

S.No.	Topic	Reference	Weightage
1.	Advanced Data Structures Dynamic Tables Priority Queues Fibonacci Heaps	Ch 19 [2] 17.4 [2]	15
2.	Divide & Conquer Counting Inversions Closest Pairs of Points Integer Multiplication	5.3 [1] 5.4 [1] 5.5 [1]	15
3.	Greedy Technique Proving Optimality using Stays Ahead and Exchange Arguments Interval Scheduling Huffman Codes	4.1 [1] Self Study 4.8 [1]	10
4.	Dynamic Programming Principles of Dynamic Programming Sequence Alignment Shortest Path in a Graph	6.2 [1] Self Study 6.6 [1] 6.8[1]	10
5.	Network Flows Maximum Flow Problem and Ford Fulkerson Algorithm Maximum flows and Minimum Cuts in a Network Bipartite Matching	7.1[1] 7.2[1] 7.5[1]	15
6.	NP Completeness Polynomial Time Reductions Reductions Via Gadgets (Satisfiability Problem) Efficient Certification and Definition of NP NP Complete Problems	8.1[1] 8.2[1] 8.3[1] 8.4[1] (till pg 466)	10

Ref: [1]. Algorithm Design, Kleinberg and Tardos, Pearson Publication

[2]. Introduction to Algorithms, CLRS, 3rd Edition, PHI