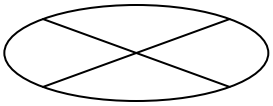
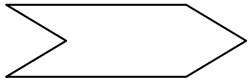
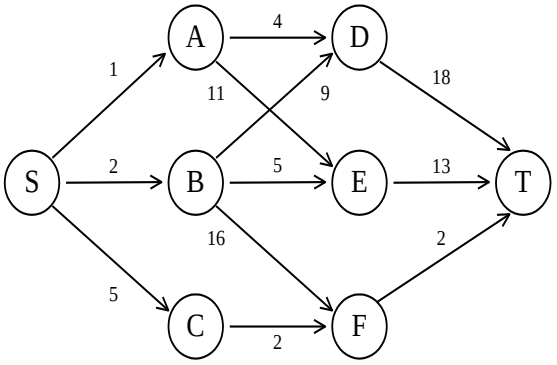
1	In Strassen's Multiplication Algorithm the T(n) is A) $7T(n) + bn^2$ B) $7T(n/2) + bn^2$ C) $8T(n/2) + bn^2$ D) $7T(n/2) + bn$
2	In a fractional Knapsack three items(1,2,3) have weights (4,8,6) & profits (12,32,30) respectively. If the weight of the knapsack is 10 then the solution is A) 3→6 , 2→4 B) 3→4 , 2→6 C) 3→6 , 1→4 D) 1→4 , 2→6
3	The cost of the minimum spanning tree is  A) 15 B) 16 C) 17 D) 18
4	Job sequencing with deadlines we have 4 jobs with profits(30,20,10,5) & deadlines as (1,2,1,2) then the best sequence to run on the machine is A) 1,2 B) 2,1 C) 1,3 D) 1,4 E) 3,2
5	A clique with maximum number of colors is called A) Chromatic number B) Color Map C) Clique number D) Initial Clique
6	In breadth First Search the no. of levels of the graph are  A) 1 B) 2 C) 3 D) 4
7	We interchange the values of variables m and n, using the replacement notation by t← m, m← n, n← t . So we use three assignments. If we want to rearrange (a,b,c,d) to (b,c,d,a,) by a sequence of replacements. The new value of a is to be the original value of b & so on. How many assignments are required? A) 3 B) 5 C) 4 D) 6
8	If the hash table is not full, attempt to store key in array elements (t+1)%N, (t+2)%N, (t+3)%N … It is the definition of a) Liner probing b) Quadratic probing c) Double hashing d) Separate Chaining
9	In the matrix chain product of (2x10)(10X4)(4X7) the solution is A) 136 B) 420 C) 360 D) 128

10	 Using Greedy Approach the shortest path of the Graph is a) 9 b) 23 c) 5 d) 17
11	Using Dynamic programming the shortest path of the above graph is a) 9 b) 23 c) 5 d) 17
12	An array A contains n-1 unique integers in the range [0,n-1] that is there is one number from the range that is not in A. The Problem can be solved in minimum a) O(n) b) O(logn) c) O(nlogn) d) $O(n^2)$
13	Suppose that each row of an nXn array A consists of 1's and 0's such that in any row I of A, all the 1's come before any 0's in that row. Suppose further that the number of 1's in the row I is at least the number in row I+1, for I = 0,1,……n-2. Assuming A is already in memory. The Problem can be solved in minimum a) O(n) b) O(logn) c) O(nlogn) d) $O(n^2)$
14	Dynamic programming is a design principle used to solve problems with _____. a) Overlapping sub problems b) Independent sub problems c) sub problems of equal size d) disjoint and distinct sub problems
15	Average case complexity of quick sort is a) O(n) b) O(logn) c) O(nlogn) d) $O(n^2)$