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

Date: 11TH December 2024
Time: 11:30AM – 1:30PM

INSTRUCTIONS TO CANDIDATES

ANSWER QUESTION ONE (COMPULSORY) AND ANY OTHER TWO QUESTIONS

QUESTION ONE (30 MARKS)

Maverick bank of Africa, a leading financial institution, is focused on improving its customer service and operational efficiency by leveraging advanced search algorithms and data management systems. the bank aims to streamline the retrieval of financial records, customer data, transaction histories, and regulatory documents. while implementing this system, maverick bank faces challenges such as ensuring user accessibility, maintaining data security, and enhancing user experience in both rural and urban branches.

- a) Discuss four benefits of implementing a centralized search platform for managing financial data and explain two challenges that maverick bank of Africa might face during its implementation. (4 Marks)
- b) Describe how advanced search algorithms improve the efficiency of retrieving financial records and customer data for maverick bank. (5 Marks)
- c) Discuss the technical and user experience aspects of the search algorithm that should be considered for optimal functionality. (3 Marks)
- d) Evaluate the importance of digital literacy among bank employees and customers in the success of maverick bank's 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 financial information. discuss the strategies that maverick bank can employ to overcome these challenges. (4 Marks)
- f) Discuss the importance of integrating various data sources for maverick bank. what are the potential benefits and challenges of creating a cohesive data integration strategy? (4 Marks)
- g) Explain two components of an effective information management system for maverick bank, and how these components can improve decision-making processes in the bank. (4 Marks)

QUESTION TWO (20 MARKS)

Maple university, a prestigious institution known for its research output, has recently faced concerns over plagiarism in academic research. instances of students and even faculty members using uncredited research or duplicating portions of other works have been reported. This has raised questions about the integrity of academic practices at the university. to maintain its academic reputation and promote ethical research, maple university aims to strengthen its policies on plagiarism detection and research integrity.

- a) Discuss four ethical issues associated with plagiarism in academic research. (4 Marks)
- b) How can maple university's use of plagiarism detection software improve the integrity of academic research? (3 Marks)

- c) Analyze the challenges maple university might face in detecting and preventing plagiarism in research. How can advanced search algorithms aid in overcoming these challenges? (4 Marks)
- d) Evaluate the importance of academic integrity policies and the role of faculty in promoting ethical research practices among students. (4 Marks)
- e) Discuss five strategies maple university should implement to strengthen research integrity and ensure compliance with ethical standards in academic research. (5 Marks)

QUESTION THREE (20 MARKS)

Deepak agriculture farm is conducting extensive research to improve its agricultural practices by utilizing advanced search algorithms and managing large datasets related to crop yields, soil health, weather patterns, and market trends. The farm is also focused on training its employees in information literacy to efficiently navigate and use digital resources. However, the increasing use of digital platforms has raised concerns about the farm's digital footprint, privacy issues, and data management.

- a) Discuss the importance of information literacy in enhancing research and decision-making at Deepak agriculture farm. How can employees be trained to effectively use digital tools and resources?(3 Marks)
- b) Analyze the ethical implications of managing digital footprints in an agricultural research environment. What considerations should Deepak agriculture farm keep in mind regarding privacy and data security? (3 Marks)
- c) Explain four strategies Deepak agriculture farm can use to safeguard sensitive agricultural data collected through digital platforms and search algorithms. (4 Marks)
- d) Discuss how advanced search algorithms improve the efficiency of retrieving and managing large agricultural datasets. provide examples of specific applications in farming. (3 Marks)
- e) Evaluate the role of institutional policies and ethics committees in ensuring the ethical use of data and digital tools at Deepak agriculture farm. (2 Marks)
- f) Discuss the criteria that should be considered when developing ethical guidelines for the collection and use of agricultural data at Deepak agriculture farm. (3 Marks)
- g) How can Deepak agriculture farm ensure data integrity and maintain transparency in reporting research findings? provide examples of best practices. (2 Marks)
- h) What ethical guidelines should be followed to prevent data manipulation or misrepresentation in agricultural research at Deepak agriculture farm? (3 Marks)

QUESTION FOUR (20 MARKS)

Wema public library is upgrading its search capabilities to support academic researchers, students, and general users in accessing a wide range of information sources. The library offers a variety of search tools, including search engines, academic databases, library catalogs, and specialized tools for finding books, research articles, and other scholarly resources. These tools are essential for supporting comprehensive research and fostering information literacy among its users.

- a) Discuss four key factors Wema public library users should consider when using different search tools (search engines, academic databases, etc.) for research purposes. How do these factors influence the choice of search method? (4 Marks)
- b) Analyze how Wema public library can use academic databases to provide researchers with access to high-quality peer-reviewed articles. What role do these databases play in supporting academic research? (4 Marks)
- c) Discuss the challenges Wema public library faces in integrating multiple search tools, such as catalogs and specialized databases. How can the library ensure a seamless user experience? (3 Marks)
- d) Explain how Wema public library uses search engines and specialized tools to help users gather relevant information on niche topics or specialized fields? What techniques can be applied to optimize search results? (4 Marks)
- e) Identify and assess potential risks related to data privacy, plagiarism, or inaccurate information when using online search tools at Wema public library. How should the library address these risks to ensure reliable research? (5 Marks)

QUESTION FIVE (20 MARKS)

Nanak general hospital, a leading healthcare institution, is enhancing its search capabilities to improve patient care and research outcomes. The hospital aims to streamline the process of accessing patient records, medical literature, treatment protocols, and other relevant data to aid healthcare professionals in making informed decisions. However, challenges have arisen in ensuring the accuracy, security, and ethical use of information retrieved through these systems. to address these concerns, Nanak general hospital is focusing on implementing advanced search tools and policies to maintain the integrity of its medical practices.

- a) Discuss four ethical issues associated with the use of search technologies in healthcare at Nanak general hospital. (4 Marks)
- b) Explain ow can Nanak general hospital's use of advanced search tools improve the accuracy and efficiency of medical research and patient care? (3 Marks)
- c) Analyze the challenges Nanak general hospital might face in implementing and managing search systems for medical data. how can advanced search algorithms help overcome these challenges? (4 Marks)
- d) Evaluate the importance of information integrity policies and the role of hospital staff in promoting ethical use of medical data in research and patient care. (4 Marks)
- e) Discuss five strategies Nanak general hospital should implement to strengthen data integrity and ensure compliance with ethical standards in medical research and healthcare practices. (5 Marks)