

## **KCA351: Artificial Intelligence Lab**

**Course Outcome ( CO)**

**Bloom's Knowledge Level (KL)**

**At the end of course, the student will be able to understand**

CO 1	Study and understand AI tools such as Python / MATLAB.	K <sub>1</sub> ,K <sub>2</sub>
CO 2	Apply AI tools to analyze and solve common AI problems.	K <sub>3</sub> , K <sub>4</sub>
CO 3	Implement and compare various AI searching algorithms.	K <sub>6</sub>
CO 4	Implement various machine learning algorithms.	K <sub>6</sub>
CO 5	Implement various classification and clustering techniques.	K <sub>6</sub>

### **DETAILED SYLLABUS**

1. Installation and working on various AI tools such as Python / MATLAB.
2. Programs to solve basic AI problems.
3. Implementation of different AI searching techniques.
4. Implementation of different game playing techniques.
5. Implementation of various knowledge representation techniques.
6. Program to demonstrate the working of Bayesian network.
7. Implementation of pattern recognition problems such as handwritten character/ digit recognition, speech recognition, etc.
8. Implementation of different classification techniques.
9. Implementation of various clustering techniques.
10. Natural language processing tool development.