KIRIRI WOMEN'S UNIVERSITY OF SCIENCE AND TECHNOLOGY
UNIVERSITY EXAMINATION, 2024/2025 ACADEMIC YEAR
SECOND YEAR, FIRST SEMESTER EXAMINATION
FOR THE BACHELOR OF SCIENCE IN INFORMATION TECHNOLOGY
KIT 2201 – BUSINESS INTELLIGENCE

Date: 06TH December 2024
Time: 11:30AM – 1:30PM

INSTRUCTIONS TO CANDIDATES
ANSWER QUESTION ONE (COMPULSORY) AND ANY OTHER TWO QUESTIONS
QUESTION ONE (30 MARKS)

A large retail company, "RetailTech," operates hundreds of stores across the country and an e-commerce platform. The company collects vast amounts of data from various sources, including point-of-sale (POS) systems, online transactions, inventory management systems, customer loyalty programs, and social media interactions. Despite having access to this wealth of data, RetailTech struggles with fragmented and siloed information, leading to suboptimal decision-making processes.

RetailTech decides to implement a Business Intelligence (BI) solution to integrate these data sources, enhance data-driven decision-making, and ultimately improve operational efficiency, customer satisfaction, and profitability.

Use the above case study to answer the following questions

a) Explain two importance of real-time analytics in financial services and how it can be implemented in the organization. [4 Marks]
b) Discuss three ways how BI tools can be used to improve risk management practices in the financial services company. [6 Marks]
c) Explain THREE methods can be used to segment customers using BI, and how can these segments be leveraged for targeted marketing. [6 Marks]
d) Discuss three ways how BI and analytics can be utilized to detect and prevent fraud in organization.
. [6 Marks]
e) Discuss three way How should the company approach data integration and ensure data quality across various sources. [6 Marks]
f) Identify two key customer insights that can be gained from a BI system and how they can benefit the company. [2 Marks]

QUESTION TWO (20 MARKS)

Discuss four potential challenges the company might face during the BI implementation and suggest mitigation strategies. [8 Marks]

a) Explain Two ways how to manage and protect sensitive data during and after the BI implementation. [4 Marks]
b) Discuss the importance of change management and user training in the successful adoption Technology in the organization [8 Marks]

QUESTION THREE (20 MARKS)

a) Analyze three role of real-time data analytics in a BI system   [6 Marks]
b) Discuss four the technical requirements for implementing real-time analytics.   [8 Marks]
c) Describe two ways How can real-time analytics improve customer experiences and operational efficiency   [4 Marks]
d) Discuss two the potential challenges and solutions for maintaining real-time data accuracy and performance   [2 Marks]

QUESTION FOUR (20 MARKS)

a) Assess Four role of BI in enhancing customer relationship management (CRM) in organization.
.   [8 Marks]
b) Discuss three impact of BI on customer segmentation and targeted marketing   [6 Marks]
c) Describe three benefits of integrating BI with CRM systems in the organizations   [8 Marks]

QUESTION FIVE (20 MARKS)

a) Describe three role of data governance in a BI implementation.   [6 Marks]
b) Discuss three key components of a data governance framework in BI   [6 Marks]
c) Explain four impact of data governance on compliance and risk management in BI   [8 Marks]