Department of Computer Science & Engineering					
National Institute of Technology Srinagar					
Course Title	Artificial Intelligence Lab	**Semester**	6th		
Department	CSE	**Course Code**	CST353		
Credits	01	**L**	**T**		**P**
Course Type	Lab	0	0		2

Course Objectives

- To understand the concepts of Artificial intelligence and machine learning.
- To understand and practice prolog and python.
- To understand and practice various classifiers like SVM and neural networks.
- To understand and practice logic and reasoning through logic programming.

Learning Outcomes

- Develop the basic logic programs.
- Understanding the implementation of various machine learning libraries like torch, tensor flow.
- Hands on experience on applying various classifiers on MNIST dataset.

Course Outline / Content

Unit	Topics	Week
1.	Study of PROLOG.	1
2.	Write a program to solve 8 queens' problem	1
3.	Solve any problem using depth first search.	1
4.	Solve any problem using best first search.	1
5.	Solve 8-puzzle problem using best first search	2
6.	Solve Robot (traversal) problem using means End Analysis	2
7.	Solve traveling salesman problem.	2
8.	Implementation of Linear and Logistic regression.	2
9.	Implementing classifiers on MNIST Data set.	2