



# National University

of Computer & Emerging Sciences Peshawar Campus



Student Name: \_\_\_\_\_

Roll No: \_\_\_\_\_

Program: BS(CS)

Semester: Spring-2021

Time Allowed: 02 hours

Course: CS218– Data Structures

Examination: Mid Term

Total Marks: 60 Weightage: 30

Date: 28<sup>th</sup> May, 2021

Instructor Name: Waqas Ali

---

**NOTE:** Attempt all questions.

---

## Question No. 2

**Attempt Time:** 10 mins, **Submission Time:** 5 min

**Marks:** 7

Consider that the same operation (sortedInsert in **question 1**) needs to be performed on an array based list and the fixed size of the list is not an issue. Comment whether using a linked list or an array based list is better for such a scenario. Using an example, show which one of those will require the least number of operations.