

Subject: DATABASE ADMINISTRATION AND DATA MINING
Title: DATABASE ADMINISTRATION AND DATA MINING
[GENERIC CORE]

Semester: V	Credits: 3	Subject Code: BB52202	Lectures: 48
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Course Outcomes:

At the end of this course the learner will be able to:

- Identify the concepts of the Database Management System
- Analyze the concepts of RDBMS
- Recognize the concept of Data Mining
- Classify the current trends in Data Management

Unit 1: Introduction to Database Management System

22

- Introduction,
- Objectives
- DBMS concepts
 - Entity
 - Attribute
 - Relationship types
- Purpose of Database System
- Advantages and Disadvantages of Database System

Unit 2: Database Administration

8

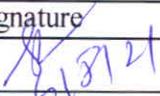
- Introduction
- Transaction states
- Purpose of Database administration
- Concept of Database Administration
- Introduction of RDBMS
- Transaction management, Properties of Transaction (ACID Properties)

Unit 3: Data Warehousing

14

- Introduction
- Purpose
- Data Warehousing concepts
- Need of Data Warehousing
- Applications



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- Advantages
- Limitations

Unit 4: Data Analytics and Data Mining

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- Introduction
- Purpose
- Data Analytics Scope, and it's Business Relevance.
- Types of Data Analytics.
- Data Mining concepts
 - Need of Data Mining,
 - Applications
 - Advantages
 - Data Mining Process
 - Limitations
- Cloud Computing
 - Introduction
 - Purpose
 - Cloud
 - Computing concepts
- Need of Cloud Computing
 - Applications
 - Advantages
 - Limitations

#12 hours for Library work, assignments, practical or field work

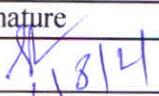
Recommended Text Books:

- ElmasriRamez, NavatheShankant, *Fundamentals of Database System*, Pearson Education; Seventh edition
- Parteek Bhatia, *Data Mining and Data Warehousing: Principles and Practical Techniques*, Cambridge University Press

Reference Books:

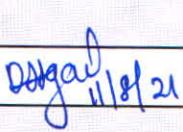
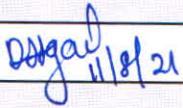
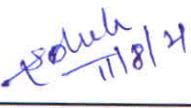
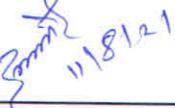
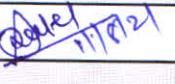
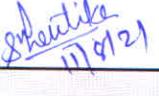
- Abraham Silberschatz, Henry F. Korth, S. Sudarshan, *Database System Concepts*, McGraw Hill Education; Sixth edition
- Pang-Ning Tan, Michael Steinbach, Vipin Kumar, *Introduction to Data Mining*, Pearson Education; First edition
- Sandeep Bhowmik ,*Cloud Computing* , Cambridge University Press; First edition

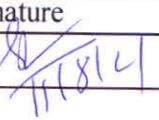


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Websites:

- www.w3cschool.com

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Faculty*	Asst Prof Monika Rajguru	 Monika 11/8/21
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Subject Expert (Outside SPPU)	Dr. Sagar Jambhorkar	 Sagar 11/8/21
VC Nominee	Prof Anjum Patel	 Anjum 11/8/21
Industry Expert	Ms. Shruti Wayal	 Shruti 11/8/21
One Alumni***	Ms. Vidhi Thakkar	

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