| SURESH <br> $\mathbf{U} \mathbf{N} \mid \mathrm{V}$ E R S I T Y <br> Accredited by NAAC with 'A' Grade |  | INTERNAL ASSIGNMENT - 1 |
| :---: | :---: | :---: |
| Course | BCA | Data Structure Using C |
| Semester | 3 |  |
| Total Marks: | 15 |  |

Q.1. Write answers for any two questions from below. (5 marks each - Word limit - 500)
A. Write a ' C ' program to add a node in a doubly linked list at the beginning and at the end.
B. Write algorithm for deleting an element in a binary tree
C. What are the values of front and rear?
Q.2. Write short notes on all of the following topics (1 mark each - Word limit - 100)
A. Binary search
B. Merging
C. Spanning tree
D. Structure
E. Multi graph

| SURESH <br> $\mathbf{U}$ \| V E R S I T Y <br> Accredited by NAAC with 'A' Grade |  | INTERNAL ASSIGNMENT-2 |
| :---: | :---: | :---: |
| Course | BCA | Data Structure Using C |
| Semester | 3 |  |
| Total Marks: | 15 |  |

Q.1. Write answers for any two questions from below. (5 marks each - Word limit - 500)
A. Write a C program of Binary Search algorithm with recursion.
B. Design a stack with operations on middle element
C. What is Merge sort? Explain time complexity of Mergre sort.
Q.2. Write short notes on all of the following topics (1 mark each - Word limit - 100)
A. Time complexity Vs space complexity
B. Circular linked list
C. Data structure
D. Cycle in a Graph
E. Height of a tree

