AI TOOLS LAB

Course Code	19ES1351	Year	II	Semester	I
Course Category	ES	Branch	EEE	Course Type	Practical
Credits	1	L-T-P	0-0-2	Prerequisite	-
Continuous Internal Evaluation:	25	Semester End Evaluation:	50	Total Marks:	75

Course Outcomes	
Upon successful completion of the course, the student will be able to	
CO1	**Apply** various pre-processing techniques on different datasets.
CO2	**Construct** Machine learning programs for Supervised, Unsupervised and Semi supervised learning models.
CO3	**Develop** Deep learning programs for Supervised & Unsupervised learning models.
CO4	**Identify** and **Apply** Artificial Intelligence concepts to solve real world problems.

Contribution of Course Outcomes towards achievement of Program Outcomes & Strength of correlations (3: High, 2: Medium, 1: Low)

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
CO1	3	3	2	1	2					1		2	1	2
CO2	3	3	2	1	2					1		2	1	2
CO3	3	3	2	1	2					1		2	1	2
CO4	2	2	3	1	2		1			1		2	1	3

Syllabus

Exp No.	Contents	Mapped CO
1	Apply Data pre-processing techniques.	CO1
2	Construct a Machine Learning model using supervised learning method.	CO2
3	Construct a Machine Learning model using Unsupervised learning method.	CO2
4	Construct a Machine Learning model using Semi supervised learning method.	CO2
5	Develop a Deep Learning model using supervised learning method.	CO3
6	Develop a Deep Learning model using Unsupervised learning method.	CO3

7	Apply a Convolutional Neural Network for Image Classification.	CO3
8	Build an AI application.	CO4

Learning Resources
Text Books
1. Artificial Intelligence: A Modern Approach, Stuart Russell and Norvig, Third Edition, 2015, Pearson Education. 2. Machine Learning: A Probabilistic Perspective, Kevin P. Murphy, 2012, MIT Press 3. Deep Learning (Adaptive Computation and Machine Learning series), Ian Goodfellow , Yoshua Bengio, Aaron Courville, Francis Bach, 2017, MIT Press.
e-Resources & other digital material
1. https://github.com/atinesh-s/Coursera-Machine-Learning-Stanford 2. https://github.com/Kulbear/deep-learning-coursera