ACADEMY OF TECHNOLOGY

Lab Assignment (Day 10)

Paper name: Design and Analysis of Algorithms Lab

Code: PCC-CS494 **Semester: 4^{th}**

Discipline: CSE **Time: 2 Hours**

Date: June 25, 2021

1. Write a program in C or C++ to find maximum profit of 0/1 Knapsack problem using dynamic programming. And also show that the selected items for the maximum profit.

2. Given an array $p[]$ which represents the chain of matrices such that the i^{th} matrix A_i is of dimension $p[i-1] \times p[i]$. Write a C or C++ program to show the minimum number of multiplications needed to multiply the chain and the optimal parenthesization.