Assignment
2nd Semester MCA
Analysis and Design of Algorithm
Full mark-10

Instruction: Submit the handwritten answer sheets by 12/10/2022

Explain 0-1 knapsack problem. [2 marks]

Which algorithm paradigm is preferred to solve the problem? [1 mark]

Derive a recursive formula to compute the value of optimal solution using dynamic programming. [3 marks]

Given the items<1,2,3,4> , knapsack size = 20, W=<12,6,8,10> and V=<70,60,55,40>, Compute the optimal value table and show the content of the knapsack. [4 marks]

Illustrate detailed steps while computing each sub problems.