



KENYATTA UNIVERSITY

EXAMINATION FOR THE DIPLOMA IN INFORMATION TECHNOLOGY

SIT 038: INFORMATION SYSTEMS MANAGEMENT

2ND SEMESTER 2023/2024

TIME: 2 HOURS

INSTRUCTIONS:

This paper consists of **TWO** sections (A and B). Answer SECTION A (**COMPULSORY**) and **ANY TWO QUESTIONS** from SECTION B.

SECTION A- COMPULSORY (30 MARKS)

QUESTION 1

SECTION A - ANSWER ALL QUESTIONS IN THIS SECTION

26 QUESTION ONE (30 MARKS)

a) With an example **in each case**, define the following terms

- i) An organisation (2 marks)
- ii) The environment (2 marks)
- iii) Information technology (2 marks)
- iv) A system (2 marks)
- v) An information system (2 marks)

b) Discuss the following **three (3)** trends in the world that are impacting on information systems in organisations.

- i) Globalisation (3 marks)
- ii) Cloud computing (3 marks)
- iii) Artificial Intelligence (3 marks)

c) Read the case study below and answer the following questions

In 2022, a leading cement and concrete producer in Eastern Africa introduced digitisation in all major aspects of its operations including clients, financials and suppliers. The system improved efficiency, service delivery and customer satisfaction by focusing on customer, credit, logistics and inventory.

- i) Who are the users of the system. (2 marks)
- ii) What roles does the system fulfil in the organization. (3 marks)
- iii) Discuss **two (2)** ways in which the system can be improved. (4 marks)
- iv) Give the general name of such a system, and name one particular example of such a system. (2 marks)

Section B (Answer two questions from this section)

SECTION B – ANSWER ANY TWO QUESTIONS (EACH QUESTION 20 MARKS)

QUESTION 2 (20 MARKS)

- a) Using an organisation of your choice, discuss the three (3) behavioral roles of management. (10 marks)
- b) With a diagram, illustrate the four (4) processes in an information system. (4 marks)
- c) Explain three (3) threats to information systems, and for each, describe an appropriate prevention measure. (6 marks)

QUESTION 3 (20 MARKS)

- a) Discuss three (3) features of one of the information systems used at the operational level of an organization. (5 marks)
- b) Read the case study below and answer the following questions

East African Breweries Limited (EABL) is a leading beverage company operating primarily in East Africa. EABL's core business revolves around the production, marketing, and distribution of alcoholic and non-alcoholic beverages. The company has well-established brewing facilities equipped with modern technology to ensure quality and efficiency in the brewing process. EABL implements an information system to ensure the quality, consistency, and efficiency of its production processes. This system is used in brewing, distillation, and packaging processes to optimize efficiency and

minimize human error. Automated controls regulate various aspects of the production process, such as temperature, pressure, and flow rates, ensuring precise execution of production steps. The system collects and analyzes real-time data from production processes to identify trends, deviations, and opportunities for optimization. The system incorporates measures to ensure compliance with relevant regulations related to food safety, alcohol content, labeling, and environmental sustainability.

- i) Name two (2) information technologies that may be a part of this system. (2 marks)
- ii) Name two processes of the firm. (2 marks)
- iii) Give the general name of the system being used in EABL. (1 marks)
- d) i) Describe the five (5) stages of the systems development life cycle (SDLC) and explain how they are applied in the management of information systems projects. (5 marks)
- ii) Discuss common challenges associated with each stage. (5 marks)

QUESTION 4 (20 MARKS)

- a) With an example, describe the functions of a Human Resource Information System. Clearly describe its role in the organisation and its functions. (5 marks)
- b) Taking an example of a Kenyan shoe-making company
 - i) Describe the 5 competitive forces, using Michael Porter's model. (5 marks)
 - ii) Illustrate the value chain of the organization. (5 marks)
- c) Kenyatta University is in the process of obtaining a new system to facilitate organizational and administrative processes. Giving the name of such a system, discuss the four (4) stages in the procurement of such an information system. (5 marks)

QUESTION 5 (20 MARKS)

- a) Describe the 5 roles of an information system in an organisation, and for each role, give a suitable example organisation (**not the case studies in this exam**) (10 marks)
- b) Strategy is very important to an organisation.
 - i) Define the term strategy (2 marks)
 - ii) Naivas supermarkets is starting operations in Tanzania. Explain how they can use information systems to achieve competitive advantage in the Tanzanian market. (8 marks)

c) Read the case study below and answer the following questions

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- i) Who are the users of the system. (2 marks)
- ii) What roles does the system fulfil in the organization. (3 marks)
- iii) Discuss **two (2)** ways in which the system can be improved. (4 marks)
- iv) Give the general name of such a system, and name one particular example of such a system. (2 marks)

Section B (Answer two questions from this section)

SECTION B – ANSWER ANY TWO QUESTIONS (EACH QUESTION 20 MARKS)

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