Supervised and Deep Learning Lab			С
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Discipline(s) / EAE / OAE	Semester	Group	Sub-group	Paper Code
EAE	7	MLDA-EAE	MLDA-EAE-3	ML-463P

## **Marking Scheme:**

- 1. Teachers Continuous Evaluation: 40 marks
- 2. Term end Theory Examinations: 60 marks

## Instructions:

- 1. The course objectives and course outcomes are identical to that of (Supervised and Deep Learning) as 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 intimation to the office of the Head of Department / Institution in which the paper is being offered from the list of practicals below. Atleast 10 experiments must be performed by the students, they may be asked to do more. Atleast 5 experiments must be from the given list.
- 1. Linear regression: Implement linear regression on a dataset and evaluate the model's performance.
- 2. Logistic regression: Implement logistic regression on a binary classification dataset and evaluate the model's performance.
- 3. k-Nearest Neighbors (k-NN): Implement k-NN algorithm on a dataset and evaluate the model's performance.
- 4. Decision Trees: Implement decision trees on a dataset and evaluate the model's performance.
- 5. Random Forest: Implement random forest algorithm on a dataset and evaluate the model's performance.
- 6. Support Vector Machines (SVM): Implement SVM on a dataset and evaluate the model's performance.
- 7. Naive Bayes: Implement Naive Bayes algorithm on a dataset and evaluate the model's performance.
- 8. Gradient Boosting: Implement gradient boosting algorithm on a dataset and evaluate the model's performance.
- 9. Convolutional Neural Networks (CNN): Implement CNN on an image classification dataset and evaluate the model's performance.
- 10. Recurrent Neural Networks (RNN): Implement RNN on a text classification dataset and evaluate the model's performance.
- 11. Long Short-Term Memory Networks (LSTM): Implement LSTM on a time-series dataset and evaluate the model's performance.
- 12. Autoencoders: Implement autoencoders on an image dataset and evaluate the model's performance.
- 13. Generative Adversarial Networks (GANs): Implement GANs on an image dataset and evaluate the model's performance.
- 14. Transfer Learning: Implement transfer learning on an image dataset and evaluate the model's performance.
- Reinforcement Learning: Implement reinforcement learning on a game environment and evaluate the model's performance.