

**SCHEME OF COURSE WORK**  
**Department of Information Technology**

**Course Details:**

<b>Course Title</b>	<b>DATA WAREHOUSING AND DATA MINING LAB</b>
<b>Course Code</b>	<b>15CT1140</b>
<b>Program:</b>	<b>B.TECH</b>
<b>Semester</b>	<b>VII</b>
<b>Prerequisites</b>	<b>Python Lab/Java</b>

<b>CO No.</b>	<b>Course outcomes</b>
CO1	Able to get the acquaintance to WEKA tool
CO2	Competent to preprocess the data for mining
CO3	Proficient in generating association rules
CO4	Able to build various classification models
CO5	Able to realize clusters from the available data

**CO-PO-PSO Mapping:**

<b>Course outcomes</b>	<b>PO1</b>	<b>PO2</b>	<b>PO3</b>	<b>PO4</b>	<b>PO5</b>	<b>PO6</b>	<b>PO7</b>	<b>PO8</b>	<b>PO9</b>	<b>PO10</b>	<b>PO11</b>	<b>PO12</b>	<b>PSO1</b>	<b>PSO2</b>	<b>PSO3</b>
CO1	3		2	2	2										
CO2			2	3	2								1	1	1
CO3	3	3	2	3	2								1		
CO4	3	3	2	3	2								1		
CO5	3	3	2	3	2								1	1	

<b>Assessment Methods:</b>	Viva voce / Mid-Test
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### Teaching-Learning and Evaluation

Week	EXPERIMENT	Course Outcomes	TEACHING-LEARNING STRATEGY	Assessment Method & Schedule
1	Basics of WEKA tool a. Investigate the Application interfaces. b. Explore the default datasets.	CO-1	<ul style="list-style-type: none"> <li>▫ Demonstration</li> <li>▫ Implementation</li> </ul>	Lab Internal-1, Viva Voce (Week 8)
2	Pre-process a given dataset based on the following: a. Attribute Selection b. Handling Missing Values c. Discretization d. Eliminating Outliers	CO-2	<ul style="list-style-type: none"> <li>▫ Demonstration</li> <li>▫ Implementation</li> </ul>	Lab Internal-1, Viva Voce (Week 8)
3	Pre-process a given dataset based on the following: a. Discretization b. Eliminating Outliers	CO-2	<ul style="list-style-type: none"> <li>▫ Demonstration</li> <li>▫ Implementation</li> </ul>	Lab Internal-1, Viva Voce (Week 8)
4	Create a dataset in ARFF (Attribute-Relation File Format) for any given dataset and perform Market-Basket Analysis.	CO-2	<ul style="list-style-type: none"> <li>▫ Demonstration</li> <li>▫ Implementation</li> </ul>	Lab Internal-1, Viva Voce (Week 8)
5	Generate Association Rules using the Apriori algorithm.	CO-3	<ul style="list-style-type: none"> <li>▫ Demonstration</li> <li>▫ Implementation</li> </ul>	Lab Internal-1, Viva Voce (Week 8)
6	Generate Association Rules using the FP-Growth algorithm.	CO-3	<ul style="list-style-type: none"> <li>▫ Demonstration</li> <li>▫ Implementation</li> </ul>	Lab Internal-1, Viva Voce (Week 8)
7	Build a Decision Tree by using ID3 algorithm	CO-4	<ul style="list-style-type: none"> <li>▫ Demonstration</li> <li>▫ Implementation</li> </ul>	Lab Internal-2 Viva Voce (Week 16)
8	Demonstration of classification rule process on a given dataset using Naïve Bayesian Classifier.	CO-4	<ul style="list-style-type: none"> <li>▫ Demonstration</li> <li>▫ Implementation</li> </ul>	Lab Internal-2 Viva Voce (Week 16)
9	Demonstration of classification rule process on a given dataset using Back propagation (Multi-layer perceptron) Classifier	CO-4	<ul style="list-style-type: none"> <li>▫ Demonstration</li> <li>▫ Implementation</li> </ul>	Lab Internal-2 Viva Voce (Week 16)
10	Build various Regression models.	CO-4	<ul style="list-style-type: none"> <li>▫ Demonstration</li> <li>▫ Implementation</li> </ul>	Lab Internal-2 Viva Voce (Week 16)
11	Cluster the given dataset by using the k-Means Clustering algorithm and visualize the cluster mean	CO-5	<ul style="list-style-type: none"> <li>▫ Demonstration</li> <li>▫ Implementation</li> </ul>	Lab Internal-2 Viva Voce

	values and standard deviation of dataset attributes			(Week 16)
12	Cluster the given dataset by using the DBSCAN Clustering algorithm	CO-5	<ul style="list-style-type: none"> <li>▫ Demonstration</li> <li>▫ Implementation</li> </ul>	Lab Internal-2 Viva Voce (Week 16)
13	Cluster the given dataset by using the Expectation Maximization Clustering algorithm.	CO-5	<ul style="list-style-type: none"> <li>▫ Demonstration</li> <li>▫ Implementation</li> </ul>	Lab Internal-2 Viva Voce (Week 16)
<b>18</b>	Lab Internal-2			
<b>19/20</b>	<b>Lab External Exam</b>			