



VIT

UNIVERSITY

(Estd. u/s 3 of UGC Act 1956)

Vellore – 632 014, Tamil Nadu, India

School of Information Technology and Engineering

Programme : MS [SE] – II Sem

Subject : Object Oriented Programming with C++

Cycle Sheet – I

1. Write a C++ program to find the sum of the digits of a given number.
2. Write a program in C++ to solve a general quadratic equation $ax^2+bx+c=0$.
3. Write a program to reverse a given number (e.g.: given no =12345 , reverse=54321).
4. Write a program to display the Fibonacci Series.(Use While Loop)
5. A Program to display the name of the day in a week, depending upon the number which is entered by the user.
6. Write a program in C++ to read a number n, and print it out digit by digit as a series of words. For example, the number 325, would be printed as “Three Two Five”
7. Find the Sum of following Series using *any Looping Structure*
 - (i) $1+2+3+\dots+n$
 - (ii) $1+3+5+\dots+n$
 - (iii) $1+2^2+3^2+\dots+n^2$
8. Write a C++ program that prints the number of vowels and consonants in the given string (Use Switch Statement)

9. Write a C++ program to input a string, sum up the ASCII values of all its characters and output the result in value.
10. Write a program to get the string and encrypt the given string to the next following alphabet and display it. (ex : india = joejb)
11. Write a program that reads an array and print the sum and average of all elements of the array. Also print the memory address and its contents for each element of the array.
12. Write a program using Array to delete the duplicate elements in an array of numbers.
13. Write a C++ program to perform the following matrix operations:

- (i) Transpose of a matrix
- (ii) Addition of two matrices
- (iii) Subtraction of two matrices

14. Write a C++ program to implement the following functions with respect to String. Don't use standard library functions.

- (i) Concatenate 2 strings and then find the length of the resultant string
- (ii) Reverse a string
- (iii) Compare two strings

15. An electricity company charges for the industrial customers with the following rates.

Minimum upto 300 units	Rs. 150
Next upto 500 units	Rs. 1 / unit.
Next upto 1000 units	Rs. 0.50/unit
Above this	Rs.0.25/unit.

Given the customer number, the previous meter reading and the current reading, Write a C++ program to output along with the input data, the charges for use of electricity.

