



Soft Computing
Subject Code – 2020505A
Year – 3rd Year/Sem-5th EE

Assignment-1

Questions:

1. Define algorithm and algorithm measurement (Complexity).
2. Define DFS and BFS with example.
3. Describe the A* and AO* algorithm.
4. Explain about P type, N type NPC and NP hard problem.
5. Explain about branch and bound algorithm.
6. Solve the 8 Puzzle problems.

1	2	3
	4	6
7	5	8

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1	2	3
4	5	6
7	8	

7. Define
 - a. Polynomial time and Non Polynomial time
 - b. Heuristic function
 - c. Informed search and uninformed search

Assignment-2

Questions:

1. Explain about Evolutionary method .
2. Explain about convention method.
3. Explain about genetic algorithm with diagram.
4. Define the terms:
 - a. selection
 - b. optimal solution
 - c. pruning
 - d. chromo some
 - e. Mutation
 - f. antial solution

Assignment-3

Questions:

1. Explain about swarm optimization and its advantages.
2. Explain ACO (Anti colony optimization)
3. Explain particle swarm optimization (PSO)
4. Explain Artificial Bee colony algorithms (ABC)

Assignment-4

Questions:

1. Explain about Fuzzy logic and its applications.
2. Explain about Neural network and types of neural network.
3. Explain single layer and multilayer feed forward networks.
4. Explain recurrent neural network.
5. Explain about back propagation algorithm.

