**18CSC202J – OODP – C++ Lab 7 Exercise**

**Topic: Inheritance and its Types**

1. Write a C++ program to read and print student information using two classes and simple inheritance.

2. Write a C++ program to read and print employee information using multiple inheritance.

3. Write a C++ program to demonstrate an example of hierarchical inheritance to get square and cube of a number.

4. Write a C++ program to read and print employee information with department and PF information using hierarchical inheritance.

5. Make a class named Fruit with a data member to calculate the number of fruits in a basket. Create two other classes named Apples and Mangoes to calculate the number of apples and mangoes in the basket. Print the number of fruits of each type and the total number of fruits in the basket.

6. We want to calculate the total marks of each student for a class in Physics, Chemistry and Mathematics along with the average marks of the class. The number of students in the class are entered by the user. Create a class named Marks with data members for roll number, name and marks. Create three other classes inheriting the Marks class, namely Physics, Chemistry and Mathematics, which are used to define marks in individual subject of each student. Roll number of each student will be generated automatically.

7. Write a C++ Program to find area and volume using multiple inheritance.

8. Write a C++ Program to show access to Private, Public and Protected using Inheritance.

9. Write a C++ Program to Access Protected Data Member using Inheritance.

10. Write a C++ Program display Student Marksheet using Multiple inheritance