Sindh Madressatul Islam University (SMIU)

Program: BSCS (Even)

Subject: Design and Analysis of Algorithms

Instructor: Mustafa Ali Bamboat

Assignment – 3

Due Date: 07-December-2023 (11th Week)

Q1. Choose the profitable item using the 0/1 knapsack strategy; where a knapsack can carry only 20 kg

$$weights = \{2,3,4,5,9\}$$

$$profits = \{3,4,5,8,10\}$$

[NOTE: use the matrix strategy]

[5 marks]

Q2. Find the all possible Longest Common Sub-Sequence between X and Y, where $X = \{abaaba\}$ and $Y = \{babbab\}$.

[NOTE: use the matrix strategy]

[5 marks]