1. What is meant by operator overloading ? Why it is necessary in oop ? Write the rules of operator overloading . Explain with example.

2. Can +() be a friend function ? Write a program for overload the + operator for allow the operations to use either order: int + object or object + int.

3. Explain the main reason for overloading [] operator with a program example

4. Write the limitations of operator overloading

5. Distinguish among public , private and protected inheritance

6. Explain why protected inheritance is important with example

7. When do ambiguity errors occurs in multiple inheritance and how we can resolve this problem in C++ ? Explain with example

8. Write a program where a virtual base class might be necessary and explain it .

9. Define abstract class

10 . how can we initialize the base class members using derived class constructor

11. What do you mean by I/O manipulator ?

12. what are the differences between unformated and formatted I/O operations.

13. What do you mean by Polymorphism in oop ? Example ,

14. difference between static binging and dynamic binging. Give examples of static and dynamic polymorphism.

15. what type of polymorphism we can achieve using virtual function ? How ? Example

16. Describe polymorphic class

17. What do you mean by template class ? Write a program that uses a template

18. Write the rules of pure virtual functions ? Why do we use these types of functions? Example

19. Describe a component of STL

20. what do you mean by exception and how can it be handled in C++ ? advantages of using exception handling mechanism in a program

21. Difference between member and friend functions

22. How to invoke Base class's parameterized constructor inside Derived class's parameterized constructor

23. what is virtual base class ? Explain writing a program

24. Write stream classes hierarchy for console I/O operations

25. what do you mean by manipulator . Formulate the diffesrence between manipulators and ios member functions

26. A friend function cannot be used to overload the assignment operator (=) . explain why ?

27. When an operator is overloaded , does it lose any of its original functionality ?

28. can the precedence of an overloaded operator be changes ? Can the number of operand be altered ?

19. Explain the importance of the virtual keyword when declaring a function in C++ base classes . How does it affect the behavior of derived class . Explain with example .

20. Describe the "diamond problem" in the context of multiple inheritance in C++ . How it can be resolved using virtual inheritance. With example.

21. When do we make a virtual function "pure" , what are the implications of making a function a pure virtual function ? Explain with explain

22. explain difference between early binding and laste binding in c++ . discuss pros and cons How virtual functions are used to implement late binding .

23. Describe key compoents of C++ exception handling , including try , catch and throw with an example .

24. A friend function cannot be used to overload the assignment operator(=) . Explain why ?

25. when an operator is overloaded , does it lose any of its original functionality ?

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27. "a derived class can access all the members of its base class" is this statement true

28. when a base class is inherited by the derived class , what happens to its public and private members ?

29. What is virtual function ? Explain with example

30. what is abstract class ? "abstract class canot be instantiated" explain this statement

31. what is generic function and what is generic class

what will happe if an exception is thrown for which there is no corresponding catch statement

32. what do you know about inserter , explain

33. what is stl , define a container , an iterator and an algorithm as they relate to the STL

34. what is the difference between operator functions and normal functions

35. explain " protected members are accessible in the class that defines them and in classes that inherit from that class " with example

36. what is a stream ? Write stream classes hierarchy for console I/O operations

37. in inheritance explain why the protected category is needed