CHAPTER – 4

1. What is Resolution? Explain in detail. How to use Resolution used in predicate and propositional logic?
2. What are Agents? What are the different types of agents? Explain in detail.
3. What is an Environment? What are the different types? Explain how agents percepts information from the environment?
4. Write short note on the following:
    i. Schema
    ii. Frames
    iii. Forward and Backward Chaining
    iv. Conceptual Graph
5. Proof of statements

CHAPTER – 5

1. Explain in detail algorithms used for Game Playing (Alpha-Beta Pruning/Mini-Max).
2. Compare Mini-Max algorithm and Alpha-Beta Pruning.
3. Write short notes on:
    i. Refinements
    ii. Board Game
    iii. The Block world
4. Explain in detail Iterative Deepening.

CHAPTER – 6

1. Explain in detail Neural Networks and its significance in Machine Learning.
2. What is Machine Learning? What are the types of Machine Learning? Explain in detail with an example.
3. Compare Supervised and Unsupervised Learning.
4. What is Regression? Explain any one of the Regression algorithms in detail.
5. What are the classification algorithms? Explain in detail any one of the classification.
6. What is unsupervised learning? Explain in detail the types of unsupervised learning.
7. What are the nearest neighbor algorithms? Explain any one of the algorithms? **ANS: K-NN/K-means**
8. What is ANN? Explain the structure of ANN.
9. What are the transfer functions in ANN?
10. What are the performance matrix used to evaluate different ML algorithms?

CHAPTER – 7

1. What is probability? Explain in detail probability density function.
2. What is Bayes Theorem? Explain in detail hoe naïve-bayes classifiers works using bayes theorem?
3. What is Bayesian Belief Networks? What are the components of Bayesian Belief Networks?
4. What is Statistical Learning? What are the different elements of statistical learning?
5. What is probability graphical model? Explain the types.
6. What is fuzzy logic? Explain the architecture. (Components/Working)
7. Write short note on:
    i. CYC
    ii. Script
    iii. Frames
    iv. Semantic Net