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KIRIRI WOMEN'S UNIVERSITY OF SCIENCE AND TECHNOLOGY
UNIVERSITY EXAMINATION, 2024/2025 ACADEMIC YEAR
FIRST YEAR, FIRST SEMESTER EXAMINATION
FOR THE DIPLOMA IN BUSINESS & INFORMATION TECHNOLOGY
DBT 1004 BUSINESS INFORMATION SYSTEMS

Date: 12TH AUGUST 2024
Time: 8:30AM – 10:30AM

INSTRUCTIONS TO CANDIDATES

ANSWER QUESTION ONE (COMPULSORY) AND ANY OTHER TWO QUESTIONS

QUESTION ONE (30 MARKS)

- i. You are a consultant for a small manufacturing company looking to upgrade its information systems to support its growing business needs.
 - a) Describe the components of an information system that you would recommend and explain how each component will support the company's business strategy. **(6 Marks)**
 - b) Discuss how the integration of these components can enhance organizational efficiency and competitiveness of the small manufacturing company. **(6 Marks)**
- ii. A large corporation is considering the implementation of an Enterprise Resource Planning (ERP) system to integrate its various business processes. Discuss the benefits and challenges the corporation might face during the ERP implementation. **(6 Marks)**
- iii. There are several types of information systems available in the industry today, discuss some three types of information systems. **(6 Marks)**
- iv. Discuss benefits of aligning information systems to business activities in higher learning institutions. **(6 Marks)**

QUESTION TWO (20 MARKS)

- i. A medium-sized retail company is struggling with its current information systems. The accounting and finance department faces delays in financial reporting, the marketing team cannot effectively track customer preferences, and the operations team experiences challenges in managing inventory. Propose specific information systems for each of these business functions (accounting and finance, marketing, and operations) and explain how these systems can resolve the issues. **(8 Marks)**
- ii. Identify five trends in business information systems that can enable a firm gain competitive advantage in the future. **(6 Marks)**
- iii. DataSafe Inc., a data management company, faces increasing cybersecurity threats and must ensure the privacy and security of its clients' data. Identify and describe three major cybersecurity threats that DataSafe Inc. **(6 Marks)**

QUESTION THREE (20 MARKS)

- i. Imagine you are starting an online retail business. Outline the different online business models and revenue streams you might consider. **(8 Marks)**
- ii. Discuss the e-commerce technologies and applications you would use to engage customers and drive sales. **(6 Marks)**
- iii. A healthcare organization aims to leverage business intelligence and analytics to improve patient care and operational efficiency. Explain how data mining can be used to enhance decision-making and patient outcomes. **(6 Marks)**

QUESTION FOUR (20 MARKS)

- i. You are leading a project to develop a new information system for a financial services company. Compare and contrast the agile and traditional project management methodologies in the context of this project. **(8 Marks)**
- ii. A multinational corporation has recently experienced a data breach that exposed sensitive customer information.
 - a) Analyze the cybersecurity threats that could have led to this breach and recommend a comprehensive risk management plan to prevent future incidents. **(6 Marks)**
 - b) Discuss the importance of data privacy and compliance regulations in this context, citing relevant laws and standards. **(6 Marks)**

QUESTION FIVE (20 MARKS)

- i. As a CIO of a tech-savvy company, you are tasked with exploring emerging technologies to gain a competitive edge.
 - a) Evaluate the impact of cloud computing, mobile technologies, and the Internet of Things (IoT) on business operations. **(8 Marks)**
 - b) Provide specific examples of how each technology can be applied to enhance productivity and innovation within your organization. **(6 Marks)**
 - c) Discuss any potential challenges in implementing these technologies. **(6 Marks)**