

MODULE 1

1. Describe Artificial Intelligence (different type of AI)
2. Necessity of Learning AI
3. Summarize the different types of Learning (Supervised learning ,Unsupervised learning, Semi-supervised learning, Reinforced learning)
4. Describe the different fields of AI(Machine learning ,Deep learning, Neural n/w, natural language processing etc.)
5. List the applications of AI

MODULE 2

1. Role of Python in AI, Features of python
2. Basics Data Types in python
3. Conditional Statements, Looping, Control Statements
4. Implement List(list operation) , Tuple ,Set, Range
5. Dictionary and its operations
6. String operation in python
7. Function in python
8. Module and packages
9. Object oriented programing (class and object)
10. Regular expression

MODULE 3

1. MachineLearning - Types of Machine learning-Supervised and Unsupervised Learning - Classification and Regression
2. Linear Regression
3. KNN algorithm
4. K Means clustering
5. Support Vector Machines (SVM)
6. Data processing using numpy
7. Data Preprocessing steps
8. Binarization-Mean Removal, Scaling, Normalization
9. Steps for Building a Classifier in Python, Building classifier in python
10. Naïve Bayes classifier
11. Decision Tree classifier
12. Random Forest

MODULE 4

1. Describe Search Algorithms
2. Informed search(DFS, BFS, Uniformcost search)
3. Uninformed search(A*, Greedy search)
4. Minimax Algorithm
5. Combinational Search
6. Illustrate Building Bots to Play Games(steps)

7. Demonstrate a Bot to Play Last Coin Standing
8. Demonstrate a Bot to Play Tic Tac Toe