"Investing in Africa's Future"

COLLEGE OF ENGINEERING AND APPLIED SCIENCES

NCIS408: MANAGEMENT INFORMATION SYSTEMS

END OF FIRST SEMESTER EXAMINATIONS

NOVEMBER 2025

MR J. CHINZVENDE

TIME: 3 HOURS

INSTRUCTIONS

Answer questions instructed in each section

Start **each** question on a new page.

The marks allocated to **each** question are shown at the end of the section.

Answer all questions in Section A and Chose Two (2) in section B

Credit will be awarded for logical, systematic and neat presentations.

<u>**Section A [Answer all]**</u>

Question One
Define the following terms as they are used in Software Engineering
a. Information System (IS)
b. Decision Support System (DSS)
c. Enterprise Resource Planning (ERP)
d. Database Management System (DBMS)
e. Customer Relationship Management (CRM)   **[10]**

Question Two
Differentiate between the following terms as they are used in MIS

a. Business Intelligence (BI) vs. Data Mining
b. Database Management System (DBMS) vs. Data Warehouse
c. Management Information System (MIS) vs. Information System (IS)
d. Decision Support System (DSS) vs. Management Information System (MIS)
e. Transaction Processing System (TPS) vs. Management Information System (MIS)
                                                             [10]

Question Three
Copy and complete the data hierarchy below

<u>Level</u>	<u>Definition</u>	<u>Process</u>	<u>Example</u>
		Collection and storage	
Information		Analysis and organization	
			Knowing that high sales in December are due to holiday shopping.
Wisdom		Reflection and synthesis	

                                                             [10]

Question 4

Discuss the importance of MIS in strategic planning and decision-making within an organisation. **[10]**

Question 5

Analyze how MIS can support strategic planning and operational efficiency in an organisation **[10]**

SECTION B [Answer any Two(2)]

Question Six

Africa University is planning to implement a new Management Information System to streamline its operations.

a. Identify and explain three key stakeholders involved in the implementation process. Why are their roles important? **[10]**
b. Discuss two potential challenges the company might face during the implementation of the MIS. How can these challenges be mitigated? **[10]**
c. Outline the steps the company should take to ensure successful change management during the transition to the new system. **[05]**

Question Seven

Africa University Clinic is using an MIS to manage patient data and improve service delivery.

a. Describe the types of data that the MIS should collect and explain their significance for decision-making in healthcare. **[10]**
b. Explain how data analytics can be utilized within the MIS to enhance patient care.

[10]

c. Discuss the ethical considerations the organization must address when handling patient data. **[05]**

Question Eight

Stanbic bank relies heavily on its MIS for transaction processing and customer data management. **[10]**
a. Discuss the importance of cybersecurity measures in protecting the MIS.
b. Identify three specific security threats that the institution might face and suggest ways to mitigate these threats. **[10]**
c. Explain the role of user training in maintaining the security of the MIS. **[05]**

END OF EXAMINATION