

Question # 01:

Q-1 Can we declare function parameters as static?

Ans- No we cannot declare function parameter as static because the memory for static variable is sticky. And a function is only accessible when we call it and by declaring variable static make it invisible to any outside scope where we declare it.

Q-2 Can we make a destructor virtual? What are the benefits of it?

Ans- Yes we can make a virtual Destructor. When we want to delete the object of derived class through a pointer of base class which is non-virtual the program shows undefined behaviour. So we define base class destructor as virtual.

Q-3 Can we make a virtual constructor?

Ans- No we cannot make a virtual constructor because the virtual works only when derived class object is pointed by the base class pointer, constructor cannot be virtual because during execution no virtual pointer is defined yet.

Q4- What is name mangling?

Ans: Name mangling is the technique of encoding the functions name and variables name by some unique name so the compiler can easily specify the different functions.

Q-5 Define late binding & early binding.

Ans- LATE BINDING

This is run-time or dynamic polymorphism. In this, compiler adds the code that identifies the type of object at run-time and then calls the function which is matched with the call. We use this by declaring the virtual function.

EARLY BINDING

This is compile time or static polymorphism. In this, compiler clearly gets associated with the address to the function call.

Q6-Default parameters cause problems when there are overloaded functions. How?

Ans- Default parameters cause problem in overloaded function because if we declare two functions by same technique the compiler can go ambiguity in deciding which function to call .

Q7-Can we override a constructor?

Ans- No we cannot override a constructor because the scope of constructor is limit in itself class so if we override the base class constructor in derive class it will not specify the constructor.

Q8-When does a destructor get called?

Ans-When the object lifetime is over and it goes out of the scope the destructor gets called.

Q9-Can we call a destructor explicitly?

Ans-Yes a destructor can be called explicitly .

e.g: ~destructorA();

Q10-Is there any difference between a null pointer & a void pointer?

Ans- A null pointer points to the null value that is assigned to it whereas a void pointer is a void data type unless the address of another data type is assigned to it.

Q-11 Do friend functions violate the principle of encapsulation?

Ans- Friend function violates the principle of data hiding by accessing the private data member of class outside the class.

Q12- What's the value of $i++ + i++$?

Ans-

$i=10$;

$i++=10$;

$i++=11$;

$i++ + i++=10+11=21$

Q13-Can we stop a class from getting inherited?

Ans- We can stop the class from getting inherited by using the final class concept in c++

Q14- Can we call a virtual function from a constructor?

Ans- we can call the virtual function in a constructor but it is not what we expect because the virtual call mechanism does not work in a constructor because overriding a base class from derived class has not yet happened.