Business Analytics

Module No. 1: Introduction to Business Analytics
1. Define the meaning of Business Analytics and differentiate it from Business Intelligence.
2. Analyze the importance and scope of Business Analytics in decision-making processes.
3. Identify and categorize the different types of Business Analytics: Descriptive, Diagnostics, Predictive, Prescriptive.
4. Evaluate the architecture of Business Analytics and its applications in various industries.
5. Demonstrate an understanding of Data Science and Big Data in the context of Business Analytics.

Module No. 2: Role of Data in The Organization
1. Identify various sources of data and their significance in organizational decision-making.
2. Evaluate the importance of data quality and strategies for dealing with missing or incomplete data.
3. Differentiate between Structured, Semi-Structured, and Unstructured Data and their implications for analysis.
4. Analyze the concepts of Data warehouse, Data mining, Data Integration, and Data profiling for organizational use.

Module No. 3: Tools Used for Data Analytics
1. Assess different types of data analytics software, including open source and proprietary options.
2. Utilize R, JAMOVI, GRETL, and Python for data analysis tasks such as importing, saving data, running descriptive statistics, and interpreting results.
3. Apply data visualization techniques using plotting charts and deriving insights from the data using the specified software tools.

Module No. 4: Database Orientation
1. Define database structures and types, including DBMS and RDBMS.
2. Explain SQL features, commands, and languages for database management.
3. Implement DDL and DML commands in SQL for data manipulation and query purposes.
4. Utilize Aggregate Functions and Relational Algebra for database operations.

Module No. 5: Data Visualization Using Tableau (Public Version)
1. Understand the concepts of Dimensions and measures in Tableau for data visualization.
2. Create various types of charts such as Pie, Column, Line, Bar, Area, Scatter, Bubble, and Stock Charts using Tableau.
3. Design and present data insights through dashboards and storyboards using Tableau.
4. Execute practical examples in Tableau to gain hands-on experience in data visualization techniques.

By the end of this course, students will be able to demonstrate proficiency in using various tools and techniques in Business Analytics for effective decision-making and data analysis in organizational settings.