

Class Test (Set 2)

Course Code: SE 214; Course Title: Algorithm Design and Analysis

Marks: 15

Time: 30 Minutes

1.	You are managing a small logistics business and have a delivery truck that can carry a limited weight. You have several products that can be delivered, each with a weight and a profit. Question: Given the following list of products: Product A: Weight = 3, Profit = 10 Product B: Weight = 2, Profit = 7 Product C: Weight = 4, Profit = 12 Product D: Weight = 5, Profit = 15 If the truck has a weight capacity of 8, use greedy approach to find the maximum profit you can achieve. Which products should be selected?	7.5
2.	For the coin denominations {1,5,10,25}, explain how the greedy algorithm can be used to select minimum number of coins to meet 43.	7.5