| **Unit** | **Topics** |
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| **I** | **Introduction to Artificial Intelligence:** Introduction to AI and AI problems, The Foundations of AI: Philosophy, Mathematics, Economics, Neuroscience, Psychology, Computer Engineering, AI Applications.  **Intelligent Agents:** Agents and Environments, The concept of rationality, The Nature of Environments, The structure of Agents. |
| **II** | **Uninformed Search Strategies:** Breadth-first, Depth-first, Uniform-cost search, Iterative deepening depth-first search, Bidirectional search.  **Informed (Heuristic) Search Techniques**: Heuristic Function, Best-first Search, Greedy best-first search, Generate-and-Test, Local Search Algorithm Hill-climbing search, Simulated annealing, And-OR Search, A\* search: Minimizing the total estimated solution cost, Problem Reduction. |