

Department of Information Technology Computer Applications

B.TECH (IT)

YEAR: 3RD SEMESTER: 5TH

ARTIFICIAL INTELLIGENCE & MACHINE LEARNING

Assignment#1

- Q1. What do you mean by uninformed search? Explain Breadth First Search and depth first search in detail with a suitable example?
- Q2. What do you mean by Agent? Why is it important? Discuss various types of agent's structure? Also write their merits and demerits?
- Q3. What is Heuristic search? Why is it important? Explain Best first search and A* algorithm in detail with a suitable example? Also write its applications?
- Q4. How artificial intelligent systems are different from traditional systems? Discuss with example. Write the characteristics of Agents?
- Q5. Discuss the components and characteristics of expert system? How Knowledge based system differ from Expert system? Discuss the various challenges of AI?

Assignment#2

- Q1. What do you mean by Data visualization and normalization? Explain in detail with example.
- Q2. Why Bigdata is important for ML? What are the 5Vs characteristics of Big Data?
- Q3. Define "Neuron" in the field of Artificial Intelligence? List some Applications of Deep Learning in the field of Artificial Intelligence?
- Q4. Explain the term AI, ML, DL and neural networks? How these are related with each other's? Also Tabulated their differences?
- Q5. Define standard deviation, variance, covariance, mean, mode, Hyperplane, median, Heat map and Tree Map? Why these are important in ML explain with suitable example?