of each of the following qualities of a good management information system:
- (i) Completeness; (2 marks)
 - (ii) Economical; (2 marks)
 - (iii) Timeliness. (2 marks)
- (b) Outline **two** benefits of using a Gantt chart as a project management tool. (2 marks)
- (c) Gaze Company has embraced the use of Management Information System for competitive advantage. Explain **three** impacts that this approach may have caused to the company. (6 marks)
- (d) Some personnel in an organization could be a threat to a stable Management Information System. Explain **three** approaches that should apply in order to avert these threats. (6 marks)

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