

Roll No.

Total No. of Pages : 02

Total No. of Questions : 09

**B.Voc. (Software Development) (Sem.-2)**

**DATA STRUCTURE**

**Subject Code : 5.GV.05**

**M.Code : 77037**

**Date of Examination : 04-07-22**

**Time : 3 Hrs.**

**Max. Marks : 30**

**INSTRUCTIONS TO CANDIDATES :**

1. SECTION-A is COMPULSORY consisting of TEN questions carrying ONE mark each.
2. SECTION-B contains FIVE questions carrying  $2\frac{1}{2}$  (Two and Half) marks each and students have to attempt any FOUR questions.
3. SECTION-C contains THREE questions carrying FIVE marks each and students have to attempt any TWO questions.

**SECTION-A**

**1. Explain briefly :**

- a. What is sentinel value?
- b. Explain simple program logic.
- c. What is abstract data type?
- d. What is dequeue?
- e. What is binary tree?
- f. Explain B+ tree.
- g. What is linked list?
- h. Which are the operations performed on stack?
- i. Explain weighted graph.
- j. What is hash table?

## SECTION-B

2. Explain the symbols used in flowchart.
3. Differentiate between circular queue and priority queue.
4. Explain application of linked list.
5. Explain the concept of B+ tree.
6. Explain the concept of breadth first search graph traversal.

## SECTION-C

7. Compare doubly linked list and circular linked list with a suitable example.
8. Explain different types of traversal of binary trees.
9. Explain the concept of bubble sort.

**NOTE : Disclosure of Identity by writing Mobile No. or Making of passing request on any page of Answer Sheet will lead to UMC against the Student.**