**18CS7IEIML-INTRODUCTION TO MACHINE LEARNING**

**Question Bank**

**UNIT-2**

1. Define pruning with proper example.
2. With suitable example show how pruning helps in the formation of accurate decision tree.
3. What are the applications in decision tree?
4. What are the issues in learning decision tree?
5. Give Decision tree for the following set of training examples.
6. Explain Loss functions and how its related to decision tree
7. List Loss functions and explain any one
8. Explain the concept of attributes in decision tree learning
9. Explain the concept of entropy and information gain.
10. How entropy value help in creation of decision tree
11. Define information gain with relevant formula.
12. How entropy value help in creation of decision tree
13. Compute the information gain of attribute a2 and entropy

Instance Classification a1 a2

1 + T T

2 + T T

3 - T F

4 + F F

5 - F T

6 - F T

**UNIT-3**

1. Define clustering with proper example.
2. Define clustering analysis
3. Explain partition clustering and give some applications of it
4. Define Hierarchical clustering in details
5. Define Birch algorithm in detail.
6. Define CURE algorithm in detail.
7. Define Density based clustering in details
8. Write the algorithm for K means.