

# **C++ Institute**

## **Exam CPA**

**C++ Certified Associate Programmer**

**Verson: Demo**

**[ Total Questions: 10 ]**

**Topic break down**

<b>Topic</b>	<b>No. of Questions</b>
<b>Topic 1: Volume A</b>	<b>5</b>
<b>Topic 2: Volume B</b>	<b>5</b>

## Topic 1, Volume A

### Question No : 1 - (Topic 1)

What happens when you attempt to compile and run the following code?

```
#include <iostream>
#include <string>
using namespace std;

class A {
public:
    A() { cout << "A no parameters";}
    A(string s) { cout << "A string parameter";}
    A(A &a) { cout << "A object A parameter";}
};
```

```
class B : public A {
public:
    B() { cout << "B no parameters";}
    B(string s) { cout << "B string parameter";}
    B(int s) { cout << "B int parameter";}
};
```

```
int main () {
```

A a2("Test");

B b1(10);

B b2(b1);

return 0;

}

- A. It prints: A no parametersA no parametersB string parameter
- B. It prints: A string parameterA no parametersB int parameterA object A parameter
- C. It prints: A no parametersB string parameter
- D. It prints: A no parametersA no parameters

**Answer: B**

**Question No : 2 - (Topic 1)**

What happens when you attempt to compile and run the following code?

```
#include <iostream>
```

```
using namespace std;
```

```
int main(){
```

```
    int i, j;
```

```
    for(i = 0, j = 1; j < 2, i < 4; i++, j++);
```

```
    cout << i << " " << j;
```

```
    return 0;
```

```
}
```

- A. It prints: 4 5
- B. It prints: 2 3
- C. It prints: 3 2
- D. It prints: 4 3

**Answer: A**

**Question No : 3 - (Topic 1)**

Which code, inserted at line 5, generates the output "ABC"?

```
#include <iostream>
```

```
using namespace std;
```

```
class A {
```

```
public:
```

```
//insert code here
```

```
};
```

```
class B:public A {
```

```
public:
```

```
void Print(){ cout<< "B"; }
```

```
};
```

```
class C:public B {
```

```
public:
```

```
void Print(){ cout<< "C"; }
```

```
};
```

```
int main()
```

```
{
```

```
A ob1;
```

```
B ob2;
```

```
C ob3;
```

```
A *obj;
```

```
obj = &ob1;
```

```
obj->Print();
```

```
obj = &ob2;  
obj->Print();  
  
obj = &ob3;  
obj->Print();  
  
}
```

- A. void Print(){ cout<<"A";}
- B. virtual void Print(){ cout<<"A";}
- C. virtual void Print(string s){ cout<<s;}
- D. None of these

**Answer: B**

**Question No : 4 - (Topic 1)**

What happens if character 3 is entered as input?

```
#include <iostream>  
  
using namespace std;  
  
class A {  
  
public:  
  
int i;  
  
};  
  
int main () {  
  
int c;  
  
A obj;  
  
obj.i = 5;  
  
cin >> c;  
  
try  
  
{
```

```
switch (c)
{
    case A. throw 20;
    case B. throw 5.2f;
    case C. throw obj;
    default: cout<<"No exception";
}

}

catch (int e)
{ cout << "int exception. Exception Nr. " << e; }

catch (A e)
{ cout << "object exception. Exception Nr. " << e.i; }

catch (...)
{ cout << "An exception occurred."; }

return 0;
}
```

- A. It prints: object exception. Exception Nr. 5
- B. It prints: int exception. Exception Nr.
- C. It prints: An exception occurred
- D. It prints: No exception

**Answer: A**

**Question No : 5 - (Topic 1)**

What happens when you attempt to compile and run the following code?

```
#include <iostream>

#include <string>
```

```
using namespace std;

class First
{
    string *s;
public:
    First() { s = new string("Text");}
    ~First() { delete s;}
    void Print(){ cout<<*s;}
};

int main()
{
    First FirstObject;
    FirstObject.Print();
    FirstObject.~First();
}
```

- A. It prints: Text
- B. Compilation error
- C. Runtime error.
- D. None of these

**Answer: C**

## **Topic 2, Volume B**

**Question No : 6 - (Topic 2)**

What happens when you attempt to compile and run the following code?

```
#include <iostream>
#include <string>
using namespace std;

class Second;

class Base {
    int age;
public:
    Base () { age=5; }
    friend void set(Base &ob, Second &so);
    void Print() { cout << age; }
};

class Second {
    string name;
public:
    friend void set(Base &ob, Second &so);
    void Print() { cout << name; }
};

void set(Base &ob, Second &so) {
    ob.age = 0; so.name = "Bill";
}

int main () {
    Base a;
```

Second b;

```
set(a,b);
```

```
a.Print();
```

```
b.Print();
```

```
return 0;
```

```
}
```

- A. It prints: 0Bill
- B. Compilation error
- C. It prints: Bill0
- D. None of these

**Answer: A**

**Question No : 7 - (Topic 2)**

What happens when you attempt to compile and run the following code?

```
#include <iostream>
```

```
#include <string>
```

```
using namespace std;
```

```
class A {
```

```
protected:
```

```
int y;
```

```
public:
```

```
int x;
```

```
int z;
```

```
A() { x=1; y=2; z=3; }
```

```
A(int a, int b) : x(a), y(b) { z = x * y;}
```

```
void Print() {
```

```
    cout << z;
```

```
}
```

```
};
```

```
int main () {
```

```
    A a(2,5);
```

```
    a.Print();
```

```
    return 0;
```

```
}
```

- A.** It prints: 10
- B.** It prints: 2
- C.** It prints: 6
- D.** It prints: 5

**Answer: A**

**Question No : 8 - (Topic 2)**

What happens when you attempt to compile and run the following code?

```
#include <iostream>
```

```
#include <string>
```

```
using namespace std;
```

```
class Base
```

```
{  
string s;  
public:  
Base() { s="Sample text";}  
Base(string s) { this->s=s; }  
void Print() { cout << s; }  
};
```

```
int main()  
{  
Base *o = new Base();  
o->Print();  
}
```

- A. It prints: Sample text
- B. It prints: Sample
- C. It prints: text
- D. None of these

**Answer: A**

**Question No : 9 - (Topic 2)**

What happens when you attempt to compile and run the following code?

```
#include <iostream>
```

```
using namespace std;
```

```
int main()
```

```
{  
long int x,y=10;  
double d;  
d = 3.99;  
x=(int) d;  
cout << x << ", ";  
d=float (y);  
cout << d;  
return 0;  
}
```

- A. It prints: 3, 10
- B. It prints: 3.99, 10
- C. It prints: 4, 10.0
- D. It prints: 4, 10

**Answer: A**

**Question No : 10 - (Topic 2)**

What is the output of the program?

```
#include <iostream>  
  
#include <string>  
  
  
using namespace std;  
  
  
int main()  
{  
string s1[]={ "H" , "t" };
```

```
string s;

for (int i=0; i<2; i++) {

    s = s1[i];

    if (i==0)

        s.insert(1,"ow");

    else

        s.push_back('o');

    cout << s;

}

return( 0 );

}
```

- A.** It prints: Hoto
- B.** It prints: Ht
- C.** It prints: toHo
- D.** It prints: Howto

**Answer: D**