ST. VINCENT PALLOTTI COLLEGE OF ENGINEERING & TECHNOLOGY,NAGPUR

(An autonomous institution affiliated to Rashtrasant Tukadoji Maharaj Nagpur University)

B. Tech. Scheme of Examination & Syllabus 2023-24

COMPUTER SCIENCE & ENGINEERING (DATA SCIENCE)

SIXTH SEMESTER

Course Code	Course Name	Th	Tu	Pr	Credits	Evaluation		
DS605T(i)	**Open Elective II :Business Intelligence**	**3**	**-**	**-**	**3**	CA	ESE	Total
						30	70	100

Course Objectives	Course Outcomes
This course is intended To enhance the ability of a student for examining Business Intelligence (BI) as a broad category of applications and technologies for gathering, storing, analyzing, sharing and providing access to data to help enterprise users make better managerial decisions	**Students will be able to** ● Explain the fundamentals of business intelligence ● Link data mining with business intelligence. ● Articulate modern BI concepts and practices, including knowledge integration, sourcing and managing BI solutions. ● Realize the crucial role that Business Intelligence plays in careers as well as in business and society in the 21st century.

Unit I [8Hrs]

Introduction : Introduction to Business Intelligence & Analytics (BIA), drivers of BIA, types of analytics: descriptive to prescriptive, Technical architecture of BIA, case analysis of AT&T Long distance, fundamentals of data management, OnLine Transaction Processing (OLTP), design process of databases

Unit II [8Hrs]

Basic Analysis Techniques: Technical architecture of BIA, case analysis of AT&T Long distance, fundamentals of data management, OnLine Transaction Processing (OLTP), design process of databases, Descriptive analytics, and visualization, customer analytics, survival analysis, customer lifetime value

Unit III [8Hrs]

Case studies and projects: Data mining process, introduction to statistical learning, data pre-processing, data quality, overview of data mining techniques, classification techniques, scoring models, classifier performance, ROC and PR curves, decision trees, tree induction, measures of purity, tree algorithms, pruning, ensemble methods

Unit IV [8Hrs]

Decision Making and Decision Support Systems: A BI perspective, Foundation and Technologies for decision Making,Information gathering ,Managing BI,BI User Segmentation,Gathering BI Requirements, Introduction to Tableau.

Unit V [8Hrs]

Modeling and Analysis,Knowledge Management and Collaborative Systems,Strategic Approach to BISocial media, big data and data mining,Business Analytics: Emerging Trends and Future Impacts

Text Books

S.N	Title	Authors	Edition	Publisher
1	Business Intelligence: The Savvy Manager's Guide	David Loshin		Newnes
2	Business Intelligence: Practices, Technologies, and Management	1. Rajiv Sabherwal, Irma Becerra-Fernandez.John		Wiley & Sons.

Reference Books

S.N	Title	Authors	Edition	Publisher
1	Business Intelligence: Making Decisions Through Data Analytics, ,	Jerzy Surma,		Business Expert Press

		February 2023	1	Applicable for 2023-24
Chairman - BoS	Dean – Academics	Date of Release	Version	