



**GURU GOBIND SINGH INDRAPRASTHA UNIVERSITY,  
EAST DELHI CAMPUS,  
SURAJMAL VIHAR-110092**

|  |   |             |             |             |             |             |             |             |             |                |             |             |
|--|---|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|----------------|-------------|-------------|
| <b>Semester: 6<sup>th</sup></b>  |   |             |             |             |             |             |             |             |             |                |             |             |
| <b>Paper code: AIML304P</b>  |   |             |             |             |             |             |             | <b>L</b>    | <b>T/P</b>  | <b>Credits</b> |             |             |
| <b>Subject: Introduction to Data Mining Lab</b>  |   |             |             |             |             |             |             | <b>0</b>    | <b>2</b>    | <b>1</b>       |             |             |
| <b>Marking Scheme:</b>   |   |             |             |             |             |             |             |             |             |                |             |             |
| 1. Teachers Continuous Evaluation: As per university examination norms from time to time   |   |             |             |             |             |             |             |             |             |                |             |             |
| 2. End term Examination: As per university examination norms from time to time   |   |             |             |             |             |             |             |             |             |                |             |             |
| <b>INSTRUCTIONS TO EVALUATORS: Maximum Marks: As per university norms</b>  |   |             |             |             |             |             |             |             |             |                |             |             |
| 1. This is the practical component of the corresponding theory paper.  |   |             |             |             |             |             |             |             |             |                |             |             |
| 2. The practical list shall be notified by the teacher in the first week of the class commencement under the intimation to the office of the HOD/ Institution in which they appear is being offered from the list of practicals below. |   |             |             |             |             |             |             |             |             |                |             |             |
| 3. Instructors can add any other additional experiments over and above the mentioned in the experiment list which they think is important.   |   |             |             |             |             |             |             |             |             |                |             |             |
| 4. At least 8 experiments must be performed by the students.   |   |             |             |             |             |             |             |             |             |                |             |             |
| <b>Course Objectives:</b>  |   |             |             |             |             |             |             |             |             |                |             |             |
| <b>1.</b>  | To perform preprocessing on real world datasets.  |             |             |             |             |             |             |             |             |                |             |             |
| <b>2.</b>  | To develop models using different data mining techniques on complex datasets.             |             |             |             |             |             |             |             |             |                |             |             |
| <b>Course Outcomes:</b>  |   |             |             |             |             |             |             |             |             |                |             |             |
| <b>CO1</b>   | Analyze and apply pre-processing techniques to prepare and process real life datasets.    |             |             |             |             |             |             |             |             |                |             |             |
| <b>CO2</b>   | Implement different clustering or classification techniques for varying sets of problems. |             |             |             |             |             |             |             |             |                |             |             |
| <b>Course Outcomes (CO) to Programme Outcomes (PO) Mapping</b>   |   |             |             |             |             |             |             |             |             |                |             |             |
| (Scale 1: Low, 2: Medium, 3: High)   |   |             |             |             |             |             |             |             |             |                |             |             |
| <b>CO/PO</b>   | <b>PO01</b>   | <b>PO02</b> | <b>PO03</b> | <b>PO04</b> | <b>PO05</b> | <b>PO06</b> | <b>PO07</b> | <b>PO08</b> | <b>PO09</b> | <b>PO10</b>    | <b>PO11</b> | <b>PO12</b> |
| <b>CO1</b>   | 2   | 1           | -           | 2           | 3           | -           | 1           | -           | -           | 1              | -           | -           |
| <b>CO2</b>   | 2   | 2           | -           | 3           | 3           | -           | -           | -           | -           | -              | 1           | 2           |

**List of Experiments**

1. Introduction and installation of WEKA tool.
2. Perform data pre-processing including cleaning, integration and transformation on ARFF files using WEKA.
3. Apply association rule mining on ARFF files using WEKA.
4. Implementation of Neural Network technique on ARFF files using WEKA.
5. Implementation of Bagging and Boosting techniques on ARFF files using WEKA.
6. Apply the concept of Voting ensemble method to ARFF files and compare the results with single classifiers.
7. Implementation of Visualization technique on ARFF files using WEKA.
8. Implementation of Clustering technique on ARFF files using WEKA.
9. Study of DBMINER tool.



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10. Apply pre-processing and classification/regression techniques on a real-world dataset.  
Evaluate the performance of classification techniques using different parameters.