

**CS304 - Object Oriented Programming-Midterm-Subjective-Objective-
Paper(2-12-2011)**

Question No: 1 (Marks: 1) - Please choose one

Suppose that the Test class does not have an overloaded assignment operator. What happens when an assignment `a=b`; is given for two Test objects a and b?

► The automatic assignment operator is used

► [The copy constructor is used](#)

► Compiler error

► Run-time error

Question No: 2 (Marks: 1) - Please choose one <http://www.vchawk.com>

A static member function can be called, even when a class is not _____.

► Declared

► Define

► Instantiated

► Called

Question No: 3 (Marks: 1) - Please choose one

Identify which of the following overloaded operator function's declaration is appropriate for the given call?

`Rational_number_1 + 2.325`

Where `Rational_number_1` is an object of user defined class `Rational_number`.

► `Rational_number operator+( Rational_number & obj);`

► `Rational_number operator+(double& obj);`

► `Rational_number operator+(Rational_number &obj, double& num);`

► `operator+(double& obj);`

Question No: 4 (Marks: 1) - Please choose one

What problem(s) may occur when we copy objects without using deep copy constructor?

- ▶ Dangling pointer
- ▶ Memory Leakage
- ▶ **All of the given** <http://www.vchowk.com>
- ▶ System crash

Question No: 5 (Marks: 1) - Please choose one

_____ **provide the facility to access the data member.**

- ▶ **accesser function**
- ▶ private function
- ▶ inline function
- ▶ None of the given

Question No: 6 (Marks: 1) - Please choose one

Constant objects cannot change their state,

- ▶ **True**
- ▶ False

Question No: 7 (Marks: 1) - Please choose one

The _____ relationship indicates that an object contains other objects.

- ▶ None of given
- ▶ **'has-a'**
- ▶ 'is-a'
- ▶ 'be-

Question No: 8 (Marks: 1) - Please choose one

Which one of the following features of OOP is used to derive a class from another?

- ▶ Encapsulation
- ▶ Polymorphism
- ▶ Data hiding <http://www.vchowk.com>

► **Inheritance**

Question No: 9 (Marks: 1) - Please choose one

_____ is a relationship

► **Inheritance**

► Polymorphism

► abstraction

► encapsulation

Question No: 10 (Marks: 1) - Please choose one

_____ satisfy the condition of polymorphism

► Carbon

► Diamond

► Coal

► **all of the given**

Question No: 11 (Marks: 1) - Please choose one

A generalization-specialization relation between classes are implemented using

► data hiding

► friend classes

► encapsulation

► **inheritance**

Question No: 12 (Marks: 1) - Please choose one

The >= operator can be overloaded.

► **True**

► False

Question No: 13 (Marks: 1) - Please choose one

In order to free the memory occupied by the object, we use -----

- ▶ Constructor
- ▶ **Destructor**
- ▶ Shallow Copy
- ▶ Deep Copy

Question No: 14 (Marks: 1) - Please choose one

<http://www.vchowk.com>

Which of the following is not an example of multiple inheritances?

- ▶ Mermaid
- ▶ **Woman**
- ▶ None of the given
- ▶ Amphibious Vehicle

Question No: 15 (Marks: 1) - Please choose one

Static variable can be initialized more than once.

- ▶ True
- ▶ **False**

Question No: 16 (Marks: 1) - Please choose one

A generic class showing all the common attributes and a behavior of other classes represents a very important feature in oop called -----

- ▶ **Inheritance**
- ▶ Encapsulation
- ▶ Polymorphism
- ▶ Abstraction

Question No: 21 (Marks: 2)

Write down C++ code for unary operator overloading.

Question No: 22 (Marks: 2) <http://www.vchowk.com>

Friend functions increase 'Programming bugs'. What is your opinion?

Question No: 23 (Marks: 3)

Explain overloading?

Question No: 24 (Marks: 3)

Give c++ code to overload unary '-- ' operator for complex numbers class.

Question No: 25 (Marks: 5)

Write down the out put of the following code:

```
class Student{ ...
public:
static int noOfStudents; Student();
~Student();
...
};
int Student::noOfStudents = 0; Student::Student(){
noOfStudents++;
}
::~~Student(){
noOfStudents--; }
int Student::noOfStudents = 0;
int main(){
cout <
cout <
Student studentB;
cout <
}
```

Question No: 26 (Marks: 5)

What are Accessor Functions, Explain with an example.

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- ▶ friend classes
- ▶ encapsulation
- ▶ inheritance

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```
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int main(){
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}
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