**OOP THROUGH C++**

**UNIT-I**

1. Differentiate between C and C++.
2. Explain the key concepts of Object Oriented Programming.
3. Explain the disadvantages of Conventional Programming.
4. Discuss the advantages of OOP.
5. Discuss about namespaces in C++ with an example.

**UNIT-II**

1. How to define a class &object in C++? Give an example.
2. Write short notes on access specifiers.
3. Explain the Rules for using Inline Function.
4. Explain the concept of friend function.
5. What is a constructor? Write different rules associated with declaring constructors
6. What is function overloading? What are the principles of function overloading?
7. What is constructor overloading? Give example.
8. What is copy constructor? Explain with an example

**UNIT-III**

1. What is operator overloading? Write a C++ program illustrating Overloading binary operator?
2. What is unary operator overloading? Write a C++ program illustrating Overloading unary operator?
3. Explain how to overload unary operator using friend function.
4. Explain the types of inheritance.
5. Explain virtual function with an example.

**UNIT-IV**

1. Define generic programming? Explain about function templates in detail.
2. What is a class template? Explain with an example.
3. Explain the difference between templates and macros.
4. Write a C++ program to sort an unordered list of elements using function templates

**UNIT-V**

1. Explain the use of try, catch and throw for exception handling in C++
2. Explain how to catch multiple exceptions in C++.
3. Discuss STL components.
4. Explain types of containers
5. Explain vector with an example
6. Explain list with an example.

**UNIT-IV**

1. **Write a C++ program that implements Bubble Sort using function templates.**