

**Unit 1:**

1. What is Artificial Intelligence? Explain its Techniques.
2. Define LISP. Explain its syntax and numeric functions
3. Explain basic list manipulation function with example
4. Explain Interaction and recursion in brief
5. Explain any two AI Problems and define the algorithms to solve them.
6. Explain Property list and Array in LISP.
7. Explain Lisp Programming in brief.
8. What is basic list manipulation function in LISP?

**Unit 2:**

1. Explain AI Problem with its Solving techniques.
2. What is forward and backward chaining in AI
3. Explain Depth First and Breadth First Search with example.
4. Explain Heuristic search techniques ? any two
5. What is hill climbing and branch bound techniques
6. Explain A\* and AO\* algorithms in brief
7. Define Problem reduction technique in artificial intelligence

**Unit 3:**

1. Explain knowledge representation with example
2. Explain skolemization explain in brief
3. What is frame systems explain
4. Explain semantic networks with example
5. Define script in knowledge representation.
6. Explain conceptual dependency with example
7. Define first order predicate calculus.

**Unit 4:**

1. Explain parsing techniques? Define context free grammar.
2. Explain RNT(recursive transitions nets) with example
3. Define case and logic grammars with example.
4. What is game playing in artificial intelligence? Explain additional refinements.
5. Explain minimax search procedure?
6. Define planning? explain the components of planning
7. What is goal stack planning ?explain
8. Explain non linear planning

**Unit5:**

1. Define probability theory with example.
2. What is baye's theorem? Explain Bayesian networks
3. Explain certainty factor with example.
4. Define expert system and explain MYCIN
5. Write any five applications of expert systems
6. Explain vidwan frame network with example
7. Explain the need of MYCIN in today's era