

BAHRIA UNIVERSITY, (Karachi Campus)

Department of Software Engineering
Assignment#04– Spring 2022

Complex Engineering Problem

COURSE CODE: **COURSE TITLE:** D&AA **CSC-321** BSE 4 Shift: **Morning** Class: Assignment Date: Course Instructor: ENGR. BUSHRA FAZAL KHAN 09-Jun-2022 Max. Marks: 7 Points Assignment Due: 22-Jun-2022

In groups code the algorithms that have been assigned to you and you are required to present in group in front of the class. Your presentation should have the following sections.

- a. Introduction (Paradigm +Problem) CLO1:1.5 Marks
- b. Algorithm Explanation CLO2:2 Marks
- c. Applications CLO 1:1.5 Marks
- d. Analysis calculate time complexity CLO4:2 Marks

List of algorithms is given below your group will be assigned one in class.

- 1 Rabin-Karp algorithm
- 2 Travelling salesman dynamic
- 3 Knuth-Morris-Prat algorithm
- 4 Boyer-Moore algorithm
- 5 knapsack problem dynamic
- 6 Knight's tour problem
- 7 Huffman code dynamic
- 8 Interpolation search problem
- 9 Travelling salesman greedy
- 10 Floyd-Warshall Algorithm
- 11 Bellman-Ford
- 12 Maximal Flow
- Finite-automata-based string matching.