

Gujarat University
Department of Computer Science
MCA– II
Artificial Intelligence

Assignment – 2

1. Explain State Space Representation using 8-puzzle problem (up to 3 levels).
2. Explain the Production System in detail.
3. Explain DFS and BFS with examples. Also, write merits and demerits.
4. Write Heuristics for the 8-puzzle problem.
5. Analyze seven problem characteristics for the following problems.
 - a. Tic-Tac-Toe
 - b. Chess
 - c. Water Jug
 - d. 8-Puzzle
 - e. Travelling Salesman Problem
 - f. Missionaries and Cannibals
 - g. Tower of Hanoi
 - h. Farmer, Fox, Goat, Grass problem
 - i. 8-Queen Problem
 - j. Monkey and Banana