



Kasarani Campus  
Off Thika Road  
Tel. 2042692 / 3  
P. O. Box 49274, 00100  
NAIROBI  
Westlands Campus  
Pamstech House  
Woodvale Grove  
Tel. 4442212  
Fax: 4444175

**KIRIRI WOMEN'S UNIVERSITY OF SCIENCE AND TECHNOLOGY**  
**UNIVERSITY EXAMINATION, 2024/2025 ACADEMIC YEAR**  
**SECOND YEAR, FIRST SEMESTER EXAMINATION**  
**FOR THE BACHELOR OF BUSINESS AND INFORMATION TECHNOLOGY**  
**KBI 2207 INFORMATION SEARCH**

Date: 9<sup>TH</sup> AUGUST 2024  
Time: 2:30PM – 4:30PM

**INSTRUCTIONS TO CANDIDATES**

**ANSWER QUESTION ONE (COMPULSORY) AND ANY OTHER TWO QUESTIONS**

**QUESTION ONE (30 MARKS)**

An agricultural cooperative, AgriTech Solutions, aims to improve its farming practices and overall productivity by efficiently accessing and managing various sources of agricultural information. This includes searching and accessing records of crop yields, soil health data, weather forecasts, market trends, and scientific research articles related to modern farming techniques and treatment protocols for plant diseases and pests.

- a) Discuss four benefits of implementing a centralized digital platform for managing agricultural data, and explain two challenges that AgriTech Solutions might face during its implementation? **(4 Marks)**
- b) Describe how advanced search algorithms improves the efficiency of retrieving agricultural data for AgriTech Solutions? **(5 Marks)**
- c) Discuss the technical and user experience aspects of the search algorithm. **(3 Marks)**
- d) Evaluate the importance of digital literacy among farmers in the success of AgriTech Solutions' new system. What specific training methods would be most effective? **(4 Marks)**
- e) Analyze the impact of inadequate digital infrastructure on the access to and management of agricultural information and discuss the strategies that AgriTech Solutions can employ in overcoming these challenges? **(5 Marks)**
- f) Discuss the importance of integrating various data sources for AgriTech Solutions. What are the potential benefits and challenges of creating a cohesive data integration strategy? **(5 Marks)**
- g) Explain two components of an effective information management system for AgriTech Solutions, and how can these components improve decision-making processes in agriculture? **(4 Marks)**

**QUESTION TWO (20 MARKS)**

Kameen women's hospital aims to improve patient care by implementing advanced searching techniques to efficiently access and manage patient records, research articles, and treatment protocols. The hospital recognizes the importance of quick and accurate information retrieval to enhance medical decision-making, patient safety, and overall operational efficiency.

- a) Discuss four benefits of implementing a centralized platform for accessing patient records, research articles, and treatment protocols in a hospital setting? **(4 Marks)**

- b) Discuss how this approach enhances patient care and operational efficiency. (3 Marks)
- c) Analyze the challenges hospitals face in integrating patient data from multiple systems. How can advanced searching techniques mitigate these challenges? (4 Marks)
- d) Evaluate the importance of privacy and security measures when accessing patient records and sensitive healthcare information using advanced searching techniques. (4 Marks)
- e) Discuss five strategies should hospitals implement to ensure compliance with healthcare regulations? (5 Marks)

### **QUESTION THREE (20 MARKS)**

A research institution is conducting a study on the effects of social media usage on mental health among adolescents. The study involves collecting sensitive data from participants, including social media activity logs, survey responses about emotional well-being, and demographic information. The institution aims to uphold ethical standards throughout the data collection process to ensure participant confidentiality, informed consent, and data integrity.

- a) Discuss the importance of informed consent in research ethics. What information should be included in an informed consent form, especially in studies involving sensitive data like social media activity logs? (3 Marks)
- b) Analyze the ethical considerations related to protecting participant confidentiality and privacy in research. (3 Marks)
- c) Explain four strategies that researchers can use to safeguard sensitive data? (4 Marks)
- d) Explain how researchers can minimize potential harm to participants in research studies? (3 Marks)
- e) Evaluate the role of an institutional review board (IRB) or ethics committee in ensuring ethical research practices. (2 Marks)
- f) Discuss the criteria that should be considered during the ethics review of a study involving data collection from human participants? (3 Marks)
- g) Discuss the importance of considering cultural differences and norms when collecting data for research. How can researchers navigate ethical challenges related to cultural sensitivity? (2 Marks)

### **QUESTION FOUR (20 MARKS)**

Maputo Enterprises, a successful multinational corporation specializing in consumer electronics, is planning to expand its operations into a new international market. The company aims to conduct comprehensive market research to gather critical information about consumer preferences, market trends, regulatory requirements, and competitive landscape in the target market. Effective information searching and analysis are crucial to making informed decisions and developing a successful market entry strategy

- a) Discuss four key demographic factors Maputo Enterprises should consider when analyzing the target market for its consumer electronics products? How can demographic insights influence market segmentation strategies? (4 Marks)
- b) Analyze the competitive landscape in the target market. What information should Maputo Enterprises gather about competitors to develop a competitive advantage? (4 Marks)
- c) Discuss the potential regulatory challenges Maputo Enterprises may face when entering the new market. How can the company ensure compliance with local laws and regulations? (3 Marks)
- d) How can Maputo Enterprises gather insights into consumer behavior and preferences in the target market? What methods and techniques can be used to obtain accurate consumer insights? (4 Marks)

- e) Identify and assess potential risks associated with entering the new market. How should Maputo Enterprises prioritize and mitigate these risks to ensure a successful market entry strategy? **(5 Marks)**

**QUESTION FIVE (20 MARKS)**

Wambui is a lawyer at Wambui and Otieno co advocates. Her legal firm is researching case laws concerning matrimony property laws.

Required:

- a) Discuss how the firm can critically assess the quality and reliability of these sources? **(5 Marks)**
- b) In reference to the case above, explain three sources of obtaining matrimony laws. **(5 Marks)**
- c) Discuss four best practices for citing the sources obtained in part (b) to ensure proper research integrity? **(4 Marks)**
- d) Discuss challenges the legal firm is likely to encounter while obtaining these sources to maintain transparency and credibility? **(6 Marks)**