



HKBK College of Engineering
Department of Computer Science and Engineering

SEMESTER - V
Artificial Intelligence
Question Bank – Module 3

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| 1. | Explain the greedy best first search algorithm with examples. | 1 |
| 2. | Explain A* search algorithm in detail with example. | 1 |
| 3. | Explain the following: i. Admissible heuristic ii. Consistency iii. Optimality of A* | 1 |
| 4. | Explain memory bounded heuristic search algorithms with examples and mention their limitations. | 1 |
| 5. | Explain heuristic functions in detail for an 8-Puzzle example. | 1 |
| 6. | Explain the following: i. The effect of heuristic accuracy on performance. ii. Generating admissible heuristics from relaxed problems. iii. Generating admissible heuristics from sub problems. iv. Learning heuristics from experience. | 1 |
| 7. | Explain knowledge based agents in detail. | 1 |
| 8. | Explain various levels of knowledge based agents | 1 |
| 9. | Explain wumpus world in detail. | 1 |
| 10. | Define propositional logic and explain its role in representing knowledge in AI systems. | 1 |
| 11. | Explain the real world applications example where propositional logic is efficiently employed. | 1 |
| 12. | Analyze a scenario and demonstrate the application of reasoning patterns in propositional logic to derive conditions. | 1 |