

Enrollment No./Seat No.:

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

Subject Code: MB02096011

Date: 16-01-2026

Subject Name: Business 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.**

	Marks
Q.1 ALL 7 Questions must be Compulsory.	14
(a) Business Analytics	
(b) Descriptive Analytics	
(c) Data Scientist	
(d) Text Analytics	
(e) Web Analytics	
(f) Dashboard	
(g) SMART KPI	
Q.2 (a) What is semi-structured data? Elaborate on the practical challenges faced while storing semi-structured data.	07
(b) Differentiate between Business Analytics and Business Intelligence.	07
OR	
(b) Define data visualization and give differences between data visualization and infographics.	07
Q.3 (a) Elaborate on the Four Vs of Big Data.	07
(b) Explain web analytics by describing its role in the 'shopping cart abandonment' scenario.	07
OR	
(a) Summarize the advantages of text mining by giving suitable industry examples.	07
(b) How will you use web and social media analytics for better customer engagement for an online cosmetic store?	07
Q.4 (a) Elaborate on how analytics is useful in the banking and healthcare industry with examples.	07
(b) What is business performance management? Explain the performance management cycle with necessary examples.	07

OR

- (a) Mention the Key Performance Indicators (KPIs) that you will monitor for a retail store. 07
- (b) List the benefits of Dashboards. 07

Q.5 Case Study: Friends, Data, and Decisions

Once upon a time, in a small town in India, two friends, Shyam and Raj, lived. They had been inseparable since childhood and had just turned 25. Both were working in IT companies in different cities, yet they managed to stay in touch regularly. Despite their demanding jobs, they always made time to connect, unwind, and share ideas over video calls or during occasional meetups.

One weekend, while sitting at a cozy café during one of Raj's visits, they got into a deep conversation over coffee. Shyam had recently enrolled in an online course on business analytics. Excited, he began sharing insights with Raj about how data could be used to make better decisions in business—and even in everyday life.

Raj was intrigued and asked, “Can we try some of this on ourselves?”

Shyam nodded enthusiastically, and the two decided to run a personal experiment using analytics. Their first step was to track and analyse their monthly expenses. They downloaded a budgeting app that allowed them to log spending categories such as rent, groceries, eating out, entertainment, subscriptions, and shopping. After feeding in three months of data, they were shocked to see how much they spent impulsively on food delivery and online shopping.

Next, they focused on their daily activities at work. They installed a time-tracking app on their laptops and smartphones, which silently tracked how they spent their working hours. The results were eye-opening: a significant portion of their time went into unproductive activities like social media scrolling, unnecessary meetings, and idle chats.

Then came the fitness challenge. Both of them had fitness bands lying around, which they hadn't used in months. They charged them up and began tracking their steps, heart rate, and sleep cycles. The data revealed that their activity levels were far below recommended health guidelines, and their sleep patterns were irregular.

Determined to make a change, Shyam and Raj made a pact. They created a shared Google Sheet to track their weekly goals and hold each other accountable. They started meal-prepping instead of eating out, set app timers to reduce digital distractions, and hit the gym together when in town. They also set weekly challenges, like who could hit 10,000 steps a day consistently or who could go a week without online shopping.

After three months, the results were transformative. Their expenses dropped by 25%, they reported feeling more focused and energized at work, and they each lost 4-5 kilos through consistent workouts. Raj was so impressed by the impact of analytics on his personal life that he also signed up for the business analytics course.

Their journey proved that you don't need to be a data scientist to make data-driven decisions. With simple tools and some discipline, anyone can use analytics to improve their lifestyle and well-being.

- (a) What are the features that you would like to have in a monthly expenses' tracker, daily activities at work app, and fitness tracker app? 07
- (b) How does analytics contribute to improving efficiency and growth? 07

OR

- (a)** What challenges do you think Shyam and Raj might have faced while analyzing personal data. How did they overcome them? **07**
- (b)** Imagine if they turn their experience into a start-up idea for personal analytics tools. What unique features or value propositions could they offer to make their product stand out in the market? **07**
