

Subject Title	Paper DSC 303: DATA ANALYTICS MODELING		
Class/Group	B. Com (Business Analytics) (CBCS)	Semester	III
Paper: DSC 303			Max. Marks: 70EE+30IE=100
PPW: 5 Hrs.			Exam Duration: 3Hrs

COURSE OUTCOMES DSC 303- DATA ANALYTICS MODELING, 5 Credits	
CO 1	Describe the principles, techniques, and business policies for collecting, organizing, managing, analyzing, and reporting information.
CO 2	Describe the process of data analytics from data acquisition to recommendations based on data
CO 3	Describe different methods and tools for data collection and their impact on analysis of data
CO 4	Identify the concepts of the relational model, normalization, dependencies, integrity, and constraints.

Objective: To make students to learn data Analytics Modeling.

UNITS	CONTENTS
I	UNDERSTANDING YOUR BUSINESS: Identify business value - Determine how business and corporate drivers impact the strategic direction of the business - Analyze different project processes used in working with data - Compare different types of data.
II	DATA PROFILING & CLEANSING: Data Profiling: Identify core data profiling tasks - Identify outliers - Use tools for data profiling - Data Cleansing: Identify core data cleansing tasks - Use tools for cleansing.
III	ETL (EXTRACT, TRANSFORM, AND LOAD): Data Quality and MDM: Identify role of data quality in organization - Identify role of MDM in organization - Use tools for data quality and MDM - ETL Tools: Distinguish between ETL processes - Use Talend Data Integration - Use MSSQL SSIS
IV	DATA WAREHOUSING: Data Warehousing: Identify purpose of data warehousing - Identify between key components of a data warehouse - Distinguish between data warehouses and data lakes - Determine the role of different warehousing techniques - Data Warehousing Tools: Differentiate between utility of relational DW, cubes, and in-memory scenarios - Compare techniques for data integration with regards to warehousing - Use warehousing tools - Use integration tools for warehousing.
V	UNDERSTANDING DATA: Overview: Identify data roles in the organization - Determine how data moves through the data lifecycle - Data Modeling: Identify the role of data modeling in the organization - Analyze data modeling techniques - Use tools for data modeling - Structured Data Tools: Identify core tools for RDBMS's (structured storage) - Use SQL to perform CRUD tasks against a database - Unstructured Data Tools: Identify tools in unstructured stack - Use tools for unstructured data management
Reference	Text Books & Reference Books. 1. Data Analytics Modeling Certificate; AICPA 2. Fundamentals of Business Analytics, 2nd Edition; R N Prasad, Seema Acharya; Wiley 3. Business Analysis with Microsoft Excel and Power BI, 5th edition; Conrad G. Carlberg; Pearson 4. Data Analytics with R; Bharti Motwani; Wiley