SVKM'S NMIMS MUKESH PATEL SCHOOL OF TECHNOLOGY MANAGEMENT& ENGINEERING Academic Year: 2024-2025	
Program: BTI Stream: Computer	Year: III Semester: V
Subject: Basic Data Structures	Time: 45 Minutes (09:10 am to 09:55 am)
Date: 24.08.2024	No. of Pages: 1
Marks: 10	
Test-I Set-A	

Instructions: Candidates should read carefully the instructions.
1) **Figures in brackets on the right hand side indicate full marks**.
3) **Assume Suitable data if necessary.**
4) Q**uestion 1 is compulsory.**
5) **Answer any 2 from the remaining questions.**

Q1		Answer briefly:	
CO- 1 ; SO- 4 ; BL-2	a.	Define Data Structures. Differentiate between Linear and Non-Linear data structures.	[2]
CO- 3; SO- 5; BL- 4	b.	Convert the following infix expression into postfix expression using stack. (A + B) / ((C + D) – (E * F) + G ^ H)	[2]
Q2 CO-2 ; SO-5; BL-3		Write a C/C++ program to print Fibonacci series up to n terms with recursive function.	[3]
Q3 CO- 2 ; SO- 5 ; BL- 3		Write a C/C++ program using concept of structures. A men's sports club keeps elaborate computerized records of all its members. The records contain typical information such as name, age, address, height, weight of each person. But there is also information about whether a member is an active playing members or not. Display the details by taking user inputs according to condition given.	[3]
Q4 CO-2 ; SO- 5; BL-3		Write a C/C++ program to reverse the position of all character elements in the array using pointers.	[3]