

<b>Program Name</b>	<b>B. Tech. (Computer Engineering)</b>	<b>Semester – VII</b>
<b>Course Code</b>	<b>R4CO4001P</b>	
<b>Course Title</b>	<b>Data Mining and Data Warehousing Lab</b>	
<b>Prerequisite</b>	<b>Statistics, Data Structures and Algorithms</b>	

<b>COURSE OUTCOMES: Students will be able to</b>	
1.	Investigate different data mining and data warehouse tasks and evaluate the algorithms with respect to their accuracy.
2.	Compare the results of a data mining exercise and analyze the results.
3.	Design a data mining solution to a practical problem.

#### **LIST OF EXPERIMENTS:**

	<b>Hrs</b>	<b>CO</b>
1. To perform a multidimensional data model using SQL queries. e.g., snowflake, star and fact constellation schema.	2	1
2. To perform various OLAP operations such as: slice, dice, roll up, drill up etc.	2	1
3. To perform data cleaning and preparing for operations	2	1,2
4. Study of Decision Trees and other classification Algorithms.	4	2,3
5. To perform association rule mining	4	2, 3
6. Study of predictive algorithms.	2	2, 3
7. Study of clustering and its different techniques.	4	2, 3
8. To perform text mining on the given data warehouse and perform correlation analysis between for the given data sets	2	2, 3

#### **TEXTBOOKS**

- 1 Pang-Ning Tan, Michael Steinbach and Vipin Kumar, “Introduction to Data Mining”, Pearson Education, ISBN: 978-93-3257-140-2
- 2 Jiawei Han, Micheline Kamber, and Jian Pei, “Data Mining Concepts and Techniques”, 3<sup>rd</sup> Edition, Morgan Kaufmann, ISBN: 978-93-80931-91-3

#### **RECOMMENDED READING**

- 1 M. Berry and G. Linoff, “Mastering Data Mining”, John Wiley and Sons, 2<sup>nd</sup> Edition.
- 2 I.H. Witten and E. Frantk, “Data Mining: Practical Machine Learning Tools and Techniques”, Morgan Kaufmann, 4<sup>th</sup> Edition.