## Additional Practical List OOPC

1.	Write a program to demonstrate the difference between Macro and inline function.			
2.	Implement a program to demonstrate Default Argument.			
3.	Write a c++ program to demonstrate use of Bool datatype.			
4.	Write C++ program to compare the individual elements of two arrays using bool data type.			
5.	Write a c++ program to demonstrate use of enum datatype			
6.	Write a C++ program to illustrate the use of wchar_t data type.			
7.	Create a strucutre called ITEM that has data for item number(int) and item cost(float). Call following functions (1) Using global structure varibale (2) Using Local structure variable: setdata() to set these values to predefined values in the program getdata() to get these values from the user putdata() to display these values			
8.	Writa a C++ program using class which contains two member functions getdata and putdata to read the information(name and age) of the person and display it on the screen respectively. Use Scope Resolution Operator			
9.	Write a C++ program using class Rectangle which contains length and width as data members and two member functions – getdata and area. The getdata function takes length and width as an input and the area function calculates the area and display it on the screen. Use Scope Resolution Operator			
10.	Write a class to create array objects with given size. Write setval() function to get values from user and putval() function to print values. And demonstrate in main function.			
11.	Define a class to represent a bank account. include the following members: data members 1) name of the depositor 2) account number 3) type of account			

- 4) balance amount in the account member functions:
- 1) to assign initial value
- 2) to deposite an amount
- 3) to withdraw an amount after checking the balance
- 4) to display name and balance write a main program to test the program.
- 12. Modify program 1. for handling 10 customers.
- 13. 1. Create a class called Distance that has separate member data for feet(int) and inches(float).Include the following member functions:
  - setdist() to set these values to predefined values in the program
  - getdist() to get these values from the user
  - showdist() to display these values in the format 5'-07".
  - 2. Member function add\_dist() to add two Distance objects to a third Distance object (e.g. d3.add\_dist(d1,d2). Define this member function outside the class.
  - 3. Make new function to return a Distance object, so that the function works as follows: d3=d1.add\_dist(d2).
- 14. Create a Class for matrix representation of m\*n size. Create following member functions.
  - read matrix
  - display matrix
  - · add two matrices
  - multiply two matrices
  - find transpose of matrix (i.e. m2= m1.transpos())
- 15. A Team has a following table of batting figure for the series of test matche

Player's name	Runs	Innings	Times not out
Sachin	8430	230	18
Saurav	4200	130	9
Rahul	3350	105	11
		44	
		* * *	

Write a program to read the figures set out in above form and calculate the average for each player and add that in the table too. And print out

the complete table.
An electricity board charges the following rates to domestic users to discourage large consumption of energy:  For the 1 <sup>st</sup> 100 units – 0.60 Rs per unit  For next 200 units – 0.80 Rs per unit  Beyond 300 units – 0.90 Rs per unit  All users are charged a minimum of Rs. 50. If the total amount is more than Rs. 300 then an additional surcharge of 15% is added. Write a program to read the name of users and number of units consumed and print out the charges with names.
Write a class to create array objects with given size. write a function to multyply the elements of an array objects with scalar value s enter by user.
Write a program that consists of two classes time12 and time24. The first one maintains time on a 12-hour basis, where as the other one maintains it on a 24-hour basis. Provide conversionfunction to carryout the conversion from object of one type to another.
Create two classes DM and DB which store the value of distance. DM stores distance in meters and centimeters and DB store in feet and inch. Write a program that can read values forthe class objects and add one object of DM with another object of DB.
Demonstrate the use of return the value of the function by the reference
Write the program to demonstrate the use of default argument and constant argument by creating two different functions.