Semester: 4th			
Paper code: AIDS258/AIML258	**L**	**P**	**Credits**
Subject: Fundamentals of Machine Learning Lab	**0**	**2**	**1**
Marking Scheme			

3. Teachers Continuous Evaluation: As per university examination norms from time to time
4. End term Examination: As per university examination norms from time to time

INSTRUCTIONS TO EVALUATORS: Maximum Marks: As per university norms

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 the 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.

Course Objectives:

3.	To formulate and analyse algorithm based on machine learning.
4.	To design the use cases of machine learning algorithms as per the user requirement.

Course Outcomes:

CO1	Apply and differentiate machine learning algorithms for regression, classification and prediction problems.
CO2	Implement supervised and unsupervised machine learning models to analyse data for executing feature engineering and feature selection for real-life scenarios.

CO/PO	PO01	PO02	PO03	PO04	PO05	PO06	PO07	PO08	PO09	PO10	PO11	PO12
CO1	3	3	3	3	3	1	1	1	1	1	1	2
CO2	3	3	3	3	3	1	1	1	1	1	2	1

LIST OF EXPERIMENTS:

1. Study and Implement Linear Regression.
2. Study and Implement Logistic Regression.
3. Study and Implement K Nearest Neighbour (KNN).
4. Study and Implement classification using SVM.
5. Study and Implement Bagging using Random Forests.
6. Study and Implement Naive Bayes.
7. Study and Implement Decision Trees.
8. Study and Implement K-means Clustering to Find Natural Patterns in Data.
9. Study and Implement Gaussian Mixture Model Using the Expectation Maximization.
10. Study and Implement Classification based on association rules.
11. Study and Implement Evaluating ML algorithm with balanced and unbalanced datasets.
12. Comparison of Machine learning algorithms based on different-different parameters.