

Subject Title	<b>Paper MJR 103: DATA-DRIVEN DECISION MAKING</b>		
Class/Group	<b>B. Com (Business Analytics) (CBCS) Only</b>	Semester	<b>I</b>
Paper: MJR 103		Max. Marks: 70EE+30IE=100	
PPW: 5 Hrs.		Exam Duration: 3Hrs	
<b>COURSE OUTCOMES MJR 103-Data-Driven Decision Making - 5 Credits</b>			
CO 1	To make students to learn data-driven decision making.		
CO 2	To understand the concepts of Business Analysis Principles		
CO 3	To acquaint the students with the basics SQL language - Key aspects of ACID - ETL- Big data and other data storage tools		
CO 4	To understand about the Data Life Cycle and stages in the data life cycle		
CO 5	Requirements gathering process: Analyze why requirement gathering process is critical to proper analysis - 3 V's of Data		

**Objective:** To make students to learn data-driven decision making.

UNITS	CONTENTS
I	<b>DISRUPTION:</b> Challenges: Identify hurdles to becoming a data-driven organization - Opportunities: Analyze data practices in the organization - Identify how data can benefit the organization - Distinguish how to be a proactive data practitioner
II	<b>BUSINESS ANALYTICS PRE-REQUISITES:</b> Business Analysis Principles: Identify the categories of analytical people - Distinguish and define roles and responsibilities of professionals in data analysis - Data Driven Decision Making: Identify cultural barriers - Distinguish solutions to cultural and cross-functional barriers - Identify six steps of the data-driven decision-making model.
III	<b>BUSINESS ANALYTICS ECOSYSTEM:</b> Relational Databases: Nature of relational databases - Purpose of the SQL language - Key aspects of ACID - Meaning of ETL - Not Only SQL: Big data and other data storage tools - Interacting with MongoDB - Document stores and graph stores - Big Data: Key functions of big data technologies - Utility of Hadoop - Purpose of MapReduce - Statistical Tool, Machine Learning, and Data Visualization: Tools for statistical analysis - Python and R - Purpose of machine learning - Visualization tools.
IV	<b>DATA LIFECYCLE MANAGEMENT:</b> Data Life Cycle: Identify the stages in the data life cycle - Data in the organization: Distinguish between ways that data enters the organization - Identify the forms data takes as it is stored and used within the organization.
V	<b>REQUIREMENTS GATHERING:</b> Requirements gathering process: Analyze why requirement gathering process is critical to proper analysis - 3 V's of data: Distinguish between the ways data is consumed (the three V's of data) - Customer journey map: Understand how requirement gathering fits with the development of a customer journey map - Distinguish between the stages of the customer journey map.
Reference	<b>Text Books &amp; Reference Books</b> <ol style="list-style-type: none"> <li>1. Data Analysis Fundamentals Certificate; AICPA</li> <li>2. Fundamentals of Business Analytics, 2nd Edition; R N Prasad, Seema Acharya; Wiley</li> <li>3. Business Analysis with Microsoft Excel and Power BI, 5th edition; Conrad G. Carlberg; Pearson</li> <li>4. Monetizing Your Data: A Guide to Turning Data into Profit-Driving Strategies and Solutions; Andrew Roman Wells, Kathy Williams Chiang; Wiley</li> <li>5. AI and Analytics, Accelerating Business Decisions; Sameer Dhanraj ani; Wiley</li> <li>6. Data Analytics with R; Bharti Motwani; Wiley.</li> </ol>