

Name: _____ Index No: _____

2920/302
MANAGEMENT INFORMATION
SYSTEMS
November 2012
Time: 3 hours

Signature: _____

Date: _____



THE KENYA NATIONAL EXAMINATIONS COUNCIL
DIPLOMA IN INFORMATION COMMUNICATION TECHNOLOGY
MODULE III
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.
This paper consists of Eight questions.
Answer any Five questions in the spaces provided in this question paper.
All questions carry equal marks.

For Examiner's Use Only

Question	1	2	3	4	5	6	7	8	Total Marks
Marks									

This paper consists of 12 printed pages.

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

1. (a) State **two** examples of computer crimes in each of the following categories:

(i) crimes that target computer networks directly; (2 marks)

(ii) crimes facilitated by computer networks. (2 marks)

(b) Social media such as *Facebook* and *Twitter* are fast emerging technology trends which affect most organizations:

(i) state **two** positive impacts these media could have on an organisation; (2 marks)

(ii) outline **two** challenges posed by these social media in an organisation; (2 marks)

(iii) explain an approach that would be used to overcome the challenges outlined in (ii). (2 marks)

(c) Distinguish between *hardware* and *software* components of information systems. (4 marks)

- (d) Explain **three** unethical behaviors that would likely to be exhibited by a network administrator in an organization. (6 marks)

2. (a) Explain each of the following terms as used in management information systems:

- (i) rationalization; (2 marks)

- (ii) business process. (2 marks)

- (b) (i) State **four** typical contents of a project initiation document. (2 marks)

- (ii) Table 1 shows activities to be undertaken by a company during the development of an information system.

Activity	Preceded by	Duration in weeks	Employees required
A	-	3	6
B	-	5	3
C	B	2	4
D	A	1	4
E	A	6	5
F	D	3	6
G	C,E	3	3

Table 1

Represent the data using the most appropriate project management tool. (6 marks)

(d) The following are cases of computer misuse that are likely to occur in a typical organization. In each case, explain the control that would be used to minimize and/or eliminate the misuse.

(i) An employee secretly changes user privileges for a database. (2 marks)

(ii) An employee uses a different account to view the contents of a database. (2 marks)

3. (a) The management of XYZ Company limited intends to use an information system to gain competitive advantage over other companies in the market. Explain **three** approaches the management would use to achieve the objective. (6 marks)

(b) Peter was given a task to manage an information system project of a certain company. He decided to use a project management software for the task.

(i) State **four** input that he would require. (2 marks)

(ii) Outline **four** benefits of using this software. (4 marks)

(c) (i) State **four** approaches to information systems classification. (4 marks)

(ii) Assuming that you are in charge of implementing organizational change in your organization. Explain **four** techniques that you would use to deal with possible resistance to change. (4 marks)

4. (a) The management of Abby Enterprises resolved to acquire an information system during a board meeting.

(i) Explain **three** methods that the management would use to acquire the information system. (6 marks)

(ii) Explain **three** criteria that would ensure successful information system acquisition by the organization. (6 marks)

(b) Explain **two** uses of *budget* as a project management tool. (4 marks)

(c) Distinguish between *PERT* and *logic network* as used in project management. (4 marks)

5. (a) State **six** qualities of good information. (3 marks)

(b) (i) State **four** rules that should be observed when drawing a network analysis diagrams. (2 marks)

(ii) Prima College is currently undertaking an information system project.

I. Outline **four** circumstances that may affect the success of the project. (4 marks)

II. Explain an approach that would be used to reduce the risk of the project's failure. (2 marks)

(c) The following are activities carried out in an order processing system. For each of the activities, state the level of management at which it is conducted:

(i) sales forecasting; (1 mark)

(ii) sales analysis; (1 mark)

(iii) processing sales. (1 mark)

(d) (i) Differentiate between *efficiency* and *effectiveness* as used in information system resource planning. (4 marks)

(ii) Outline **two** impact of information system as agent of change in a typical organization. (2 marks)

6. (a) Explain the term *information system maintenance* (2 marks)

(b) (i) Outline **two** primary objectives of information system planning. (2 marks)

(ii) Explain **two** factors that influence the alignment of an information system plan to the organizational plan. (4 marks)

(c) Chetrum Organization is contemplating acquisition of a new information system. Explain **three** factors that could be considered for a successful technological change. (6 marks)

(d) (i) Name **four** information system resources. (2 marks)

- (ii) Outline **two** reasons for managing information system resources. (2 marks)

- (iii) Specify the most appropriate *maintenance* for information system resources justifying your case. (2 marks)

7. (a) (i) Define the term *social technical systems* as used in management of information systems. (2 marks)

- (ii) State **two** approaches that would be used to improve the social technical views in an organization (2 marks)

- (b) A certain company is planning to attain ISO certification by the end of the following year. The core business processes are repetitive and hence monotonous thus affecting the output. Assuming that you are a senior information system officer in this company:

- (i) Explain the most appropriate approach you would use through ICT that could change the business processes hence improve output; (2 marks)

(ii) Outline **two** advantages and **two** disadvantages of the approach identified in (i). (4 marks)

(c) Differentiate between *administrative controls* and *access controls* giving an example in each case. (4 marks)

(d) Describe **three** circumstances that would make the management embrace the use of IS in decision making. (6 marks)

8. (a) (i) Outline **four** characteristics of an *information society*. (2 marks)

(ii) Explain **two** challenges faced when implementing information society (4 marks)

- (b) Distinguish between *office automation systems* and *global distribution systems*. (4 marks)

- (c) Describe each of the following constraints as used in projects management.

- (i) quality; (2 marks)

- (ii) cost. (2 marks)

- (d) The following are decisions that are taken in a certain hierarchically managed company. In each case, explain the type of the decision made by the managers in hierarchy.

- (i) The payment period is to be extended by five days to improve cash flows; (2 marks)

- (ii) Specified details on invoices must be checked and stamped to show that the checks have been carried out fully and satisfactory; (2 marks)

- (iii) Suppliers who supply over Kshs 500,000 worth of goods per annum join the company's electronic data interchange network. (2 marks)
