Seat No.: _____   Enrolment No._____

GUJARAT TECHNOLOGICAL UNIVERSITY
MBA - SEMESTER–II EXAMINATION – WINTER 2020

Subject Code:4529201   **Date:04/02/2021**
Subject Name:Business Analytics
Time:10:30 AM TO 12.30 PM   **Total Marks: 47**
Instructions:
  1. **Attempt any THREE questions from Q1 to Q6.**
  2. **Q7 is compulsory.**
  3. **Make suitable assumptions wherever necessary.**
  4. **Figures to the right indicate full marks.**

Q. No.		Question Text and Description	Marks
Q.1	A	Define the following terms: (a) Machine Learning (b) Data Lake (c) Digital Data	06
	B	Define the following terms (a) User Interface (b) Social Media Analytics (c) Metadata	06
Q.2	(a)	Describe in detail the different components of business analytics with its conceptual diagram.	06
	(b)	How can business intelligence be used by business organizations in enhancing customer experience and business performance?	06
Q.3	(a)	What are the challenges associated with use of unstructured data in growing organizations. State solutions to appropriately store unstructured data.	06
	(b)	What is the importance of data warehousing process in Business Analytics? Explain its significance.	06
Q.4	(a)	What is Big Data? Why is it an extremely essential part of business analytics?	06
	(b)	Information visualization has become important in business intelligence and analytics. Justify the statement with suitable examples.	06
Q.5	(a)	What is data mining? What are the major phases involved in CRISP DM process?	06
	(b)	Explain the techniques of knowledge discovery of business applications.	06
Q.6	(a)	What is Sentiment Analysis? How does it relate to Text mining approaches?	06
	(b)	Explain with suitable business example, how does data mining support in strategic decision making in any two different industries/ functional domain of your choice.	06
Q. 7		**Simplify the shopping maze to win more sales** Despite investing millions of dollars in enhancements to its mobile and web presence, a major retailer was having an increasingly difficult time converting online customer visits into sales. The gap	

between visitors to the site and completed purchases was widening. A growing number of consumers were losing interest in following the digital maze required to locate and purchase the products they were seeking. As a result, the retailer was having an increasingly difficult time converting online customer visits into sales.

According to the company's director of marketing, "We were constantly making changes to our website and offering special online promotions, but we found that some changes were having an opposite impact on sales than we were expecting. It seemed like one step forward often meant taking two steps backward."

The company later on implemented customer analytics solution provided by Deloitte. The retailer analyzed its customer data against industry benchmarks to identify where customers were leaving the funnel and to pinpoint reasons for the fracture. The retailer soon discovered, most of its online customers were looking for a direct route to the products they want to buy; in most cases, they would spend no more than one minute trying to locate a particular item.

In recognizing the value of a streamlined shopping experience the retailer was able to simplify the customer's digital experience, reduce points of fracture, and increase conversions. The company learned that fewer clicks resulted in more sales, the easier it is for customers to find a particular product, the more likely they will make a purchase. Repairing the fractures in the digital shopping experience and guiding the customer through the purchasing funnel more effectively resulted in improved results for this major retailer.

As further enhancements to the retailer's digital site are proposed, analytics will be used to determine whether or not certain enhancements will have the desired effect on the customer's digital journey before they are implemented, helping to increase investment and improve returns quickly.

Their Director Marketing commented, "With a mobile marketplace that represents almost $600 billion in business a year—and growing—every incremental increase in conversion rates represents significant sales growth. By relying on Deloitte to help us get inside e-Commerce data to streamline the customer journey, we can build a more dynamic, engaging digital experience for our customers. And allocating resources more effectively means earning a higher return on our digital investment and increasing sales."

Questions:

(a) With reference to the case, highlight the importance of Analytics in Retail Industry **5.5**

(b) How could the retailer improve its digital shopping experience and benefit using Deloitte's analytical solution? **5.5**

OR

Q.7 (a) How do analytics help retailers improve their sales performance goals? **5.5**

(b) Analytics contribute in enhancing and adding value and streamlining the customer shopping experience. Comment. **5.5**

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