## **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. Find Sin(x)
- 5. Find Cos(x)
- 6. Display pyramid using '\*'
- 7. Check for leap year
- 8. To display count of +ves, -ves and zeros in a set of N numbers
- 9. Find first n prime numbers
- 10. Find LCM and HCF of 2 numbers
- 11. To print Armstrong numbers within range
- 12. Convert a decimal number to a new base
- 13. To calculate the standard deviation of N numbers
- 14. Find the decimal equivalent of number (base other than 10)
- 15. To merge two arrays
- 16. To find N<sup>th</sup> Fibonacci number
- 17. To find the trace of a square matrix
- 18. To sort n numbers
- 19. Find the number of words in a given sentence
- 20. Reverse a string using recursion
- 21. Find the number of vowels in a strings
- 22. To generate mark list of N students using array of structures
- 23. To find the length of string using pointer
- 24. To store and read from a text file
- 25. Write odd and even numbers into two files

## DATASTRUCTURE USING C

- 1. Reverse a string using pointer
- 2. Sort a given list of strings
- 3. Merge two sorted arrays into one sorted array
- 4. Search an element in one dimensional array using linear search
- 5. Search an element in one dimensional array using binary search
- 6. Search an element in one dimensional array using recursive binary search
- 7. Implement Pascal triangle using two dimensional arrays
- 8. Read a sparse matrix and display its triplet representation using array
- 9. Create a singly linked list of N nodes and display it
- 10. Delete a given node (by position) from a singly linked list
- 11. Create a singly linked list and search an element from that list
- 12. Create a doubly linked list of integers and display in forward and backward direction
- 13. Implement polynomial using array
- 14. Implement stack operations (push & pop) using array
- 15. Implement queue operations (insertion & deletion ) using array
- 16. Evaluation of postfix expression using array
- 17. Implement quick sort using array
- 18. Implement bubble sort using array
- 19. Implement selection sort using array
- 20. Implement insertion sort using array