Seat No.: _____   Enrolment No._____

GUJARAT TECHNOLOGICAL UNIVERSITY
MBA – SEMESTER –IV-EXAMINATION – SUMMER-2022

Subject Code: 1549302   **Date: 13-07-2022**
Subject Name: Business Analytics
Time: 10:30 AM TO 01:30 PM   **Total Marks: 70**

Instructions:

1. **Attempt all questions.**
2. **Make suitable assumptions wherever necessary.**
3. **Figures to the right indicate full marks.**

Q.1	Explain the terms.	**14**
	1. Data Base	
	2. Business Analytics	
	3. OLAP	
	4. Data Warehouse	
	5. Predictive Analysis	
	6. Big Data	
	7. Data Mining	
Q.2	**(a)** Explain Business Environment Factors which create pressure on Organization to shift from Conventional company to IT driven Company.	**07**
	(b) Explain Business Analytics and its type Descriptive, Predictive and Prescriptive with suitable examples.	**07**

OR

	(b) A pharma co. has retail medicine stores in various cities across India. As part of extended service, it has a small clinic in each of the stores where patients for nominal cost can visit for outpatient needs. Patients who come to this clinic often buy medicine from the store. The Co. is interested in cultivating personalized relation with regular patients so that it can provide better service.

You are required to design a predictive model analytics platform to address this need with all the necessary required assumptions. | **07** |
| **Q.3** | **(a)** Explain difference between OLAP and OLTP systems. | **07** |
| | **(b)** Explain different sources of digital data that we generate every day with suitable examples. | **07** |

OR

Q.3	**(a)** Analyze and explain how web analytics can be effective tool for Business assessment.	**07**
	(b) Explain semi- structured data and also list sources of semi structured data.	**07**
Q.4	**(a)** Why Big data is important? Also discuss with suitable examples who uses Big data?	**07**
	(b) Explain HR Analytics and how it may help to have effective Human Resource Management in an Organization.	**07**

Q.4 **(a)** Define Business Performance Management Cycle and Design KPIs for any Service Unit with suitable examples. **07**

(b) Discuss the role of Analytics in Retail Industry In India. **07**

Q.5 **The Dream Employee:**

A group of students studying MBA (Second Year) at a management Institute in India went for a study tour to five other partnering MBA Institutes. This part of a learning intervention model that was launched by 20 MBA schools in India. Healthy academic discussions and exchange of knowledge was the primary focus areas of this activity. Clad in business suits, students were looking as Industry Professionals. Discussions revolved around coursework, syllabus, and structure of programme, industry interventions, guest lectures, facilities at the institute (library, canteen, hostel, class rooms and so on) and placements. During one of the evening tea session discussions, one of the student, Sushma said that data science is an upcoming area for recruitment by many organisations. Business Analysts are getting a heavy pay package. Several heads turned towards her. Akshay said he had heard that too. Roshan said that he has his bachelor's degree in IT engineering: data science is just an extension of the concepts taught to him in his B.Tech Programme. Paulomi who is a computer engineer disagreed. She said they are related concepts but in B School one needs to see it from lens of a manager. Devika a Science graduate is confused. She says that if Data Science is such an important area of recruitment why they are discussing it now in second year? This should have been taught in the first year. How is it related to the four core disciplines- marketing, finance, operations and HR?

Jaydeep, Kartik and Vandana are majoring in BA. They said, "wait a minute friends: let us explain and they narrated in detail about the relationship that exists between data science and the associated fields of study which includes BA. They further explained that their management Institute had done a deep study in looking at the needs of organisations od constantly processing business data in large quantities for supporting managerial decision making. Additionally there has been a leap in quality of job opportunity arising due to digital age. To build a resource pool in this area, their institute had recently launched a special major in this BA. The discussion continue till late in the evening on its merits and courses. Some who understood it participated whereas there were others who shelved it away as too technical and not their cup of tea.

The next day there was a speaker series organised for them where senior employees from online retail giants addressed them. The marketing heads discussed among many things the relevance of analysing digital information for effective decision making, so did the finance, HR and the operations managers in their respective domain. They reiterated in many different ways that a dream employee is one who has the domain expertise which comes with time and experience and is able to look at varied sources of data to suggest means of filtering out relevant content, is able to suggest the analytical techniques to process the data and finally read and communicate the outcomes for its appropriate use in decision

making. A resource having all of these qualities together is hard to find. However paperless future will value such resources and hence capabilities need to be built around them.

Q.5 **(a)** Design the kind of capabilities that need to be built for an MBA students to be hired in HR Analytics department of an organization. **07**

(b) Design the kind of capabilities that need to be built for an MBA students to be hired in Marketing Analytics department of an organization. **07**

OR

Q.5 **(a)** Design the kind of capabilities that need to be built for an MBA students to be hired in Financial Analytics department of an organization. **07**

(b) Design the kind of capabilities that need to be built for an MBA students to be hired in Operations Analytics department of an organization. **07**

****