

III & IV Semester C & DS Complementary

Program List for the Academic Year 2020-21

PART A - C PROGRAMMING

1. Find roots of a quadratic equation
2. Find the sum of digits and reverse of a number
3. Find the factorial of a number
4. Display pyramid using '*'
5. Check for leap year
6. To display count of +ves, -ves and zeros in a set of N numbers
7. Find first n prime numbers
8. Find LCM and HCF of 2 numbers
9. To print Armstrong numbers within range
10. Convert a decimal number to a new base
11. To calculate the standard deviation of N numbers
12. Find the decimal equivalent of number (base other than 10)
13. To merge two arrays
14. To find Nth Fibonacci number
15. To find the trace of a square matrix
16. To sort n numbers
17. Find the number of words in a given sentence
18. Find the number of vowels in a strings

PART B – DATA STRUCTURES USING C

1. Sort a given list of strings
2. Merge two sorted arrays into one sorted array
3. Search an element in one dimensional array using linear search
4. Search an element in one dimensional array using binary search
5. Implement sparse matrix
6. Create a singly linked list of N nodes and display it
7. Delete a given node (by position) from a singly linked list
8. Create a singly linked list and search an element from that list
9. Implement polynomial using array
10. Implement stack operations (push & pop) using array
11. Implement queue operations (insertion & deletion) using array
12. Implement merge sort using array
13. Implement bubble sort using array
14. Implement selection sort using array
15. Implement insertion sort using array