

	Question	COs, RBT level	Marks
Q.1	What are ϵ - approximate algorithms?	CO6, L2	2
Q.2	Define satisfiability problem.	CO5, L1	2
Q.3	Illustrate the bounding functions involved in solving sum of subsets problem using backtracking technique.	CO2, L3	4
Q.4	Judge the correctness of the statement that all NP-complete problems are NP-hard but some NP-hard problems are not known to be NP-complete.	CO5, L5	4
Q.5	Appraise the importance of using greedy method and relaxing the condition of $x_i = 0$ or 1 to $0 \leq x_i \leq 1$ while computing optimal solution for 0/1 Knapsack problem using a recursive backtracking algorithm.	CO2, L4	4
Q.6	Examine how Boyer-Moore algorithm is working efficiently than Boyer-Moore Horspool algorithm for the worst case time complexity.	CO4, L4	8

Course Outcomes (CO)

Students will be able to