School of Information Technology and Engineering
Fall Semester 2022-2023
SET-1
Laboratory Continuous Assessment Test – 2

NAME: ROLL NO:

Programme Name & Branch: MCA
Course Name & code: ITA5002, Problem solving with Data structures and Algorithms
Class Number (s): VL2022230105108   Slot: C2 +TC2
Exam Duration: 80 Min.   **Maximum Marks: 50**

General instruction(s):
Answer all the questions (2 * 25 = 50)

1. Implement the insertion sort to the given matrix **A** $\begin{bmatrix} 45 & 22 & 2 \\ 3 & 12 & 1 \\ 9 & 6 & 8 \end{bmatrix}$ to get an ascending order?

2. Implement linear search to the find an elements whether **Y** and **D** available or not in the given array?

VIT[10]={B Z A X R O L E D M}

****ALL THE VERY BEST****

NAME: **ROLL NO:**

Programme Name & Branch: MCA

Course Name & code: ITA5002, Problem solving with Data structures and Algorithms

Class Number (s): VL2022230105108   **Slot: C2+TC2**

Exam Duration: 80 Min.   **Maximum Marks: 50**

General instruction(s):

Answer all the questions (2 * 25 = 50)

1. Implement the selection sort to the given matrix **A** $\begin{bmatrix} 1 & 2 & 3 \\ 4 & 5 & 6 \\ 7 & 8 & 9 \end{bmatrix}$ to get a descending order?

2. Implement binary search to identify whether **T** and **Z** elements are available or not in the given array?

VIT[15]={M C A F I R S T Y E A R V I T}

****ALL THE VERY BEST****

NAME: ROLL NO:
Programme Name & Branch: MCA
Course Name & code: ITA5002, Problem solving with Data structures and Algorithms
Class Number (s): VL2022230105108   Slot: C2+TC2
Exam Duration: 80 Min.   **Maximum Marks: 50**

General instruction(s):
Answer all the questions (2 * 25 = 50)

1. Implement the heap sort to the given values **23 9 44 65 12 99 86 33 12** to get an ascending order?

2. Implement linear search to the find an elements whether **Z** and **I are** available or not in the given array?

VIT[10]={N E W D E L H I}

****ALL THE VERY BEST****

NAME: ROLL NO:
Programme Name & Branch: MCA
Course Name & code: ITA5002, Problem solving with Data structures and Algorithms
Class Number (s): VL2022230105108   Slot: C2+TC2
Exam Duration: 80 Min.   **Maximum Marks: 50**

General instruction(s):
Answer all the questions (2 * 25 = 50)

1. Implement the radix sort to the given values **23 9 44 65 12 99 86 33 12** to get a descending order?

2. Implement binary search to identify whether **M** and **T** elements are available or not in the given array?

VIT[15]={V I T M C A P}

****ALL THE VERY BEST****

School of Information Technology and Engineering
Fall Semester 2022-2023
SET-5
Laboratory Continuous Assessment Test – 2

NAME: **ROLL NO:**
Programme Name & Branch: MCA
Course Name & code: ITA5002, Problem solving with Data structures and Algorithms
Class Number (s): VL2022230105108   **Slot: C2+TC2**
Exam Duration: 80 Min.   **Maximum Marks: 50**

General instruction(s):
Answer all the questions (2 * 25 = 50)

1. Implement the insertion sort to the given values **23 9 44 65 12 99 86 33 12** to get an ascending order

2. Implement linear search technique to identify whether **O** element is available or not and count the number of times the character **V** is repeated in the given array?

VIT[15]={V I T V A G O N V E }

****ALL THE VERY BEST****