

UNIT-1 : INTRODUCTION TO AI PROGRAMMING LANGUAGES

1 MARK QUESTIONS

1.	What is AI? What are the applications of AI?
2.	What is uninformed search? What are the various types of uninformed search algorithms?
3.	How many types of Heuristic searches?
4.	Differentiate between Exhaustive Search and Heuristic search?
5.	Explain A* Algorithm.
6.	Write the limitations of DFS and BFS strategies?
7.	What is uniform cost search and hill climbing search
8.	Explain MINIMAX Algorithm.
9.	What are the limitations of Min-Max algorithm?
10.	How the Alpha-Beta pruning algorithm works?

5 MARKS QUESTIONS

1.	Discuss the following search technique with the help of an example. Also discuss the benefits and shortcoming of each i) Breadth First Search ii) Depth First Search
2.	Discuss the following heuristic search techniques. Explain the algorithm with the help of an example. i) Best-first search ii) Beam search
3.	What is Heuristic search technique. Explain the algorithm with the help of Hill climbing?
4.	Illustrate the Blind search strategies?
5.	Explain in detail about A* algorithm.
6.	What is game Tree, Explain with one Algorithm?
7.	What are the limitations of Min-Max algorithm, Differentiate between Min-Max and Alpha-Beta pruning?
8.	What is Min-Max algorithm? Explain the working of Min-Max algorithm.
9.	Explain the adoption of Alpha-Beta pruning for a two player in detail. (March-2021)
10.	What is Exhaustive and Heuristic search techniques, Explain with example?

Unit –II : KNOWLEDGE REPRESENTATION

1 MARK QUESTIONS

1.	What is Predicate Logic?
2.	Define Knowledge Representation.
3.	Explain Semantic net.

4.	Define Logic?
5.	Define Frame?
6.	Write short notes on Inheritance
7.	Define syntactic analysis with an example?
8.	What is Logic programming.
9.	Write short notes on Rule-Based deduction systems.
10.	Define FOL with an example.

5 MARKS QUESTIONS

1	What are various techniques to represent the knowledge?
2.	What are frames? How do they differ from semantic nets.
3.	What is the difference between declarative and procedural knowledge?
4.	State Representation of facts in predicate logic?
5.	Write short notes on constrain Propagation.
6.	Differentiate prepositional & predicate logic.
7.	What are the rules to representing knowledge?
8.	Explain Rule-Based deduction systems.
9.	Discuss about Knowledge Representation Issues in detail
10.	Explain in detail about frames representation.

Unit – III : EXPERT SYSTEMS

1 MARK QUESTIONS

1.	Define Expert systems?
2.	Define Knowledge ?
3	Explain the role of domain expert?
4.	Write the advantages of Expert systems.
5	What are the Applications of Expert systems?
6.	What is the role of user interface?
7	Differentiate Expert and Non-expert?
8.	Define knowledge base.
9.	What are the basic characteristics of Expert systems?

10.	Explain the knowledge acquisition process?
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5 MARKS QUESTIONS

1.	Explain the various stages of expert system development?
2	With an Architectural diagram explain how expert systems works?
3.	Write short notes on Expert systems?
4	Design an expert system for travel recommendation and discuss its roles.
5.	Compare the merits of artificial over human expertise?
6.	What are different ways of representing knowledge?
7.	Explain the role of knowledge engineer?
8.	Discuss Expert systems design examples.
9.	Explain in detail about Knowledge Acquisition and Meta-Knowledge in expert system.
10.	What are the problems in Expert systems? Explain in detail.