Seat No.: _____     Enrolment No._____

# GUJARAT TECHNOLOGICAL UNIVERSITY
## MBA – SEMESTER – II - EXAMINATION – SUMMER 2022

**Subject Code: 4529201**     **Date: 05/08/2022**
**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. No. | Question Text and Description | Marks |
|---|---|---|
| **Q.1** | Briefly explain the below terms | 14 |
| | (a) Business Intelligence | |
| | (b) Business Performance Management | |
| | (c) Data Mart | |
| | (d) Structured Data | |
| | (e) Data Mining | |
| | (f) Big Data | |
| | (g) Marketing Analytics | |
| **Q.2** | **(a)** Define Business Analytics. Discuss the Need and Components of Business Analytics with relevant examples. | **07** |
| | **(b)** How can business managers use the Descriptive, Predictive and Prescriptive Analytics for making better business decisions? Discuss with examples. | **07** |
| | **OR** | |
| | **(b)** Define and list the important differences between OLTP and OLAP operations and uses for business purposes. List some Data models for OLTP and OLAP. | **07** |
| **Q.3** | **(a)** Compare and Contrast the sources, storage, characteristics and limitations of Unstructured and Structured Data with relevant examples. | **07** |
| | **(b)** What is a Data Warehouse? Explain some of the important characteristics of Data Warehousing. | **07** |
| | **OR** | |
| **Q.3** | **(a)** What is a Business Report? What are the main characteristics of a Business Report? | **07** |
| | **(b)** Define and explain the important differences between Data Visualization and Visual Analytics. | **07** |
| **Q.4** | **(a)** List and Explain the steps of the process of Data Mining. Discuss some business applications of Data Mining. | **07** |
| | **(b)** Define Text Analytics and Text Mining. List and explain some of the practical applications of Text Mining in the areas of Marketing, Security, Bio-Medical and Academics. | **07** |
| | **OR** | |
| **Q.4** | **(a)** Discuss the characteristics of Big Data. How Big Data can help business managers make effective decisions for their organizations? Explain with practical examples. | **07** |

**(b)** Define Business Performance Management. Explain the concept and distinguishing features of Key Performance Indicator and Dashboards.    **07**

**Q.5** **CASE STUDY:**

Great Clips, the world's largest and fastest growing salon has more than 3,000 salons throughout the United States and Canada. Great Clips franchise success depends on a growth strategy that is driven by rapidly opening new stores in the right locations and markets. The company needed to analyze the locations based on the requirements for a potential customer base, demographic needs and sales impact on existing franchisees in the target locations.

Choosing a good site is of utmost importance. The current processes took a long time to analyze a single site and a great deal of labor requiring intensive analyst resources was needed to manually assess the data from multiple data sources.

With thousands of locations analyzed each year, the delay was risking the loss of prime sites to competitors and was proving expensive. Great clips employed external contractors to cope with the delay. Great Clips created a site selection workflow application to evaluate the new salon site locations by using the geospatial analytical capabilities of Alteryx. A new site location was evaluated by its drive time proximity and convenience for serving all the existing customers of the Great Clips network in the area. The Alteryx based solution also enabled evaluation of each new location based on demographics and consumer behavior data, aligning with existing Great Clips customer profiles and the potential impact of new site revenue on the existing sites. As a result of using location based analytic techniques Great Clips was able to reduce the time to assess new locations by nearly 95 percent. The labour intensive analysis as automated and developed into a data collection analysis, mapping and reporting application that could be easily used the non technical real estate managers. Furthermore, it enabled the company to implement proactive predictive analytics for a new franchise location because the whole process now took just a few minutes.

**(a)** How is geo spatial analytics employed at Great Clips?    **07**

**(b)** What criteria should a company consider in evaluating sites for future locations?    **07**

**OR**

**Q.5** **(a)** What were the limitations of the old method of site selection of Great Clips?    **07**

**(b)** Can you think of other applications where such geospatial data might be useful?    **07**

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