**SAVEETHA SCHOOL OF ENGINEERING**

**SAVEETHA INSTITUTE OF MEDICAL AND TECHNICAL SCIENCES**

**CSA06 – DESIGN AND ANALYSIS OF ALGORITHMS**

List of **Experiments**

1. Write a program to Print Fibonacci Series using recursion.

2. Write a program to check the given no is Armstrong or not. .

3. Write a program to find the GCD of two numbers .

4. Write a program to get the largest element of an array.

5. Write a program to find the Factorial of a number .

6. Write a program to check a number is a prime number or not .

7. Write a program to perform Selection sort.

8. Write a program to perform Bubble sort

9. Write a program for to multiply two Matrix

10. Write a program for to check whether a given String is Palindrome or not

11.Write a program for to copy one string to another

12. Write a Program to perform binary search.

13. Write a program to print the reverse of a string

14. Write a program to find the length of a string.

15. Write a program to perform Strassen’s Matrix Multiplication.

16. Write a program to perform Merge Sort.

17. Using Divide and Conquer strategy to find Max and Min value in the list.

18. Write a program to generate all the prime numbers.

19. Write a program to perform Knapsack problem using greedy techniques.

20. Write a program to perform MST using greedy techniques.

21. Using Dynamic programming concept to find out Optimal binary search tree.

22. Using Dynamic programming techniques to find binomial coefficient of a given number

23. Write a program to find the reverse of a given number.

24. Write a program to find the perfect number.

25. Write a program to perform travelling salesman problem using dynamic programming

26. Write a program for the given pattern

If n=4 1

1 2

1 2 3

1 2 3 4

27. Write a program to perform Floyd’s algorithm

28. Write a program for pascal triangle.

29. Write a program to find the optimal cost by using appropriate algorithm

30. Write a program to find the sum of digits.

31. Write a program to print a minimum and maximum value sequency for all the numbers in a list.

32. Write a program to perform n Queens problem using backtracking.

33. Write a program to inset a number in a list.

34. Write a program to perform sum of subsets problem using backtracking.

35. Write a program to perform graph coloring problem using backtracking.

36. Write a program to compute container loader Problem.

37. Write a program to generate the list of all factor for n value.

38.Write a program to perform Assignment problem using branch and bound.

39. Write a program for to perform liner search.

40.Write a program to find out Hamiltonian circuit Using backtracking method