

Enrollment No.: _____

Seat No.: _____

GUJARAT TECHNOLOGICAL UNIVERSITY
MBA - SEMESTER - IV EXAMINATION - WINTER 2025

Subject Code: 4549296

Date: 19-12-2025

Subject Name: Advanced Data Analytics

Time: 02:30 PM TO 05:30 PM

Total Marks: 70

Instructions

- 1. Attempt all questions.**
- 2. Make suitable assumptions wherever necessary.**
- 3. Figures to the right indicate full marks.**
- 4. Use of simple calculators and non-programmable scientific calculators are permitted.**

Question Text and Description		Marks
Q.1	(a) Big Data (b) Data Analytics (c) Business Analytics (d) Predictive Analytics (e) HR Analytics (f) Marketing Analytics (g) Finance Analytics	14
Q.2	(a) Write a short note on the application of analytics in different business functions.	07
	(b) What is Big data? Describe the big data life cycle in detail.	07
OR		
Q.3	(b) Write a note on HRIS for HR Decision-making.	07
	(a) What is analytics? Discuss any two tools used in Analytics.	07
	(b) Elaborate the importance of data in business analytics & its use in supply chain management.	07
OR		
Q.3	(a) Explain the benefits of Marketing Analytics.	07
	(b) Throw light on HR Decision Making and HR Analytics	07
Q.4	(a) What is the need of Financial Analytics?	07
	(b) How is Predictive and descriptive HR decision making different?	07
OR		
Q.4	(a) 'While data analytics is an important tool for decision making, managers should never take an important analysis at face value.' – Analyze the underlying essence of the statement.	07
	(b) How are data processing and data science related to finance? Mention the relevance in the areas of risk analytics, real time analytics and customer data management.	07
Q.5	A telecommunications company is experiencing high customer churn rates. They have collected extensive customer data, including usage patterns, customer demographics, and customer service interactions. The company wants to use advanced data analytics to predict customer churn and take proactive measures to retain customers.	
	(a) What data preprocessing steps should the company take before building a customer churn prediction model?	07
	(b) Outline the steps the company should follow to develop a customer churn prediction model using machine learning techniques	07

OR

- Q.5** (a) Discuss the importance of data ethics in advanced data analytics. **07**
(b) Why is marketing Analytics important for business? **07**
