

CS304- Object Oriented Programming LATEST SOLVED MCQS FROM MIDTERM PAPERS

Nov 07,2011

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Latest Mcqs

CS304-MIDTERM SOLVED MCQS WITH REFERENCES



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Question No: 1 (Marks: 1) - Please choose one Which part of an object exhibits its state?

- **Data** (Page 23)
- ► Operations
- Any public part
- Any private part

Question No: 2 (Marks: 1) - Please choose one Inheritance is a way to

- ▶ organize data.
- pass arguments to objects of classes.
- ▶ add features to existing classes without rewriting them. (Page 27)
- improve data-hiding and encapsulation.

Question No: 3 (Marks: 1) - Please choose one Suppose you have been given the following design,

"A person has a name, age, address and sex. You are designing a class to represent a type of person called a patient. This kind of person may be given a diagnosis, have a spouse and may be alive". Given that the person class has already been created, what of the following would be appropriate to include when you design the patient class?

registration date and diagnosis

Click here for Detail

- \blacktriangleright age and sex
- sex and diagnosis
- diagnosis and age

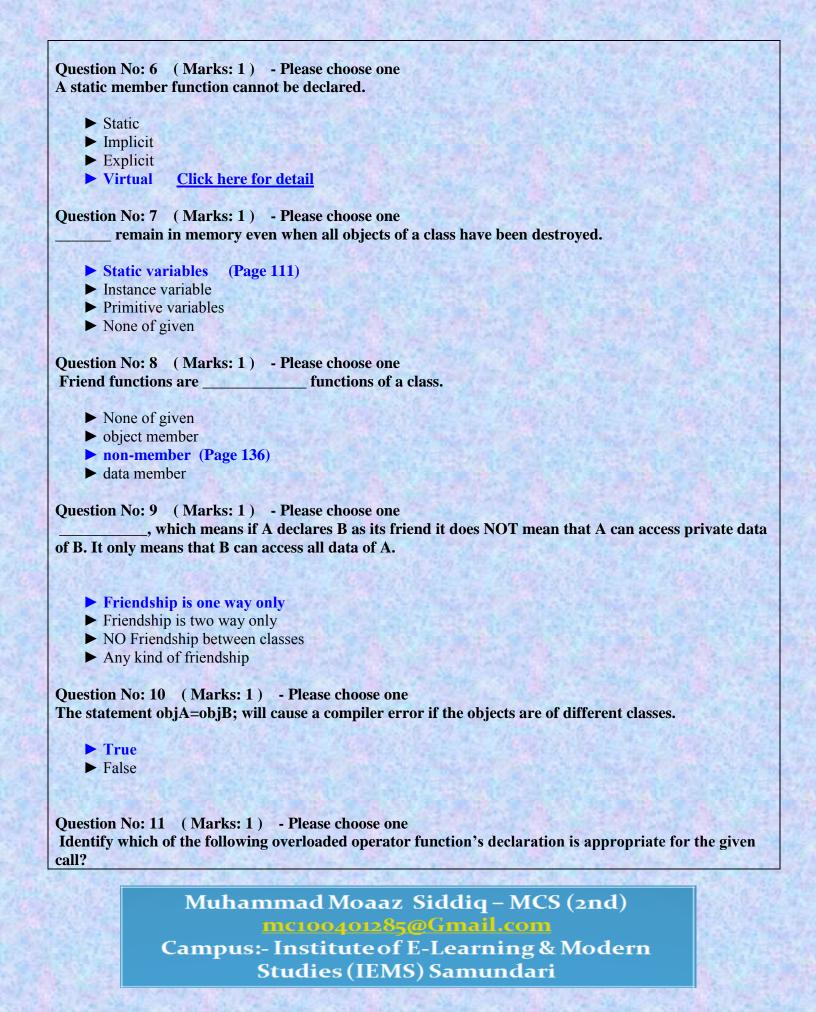
Question No: 4 (Marks: 1) - Please choose one What problem(s) may occur when we copy objects without using deep copy constructor?

- ► Dangling pointer
- Memory Leakage
- ► All of the given (Page 147)
- System crash

Question No: 5 (Marks: 1) - Please choose one this pointers are not accessible for static member functions. True (Page 114)

True (Page 114)False

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```
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);
                                                        (Page 145)
    ► Rational number operator+(Rational number &obj, double& num);
    operator+(double& obj);
Question No: 12 (Marks: 1) - Please choose one
Which operator can not be overloaded?
    \blacktriangleright The relation operator (>=)
    Assignment operator (=)
    ► Script operator ([])
    ► Conditional operator (? : ) (Page 141)
Question No: 13 (Marks: 1) - Please choose one
To convert from a user-defined class to a basic type, you would most likely use
    ► a built-in conversion operator.
    ► a one-argument constructor.
    ▶ an overloaded = operator.
    a conversion operator that's a member of the class.
Question No: 14 (Marks: 1) - Please choose one
The technique in which we visualize our programming problems according to real life's problems is
called
    structured programming
    object oriented Programming
                                         (Page 9)
    procedural programming
    non of the given
Ouestion No: 15 (Marks: 1) - Please choose one
                                                           properties from another class
In object orientated programming, a class of objects cans
of objects
    ► Utilize
    ► Borrow
```

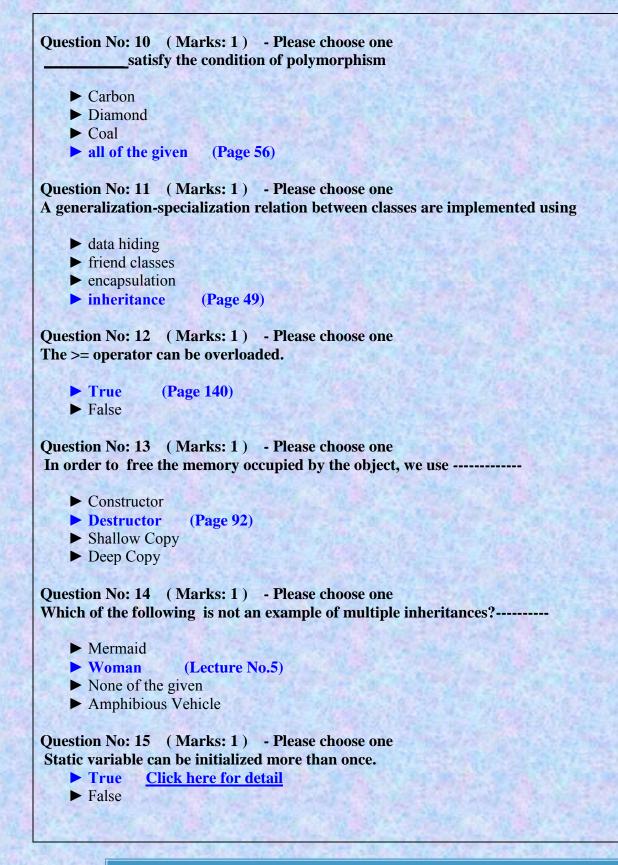
- Inhorit
- Inherit <u>Click here for detail</u>
- Adopt

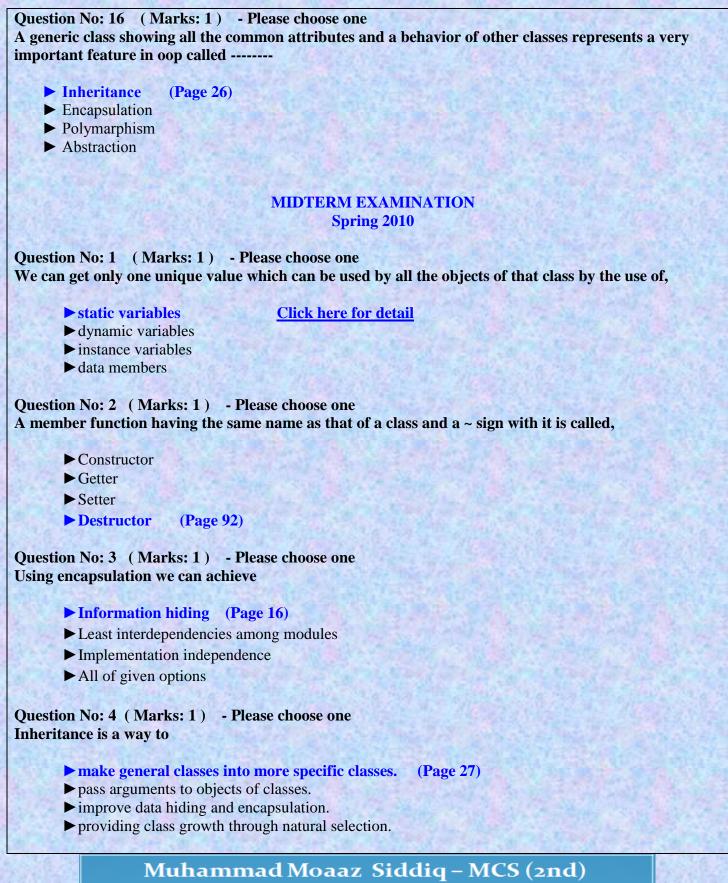
Question No: 16 (Marks: 1) - Please choose one A C++ class is similar to
Structure <u>Click here for detial</u>
 Header File Library File
 None of the given
• None of the given
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Spring 2010
and the constraint of the state of the state of the state of the state
Question No: 1 (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 (Page 147) System graph
► System crash
 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 <u>Click here for detial</u>
Compiler error
► Run-time error
Question No: 3 (Marks: 1) - Please choose one a'A static member function can be called, even when a class is not
Declared
 Declared Define
 Instantiated C++ How to Program, Fifth Edition(Page 871)
 Called Called
Question No: 4 (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.
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```
► Rational number operator+( Rational number & obj);
    Rational number operator+(double& obj);
                                                  (Page 145)
    ▶ Rational number operator+(Rational number &obj, double& num);
    ► operator+(double& obj);
Question No: 5 (Marks: 1) - Please choose one
           provide the facility to access the data member.
    accesser function
                         (Page 68)
    ▶ private function
    ▶ inline function
    ► None of the given
Question No: 6 (Marks: 1) - Please choose one
Constant objects cannot change their state,
    True (Page 105)
    ► False
Question No: 7 (Marks: 1) - Please choose one
The _____ relationship indicates that an object contains other objects.
    ► None of given
                       (Page 53)
    ▶ '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
    ► Inheritance
                        (Page 25)
Question No: 9 (Marks: 1) - Please choose one
  is a relationship
    ► Inheritance
                      (Page 25)
    ▶ Polymarphism
    ▶ abstraction
    ▶ encapsulation
```





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Question No: 5 (Marks: 1) - Please choose one
Static variable can be initialized more than once.
True
False
         (Page 107)
Question No: 6 (Marks: 1) - Please choose one
For classes with common behavior, you can save effort by placing the common behavior in a _
       Derived Class
                      (Page 29)
       Base class
       ► Deprived Class
       ► Named class
Question No: 7 (Marks: 1) - Please choose one
Which of the following are an advantage of OOP?
       ► OOP makes it easy to re-use the code
       ▶ It provides an ability to create one user defined data type by extending the other
       ► It provides the facility of defining Abstract data types through which real world entities can be
defined better.
       ► All of the given options
                                     Click here for detail
Question No: 8 (Marks: 1) - Please choose one
The >= operator can be overloaded.
                  (Page 140)
       ► True
       ► False
Question No: 9 (Marks: 1) - Please choose one
A static member function cannot be declared.
       ► Static
       ► Implicit
       ► Explicit
       ► Virtual
                     Click here for detail
Question No: 10 (Marks: 1) - Please choose one
Static variables act like a global variable in the context or scope of the class.
       ► True
                 click here for detail
       ► False
Question No: 11 (Marks: 1) - Please choose one
The compiler won't object if you overload the * operator to perform division.
       ► True
                    Click here for detail
       ► False
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```
Question No: 12 (Marks: 1) - Please choose one
We can use "this" pointer in the constructor in the body and even in the initialization list of any class if
we are careful,
```

► TRUE

False

Question No: 13 (Marks: 1) - Please choose one A C++ class is similar to -----

► Structure

Click here for detail

► Header File

► Library File

► None of the given

Question No: 14 (Marks: 1) - Please choose one Which operator can not be overloaded?

- The relation operator (\geq)
- ► Assignment operator (=)
- ► Script operator ([])
- ► Conditional operator (? :) (Page 141)

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

An overloaded operator always requires one less argument than its number of operands.

► True (Page 896)

► False

Question No: 16 (Marks: 1) - Please choose one A generalization-specialization relation between classes are implemented using

- ► data hiding
- ► friend classes
- ▶ encapsulation
- ▶ inheritance (Page 49)

Question No: 17 (Marks: 1) - Please choose one In OOP a class is an example of _____

► Data Type

- ► Abstract Type
- ► User Defined Type (Page 66)
- ► None of the given

Question No: 18 (Marks: 1) - Please choose one A class can be identified from a statement by ------

Noun (Page 58)Pronoun

- Pronoun
- ► Verb
- ► Adverb

Question No: 19 (Marks: 1) - Please choose one The members of a class that can be accessed without creating the object of the class is called

- ► Private member
- ► Data Member
- Public Member

(How to Program page 983)

► Static

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Question No: 1 (Marks: 1) - Please choose one Suppose there is an object of type Person, which of the following can be considered as one of its attributes

- ► Name
- ► Age
- ► Work()
- **Both Name and Age (page 13)**

Question No: 2 (Marks: 1) - Please choose one What a derived class can add?

- New data members
- New member functions and New friend functions
- New constructors and destructor
- All of given <u>Click here for Detail</u>

Question No: 3 (Marks: 1) - Please choose one ______is/are used to access information hidden within an object?

- ► Interface
- Private data members
- Private member functions (Page 69)
- ► Both public and private members

Question No: 4 (Marks: 1) - Please choose one this pointers are not accessible for static member functions.

True (Page 14)False

Question No: 5 (Marks: 1) - Please choose one A static member function cannot be declared.

- ► Static
- ► Implicit
- ► Explicit
- Virtual <u>Click here for detail</u>

Question No: 6 (Marks: 1) - Please choose one C++ compiler does not allow to dynamically allocate memory for objects

► False <u>Click here for detail</u>

► True

Question No: 7 (Marks: 1) - Please choose one Given the following class class Base{ int Age=33;

How you can improve above class with respect to accessing the field Age?

► Define the variable Age as private

Define the variable Age as protected

► Define the variable Age as private and create a get method that returns it and a set method that updates it

Click here for detail

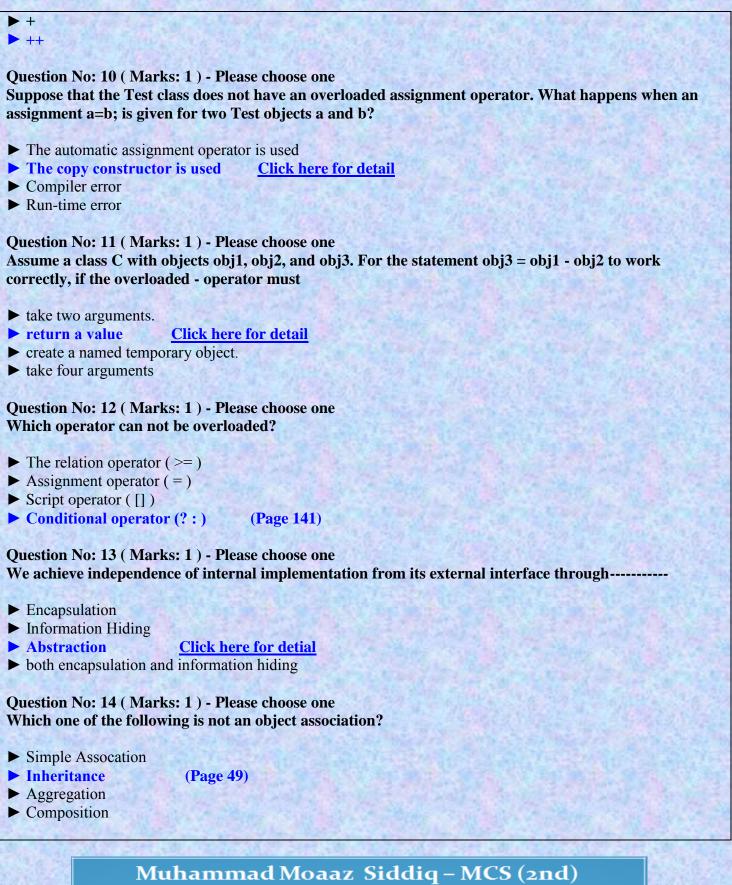
▶ Define the variable Age as protected and create a set method that returns it and a get method that updates it

Question No: 8 (Marks: 1) - Please choose one Friend class and friend function can be used as an alternate to each other

- True <u>Click here for detail</u>
- ► False

/
-

Question No: 9 (Marks: 1) - Please choose one Which of the following operators always takes no argument if overloaded?



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Keeping in view the principle of abstraction, which of the above information the company needs to save as employee's record?

```
▶ 2,4
    ▶ 1, 3, 5
    ▶ 1, 2, 3
             (Lecture No.3)
    ▶ 1, 2, 3, 4
Question No: 4 (Marks: 1) - Please choose one
What a derived class can add?
    ► New data members
    ▶ New member functions and New friend functions
    New constructors and destructor
    ► All of given
                       Click here for Detail
Ouestion No: 5 (Marks: 1) - Please choose one
The concept of derived classes is involved in,
    ▶ inheritance
                       (Page 25)
    ▶ encapsulation
    ► structure
    ► array
Question No: 6 (Marks: 1) - Please choose one
Your chief Software designer has shown you a sketch of the new Computer parts system she is about to
create. At the top of the hierarchy is a Class called Computer and under this are two child classes. One is
called LinuxPC and one is called WindowsPC. The main difference between the two is that one runs the
Linux operating System and the other runs the Windows System (of course another difference is that one
needs constant re-booting and the other runs reliably). Under the WindowsPC are two Sub classes one
called Server and one Called Workstation. How might you appraise your designers work?
    • Give the goahead for further design using the current scheme
    ► Ask for a re-design of the hierarchy with changing the Operating System to a field rather than
                Click here for detail
Class type
    ► Ask for the option of WindowsPC to be removed as it will soon be obsolete
    ► Change the hierarchy to remove the need for the superfluous Computer Class.
Question No: 7 (Marks: 1) - Please choose one
Consider the code below,
class Fred {
public:
Fred();
```

... }; int main()

}

Fred a[10]; Fred* p = new Fred[10];

Select the best option,

Fred a[10]; calls the default constructor 09 times
 Fred* p = new Fred[10]; calls the default constructor 10 times
 Produce an error

Fred a[10]; calls the default constructor 11 times
Fred* p = new Fred[10]; calls the default constructor 11 times

► Fred a[10]; calls the default constructor 10 times Fred* p = new Fred[10]; calls the default constructor 10 times

Question No: 8 (Marks: 1) - Please choose one Which construct is the source for the creation of an object?

Destructor of the class

New operator <u>Click here for detial</u>

► Delete operator

Constructor of the class

Question No: 9 (Marks: 1) - Please choose one this pointers are not accessible for static member functions.

True (Page 14)
False

Question No: 10 (Marks: 1) - Please choose one When a variable is define as static in a class then all object of this class,

- ► Have different copies of this variable
- Have same copy of this variable
 <u>Click here for detail</u>
- Can not access this variable
- ► None of given

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

remain in memory even when all objects of a class have been destroyed.

- Static variables (Page 111)
- Instance variable
- Primitive variables
- None of given

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```
Question No: 12 (Marks: 1) - Please choose one
Given the following class
class Base{
    int Age=33;
}
How you can improve above class with respect to accessing the field Age?
    ► Define the variable Age as private
    ► Define the variable Age as protected
   ▶ Define the variable Age as private and create a get method that returns it and
       a set method that updates it
                                      Click here for detail
    ▶ Define the variable Age as protected and create a set method that returns it and a get method that
updates it
Question No: 13 (Marks: 1) - Please choose one
The life of sub object is not dependant on the life of master class in
    ► Composition
   ► Aggregation
                     (Page 134)
    ► Separation
    ► None of the given
Question No: 14 (Marks: 1) - Please choose one
Which one is not keyword in C++?
    ▶ operator
    ► B op
                  Click here for detail
    ► const
    ► None of given
Ouestion No: 15 (Marks: 1) - Please choose one
The >= operator can be overloaded.
    ► True
               (Page 140)
    ► False
Ouestion No: 16 (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);
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MIDTERM EXAMINATION Spring 2009

Question No: 1 (Marks: 1) - Please choose one A template provides a convenient way to make a family of

- variables and data members
- ► functions and classes <u>Click here for detail</u>
- classes and exceptions
- ▶ programs and algorithms

Question No: 2 (Marks: 1) - Please choose one Which one of the following terms must relate to polymorphism?

- Static allocation
- Static typing
- **Dynamic binding** (How to program , page 1103) <u>Click here for more detail</u>
- ► Dynamic allocation

Question No: 3 (Marks: 1) - Please choose one What is true about function templates?

- ► The compiler generates only one copy of the function template
- ▶ The compiler generates a copy of function respective to each type of data (Page 257)
- ▶ The compiler can only generate copy for the int type data
- ▶ None of the given.

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

Which of the following is the best approach if it is required to have more than one functions having exactly same functionality and implemented on different data types?

- Templates <u>Click here for detial</u>
- Overloading
- Data hiding
- Encapsulation

Question No: 5 (Marks: 1) - Please choose one template <> class Vector<char*> { }

This is an example of partial specialization.

True (Page 281)False

Question No: 6 (Marks: 1) - Please choose one Classes like TwoDimensionalShape and ThreeDimensionalShape would normally be concrete, while classes like Sphere and Cube would normally be abstract. ► True **False Click here for Detail Ouestion No: 7** (Marks: 1) - Please choose one A non-virtual member function is defined in a base class and overridden in a derived class; if that function is called through a base-class pointer to a derived class object, the derived-class version is used. ► True **False Click here for Detial Question No: 8** (Marks: 1) - Please choose one Assume a class Derv that is privately derived from class Base. An object of class Derv located in main() can access public members of Derv. **Click here for Detail** ▶ protected members of Derv. private members of Derv. ▶ protected members of Base. Question No: 9 (Marks: 1) - Please choose one In order to define a class template, the first line of definition must be: ► template <typename T> (Page 281) ► typename <template T> ► Template Class <ClassName> ► Class < Template T> **Ouestion No: 10** (Marks: 1) - Please choose one If there is a pointer p to objects of a base class, and it contains the address of an object of a derived class, and both classes contain a nonvirtual member function, ding(), then the statement p->ding(); will cause the version of ding() in the _____ class to be executed. ► Base ► Derived ► Abstract virtual (not sure) Muhammad Moaaz Siddig – MCS (2nd)

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

When the base class and the derived class have a member function with the same name, you must be more specific which function you want to call (using _____).

- scope resolution operator
- dot operator
- null operator
- Operator overloading (Page 204) <u>Click here for Detail</u>

Question No: 12 (Marks: 1) - Please choose one Non Template Friend functions of a class are friends of ______instance/s of that class.

All
 Click here for detail
 One specific

- One specific
- All instances of one date type
- None of the given options

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

- finds matching sequences of elements in two containers.
- finds a container that matches a specified container.
- takes iterators as its first two arguments.
 <u>Click here for Detail</u>
- takes container elements as its first two arguments.

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

If you define a vector **v** with the default constructor, and define another vector **w** with a one-argument constructor to a size of 11, and insert 3 elements into each of these vectors with push_back(), then the size() member function will return _____ for **v** and _____ for **w**.

- ▶ 11 for v and 3 for w.
- \blacktriangleright 0 for v and 0 for w.
- \blacktriangleright 0 for v and 3 for w.
- ► 3 for v and 11 for w.

Question No: 15 (Marks: 1) - Please choose one Which of the following may not be an integral part of an object?

- ► State
- Behavior
- Protected data members
- ► All of given (not sure)

Question No: 16 (Marks: 1) - Please choose one Which is not the Advantage of inheritance?

- ▶ providing class growth through natural selection.
- ► facilitating class libraries.
- ► avoiding the rewriting of code. <u>Click here for Detail</u>
- providing a useful conceptual framework.