SAGAR INSTITUTE OF RESEARCH AND TECHNOLOGY

Department of AIML

ASSIGNMENT-IV, Jan-June 25

SEMESTER: IV **BRANCH: AIML**

Subject Code/ Name: AL-402 ADA

Q. No.	Question Description	COs (Course Outcomes)	Level Bloom's Taxonomy)
1	Apply an algorithm to determine the Hamiltonian cycle using back tracking.	CO2	L3
2	Build the state space tree for 8 Queen Problem Using Backtracking.	CO2	L3
3	Explain graph colouring problem with suitable examples. Also write algorithm for m colouring problem.	CO4	L5
4	Explain Construct B tree 3, 14, 7, 1, 8, 5, 11, 17, 13, 6, 23, 12, 20, 26, 4, 16, 18, 24, 25, 19.	CO4	L5
5	Determine the cost of following TSP matrix using branch and bound method $\begin{bmatrix} \infty & 20 & 30 & 10 & 11 \\ 15 & \infty & 16 & 4 & 2 \\ 3 & 5 & \infty & 2 & 4 \\ 19 & 6 & 18 & \infty & 3 \\ 16 & 4 & 7 & 16 & \infty \end{bmatrix}$	CO4	L5

Bloom's Taxonomy Levels: - R: Remembering (L1), U: Understanding (L2), A: Applying (L3), A: Analyzing (L4), E: Evaluating (L5), C: Creating (L6)

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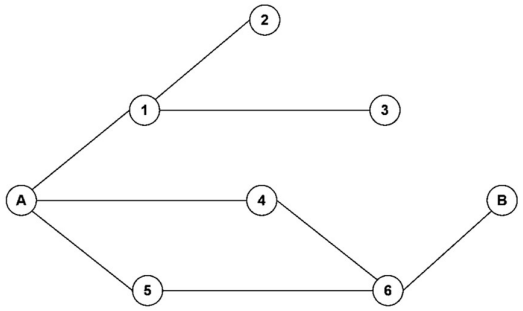
ASSIGNMENT-V, Jan-June 25

SEMESTER: IV **BRANCH: AIML**

Subject Code/ Name: AL-402 ADA

Q. No.	Question Description	COs (Course Outcomes)	Level Bloom's Taxonomy)
1	Compare the P, NP hard and NP complete Classes and find the relationship between them.	CO3	L4
2	Examine the purpose of design and complexity of parallel algorithm.	CO3	L4
3	Explain short Notes on Approximation Algorithm, Data transfer optimization and data stream algorithm.	CO4	L5
4	Evaluate DFS and BFS order for the Following Graph also compare between them. 	CO4	L5
5	Construct AVL tree for given data 2, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24 also Determine the in-order preorder and post order.	CO4	L5

Bloom's Taxonomy Levels: - R: Remembering (L1), U: Understanding (L2), A: Applying (L3), A: Analyzing (L4), E: Evaluating (L5), C: Creating (L6)