

Class Test 02 (Open Book Exam)

Time duration: 90 Mins

Marks: 15

Course Code & Title: CSE214 (Algorithm), Fall 2020

Teacher Initial: SMAH

Read the Questions Carefully and Answer All the Questions

Q1: This is the second class of dynamic programming Eva is attending. Eva understands that in 0/1 knapsack problems, items cannot be broken down into parts and it is a multi-criteria optimization problem. However, Eva is currently trying to understand the algorithm only for two criteria: size & value. Consider there are four (4) items of sizes: 1, 2, 3 & 4 (in gm) and corresponding values (in tk) are the last four digits of Eva's ID. Assuming knapsack size 6, can you find out the optimum value considering the last four digits of your own ID as the values?

(15)