FACULTY OF INFORMATICS
Year 2021
MCA I Semester (CBCS) Examination,

MCA 2 years Course

Sub: Data Structures with C Lab

1a). Write a program to implement the addition of Two matrixes

b) Write a program to implement the multiplication of two matrixes

2a) Write a program to implement the strlen(), strcpy(), strcpy(), strcat()

b) Write a program to implement the call by value and call by reference

3a). Write a program to implement the factorial of a given number using recursion function

b) Write a program to implement the prime number given range and Fibonacci series

4. Write a program to Implementation of Singly Linked List.

5. Write a program to Implementation of Doubly Linked List.

6. Write a program to Implementation of Circular Linked List.

7. Write a program to find the largest element in a given doubly linked list

8. a) Write a program to Implementation of Stacks using arrays
   b) Write a program to Implementation of Queues using arrays

9a). Write a program to Implementation of Stacks using linked lists

b) Write a program to Implementation of Queues linked lists

10. Write a program to Implementation of Queues using arrays

11. Write a program to Implementation of Queues using linked lists

12. Write a program to Infix to postfix conversion.

13. Write a program to Infix to evaluation of postfix expression

14. Write a program to Polynomial arithmetic using linked list.

15. Write a program to Implementation of Binary Search

16. Write a program to Implementation of Hashing.

17. Write a program to Implementation of recursive traversals on binary tree.

18. Write a program to Implementation of iterative traversals on binary tree.

19. Write a program to Implementation of Binary Search Tree.

20. Write a program to Implementation of operations on binary tree (delete entire tree, copy entire tree, mirror image, level order, search for a node etc.)

21. Write a program to implement Linear Search Technique

22. Write a program to Implementation of Binary Search Technique

23. Write a program to Implementation of Selection sort

24. Write a program to Implementation of Insertion sort

25. Write a program to Implementation of Bubble sort

26. Write a program to Implementation of of Merge sort

27. Write a program to Implementation of Quick sort

28. Write a program to Implementation of operations on AVL Trees.

29. Write a program to Implementation of traversal on Graphs (BFS)

30 Write a program to Implementation of traversal on Graphs (DFS)