CORE COURSE III: 2B03CSC
ADVANCED C PROGRAMMING - LAB

| SEMESTER | COURSE CODE | HOURS <br> PER WEEK | CREDIT | EXAM <br> HRS |
| :---: | :---: | :---: | :---: | :---: |
| 2 | 2B03CSC | $2^{*}$ | 2 | 3 |

*Lab will be conducted for 2 hours each in I and II Semesters

## Part A

## Conditional operator

1. Write a program to print largest among three numbers

## sizeof operator

2. Write a program to print the size of built in data types. else if
3. Write a program to check whether the given number is odd or even
4. Write a program to find the roots of a quadratic equation else if ladder
5. Write a program to print grade of students
6. Write a program to count number of vowels, consonants and spaces in a line of text.
switch
7. Write a program to accept two numbers and perform various arithmetic operations $(+,-, *, /)$ based on the symbol entered.
while
8. Write a program to check whether the given number is Armstrong number or not.
9. Write a program to print Fibonacci series up to a given number.

## do-while

10. Write a program to print multiplication table for the given number
for
11. Write a program to print prime numbers within range.
12. Write a program to convert decimal number to its binary equivalent.

## Part B

## Array

13. Write a program to perform Matrix multiplication

## String

14. Write a program to check whether the given string is palindrome or not
15. Write a program to implement 5 string handling functions

## Function

16. Write a program to print transpose of a given matrix

## Recursive function

17. Write a program to find the factorial of a given number.
18. Write a program to print sum of n natural numbers

## Pointers

19. Write a program to swap two numbers using pointers

## Pointers and function

20. Write a program to access the elements of an array using function pointer

## Structure

21. Write a program to add two complex numbers using structure
22. Write a program to calculate and display the Gross_salary and Net_salary of employees working in a retail medical shop if their Basic, DA, TA, other allowances and deductions are given.

## File

23. Write a program to read a line of text from the keyboard and write it to a file.

## Macros

24. Write a program to print volume of a triangle using the concept macros with argument.
