



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

SCHOOL OF INFORMATION TECHNOLOGY AND ENGINEERING

ASSIGNMENT QUESTIONS

Subject : Object Oriented Programming

Class : MS – SE II sem

PRACTICAL SHEET

Cycle 2- Functions

1. Write a C++ program to illustrate the usage of function call operator as lvalue in an assignment statement.
2. Write and test the following function that returns through its reference parameters both the maximum and the minimum values stored in an array:

```
void getExtremes (float& min, float& max, float a[], int n);
```

3. Write a C++ function called “zstrcmp” to compare one string with another string or compare first ‘n’ characters of one string with another string. Use default arguments and Do not overload the function. “zstrcmp” function must return an integer which has the same interpretation as that of “strcmp” in C.
4. Write a C++ function called “zstrcpy” to copy one string to another or copy first ‘n’ characters of one string into another. Use default arguments and Do not overload the function.
5. Write a recursive function to multiply two integers.
6. Write a recursive function to find the sum of first ‘N’ Natural numbers.
7. Write a recursive function to Linear Search an array of ‘N’ integers.
8. Write a recursive function to calculate the Fibonacci value.
9. Implement and test the following function:

```
bool isPalindrome(char * str);  
//      returns true iff s is a palindrome  
//      examples: isPalindrome(“malayalam”) returns true;
```

// isPalindrome("xyz") returns false.

10. Write a function called "maxOfThree" to find the largest of three integer values passed to it and return the largest value. Overload the same function accepting double values and strings.
11. Create a generic function called "genericSearch" to linear search an element in an array of 'N' numbers. Illustrate multiple invocations of the generic function to search an array of characters, integers and float.
12. Create a generic function called "genericSort" to sort an array of 'N' numbers in ascending order. Illustrate multiple invocations of the generic function to sort an array of characters, integers and float.
13. Define a C++ structure called Nokia with the following members.
 - i) A long integer member to store the Mobile model.
 - ii) A float member to store the Price.
 - iii) A integer member to store the Demand level.Write a C++ program
 - i) To read the details of six Mobile model using an array variable.
 - ii) To sort the list based on the price of the mobile and display the sorted list.
 - iii) To sort the list based on the demand level and display the sorted list.
14. Write a C++ program to read a line of text and a substring. Write a function to search if the substring is present in the line of text read from standard input.
15. Write a C++ program to read a line of text from the standard input. Include a function in the same program to replace all blank spaces more than one to a single blank space.