

Exam : **CPA**

Title : C++ Certified Associate
Programmer

Version : DEMO

1.

What will the variable "age" be in class B?

```
class A {
int x;
protected:
int y;
public:
int age;
A () { age=5; };
};
class B : public A {
string name;
public:
B () { name="Bob"; };
void Print() {
cout << name << age;
}
};
```

A.public

B.private

C.protected

D.None of these

Answer: A

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

```
#include <iostream>
#include <string>
using namespace std;
class complex{
double re, im;
public:
complex() : re(1),im(0.4) {}
complex operator?(complex &t);
void Print() { cout << re << " " << im; }
};
complex complex::operator? (complex &t){
complex temp;
temp.re = this?>re ? t.re;
temp.im = this?>im ? t.im;
return temp;
}
int main(){
complex c1,c2,c3;
c3 = c1 ? c2;
```

```
c3.Print();
}
```

A.It prints: 1 0.4
B.It prints: 2 0.8
C.It prints: 0 0
D.It prints: 1 0.8

Answer: C

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

```
#include <iostream>
using namespace std;
class complex{
double re;
double im;
public:
complex() : re(0),im(0) {}
complex(double x) { re=x,im=x;};
complex(double x,double y) { re=x,im=y;};
void print() { cout << re << " " << im;};
};
int main(){
complex c1;
c1 = 3.0;
c1.print();
return 0;
}
```

A.It prints: 0 0
B.It prints: 1 1
C.It prints: 3 3
D.Compilation error

Answer: C

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

```
#include <iostream>
using namespace std;
void fun(int);
int main()
{
int a=0;
fun(a);
return 0;
}
void fun(int n)
{
```

```
if(n < 2)
{
fun(++n);
cout << n;
}
}
```

- A.It prints: 21
- B.It prints: 012
- C.It prints: 0
- D.None of these

Answer: A

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

```
#include <iostream>
using namespace std;
int s(int n);
int main()
{
int a;
a = 3;
cout << s(a);
return 0;
```

```
}
int s(int n)
{
if(n == 0) return 1;
return s(n-1)*n;
}
```

- A.It prints: 4
- B.It prints: 6
- C.It prints: 3
- D.It prints: 0

Answer: B

6.What will be the output of the program?

```
#include <iostream>
using namespace std;
int fun(int);
int main()
{
cout << fun(5);
return 0;
```

```
}  
int fun(int i)  
{  
return i*i;  
}
```

- A.25
- B.5
- C.0
- D.1

Answer: A

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

```
#include <iostream>  
using namespace std;  
#define FUN(arg) if(arg) cout<<"Test";  
int main()  
{  
int i=1;  
FUN(i<3);  
return 0;  
}
```

- A.It prints: 0
- B.It prints: T
- C.It prints: T0
- D.It prints: Test

Answer: D

8.What will the variable "y" be in class B?

```
class A {  
int x;  
protected:  
int y;  
public:  
int age;  
};  
class B : private A {  
string name;  
public:  
void Print() {  
cout << name << age;  
}  
};
```

- A.public
- B.private

- C.protected
- D.None of these

Answer: B

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

```
#include <iostream>
using namespace std;
int main()
{
float x=3.5,y=1.6;
int i,j=2;
i = x + j + y;
cout << i;
return 0;
}
```

- A.It prints: 7
- B.It prints: 6
- C.It prints: 7,1
- D.Compilation error

Answer: A

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

```
#include <iostream>
using namespace std;
int main(){
int i = 1;
if (i==1) {
cout << i;
} else {
cout << i-1;
}
return 0;
}
```

- A.It prints: 0
- B.It prints: 1
- C.It prints: -1
- D.It prints: 2

Answer: B

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

```
#include <iostream>
#include <string>
using namespace std;
class complex{
```

```
double re, im;
public:
complex() : re(1),im(0.4) {}
complex operator+(complex &t);
void Print() { cout << re << " " << im; }
};
complex complex::operator+ (complex &t){
complex temp;
temp.re = this->re + t.re;
temp.im = this->im + t.im;
return temp;
}
int main(){
complex c1,c2,c3;
c3 = c1 + c2;
c3.Print();
}
```

- A.It prints: 1 0.4
- B.It prints: 2 0.8
- C.It prints: 0 0
- D.Garbage value

Answer: B

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

```
#include <cstdlib>
#include <iostream>
using namespace std;
float* sum(float a,float b);
float* sum(float a,float b)
{
float *f = new float;
*f = a+b;
return f;
}
int main()
{
float a,b,*f;
a = 1.5; b = 3.4;
f = sum(a,b);
cout<<*f;
return 0;
}
```

- A.It prints: 0
- B.It prints: 4.9

C.It prints: 5

D.It prints: 4

Answer: B

13.Which statement should be added in the following program to make work it correctly?

using namespace std;

int main (int argc, const char * argv[])

```
{  
cout<<"Hello";  
}
```

A.#include<stdio.h>

B.#include<stdlib.h>

C.#include <iostream>

D.#include<conio.h>

Answer: C

14.What is the output of the program?

```
#include <iostream>
```

```
using namespace std;
```

```
int main()
```

```
{  
int tab[4]={10,20,30,40};  
tab[1]=10;  
int *p;  
p=&tab[0];  
cout<<*p;  
return 0;  
}
```

A.It prints: 10

B.It prints: 20

C.It prints: 11

D.It prints: 30

Answer: A

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

```
#include <iostream>
```

```
using namespace std;
```

```
int fun(int x) {
```

```
return 2*x;
```

```
}
```

```
int main(){
```

```
int i;
```

```
i = fun(1) & fun(0);
```

```
cout << i;
```

```
return 0;
}
```

- A.It prints: 0
- B.It prints: 1
- C.It prints: -1
- D.Compilation error

Answer: A

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

```
#include <iostream>
using namespace std;
class A {
public:
virtual void Print()=0;
};
class B:public A {
public:
virtual void Print() { cout<< "B"; }
};
class C:public A {
public:
virtual void Print() { cout<< "C"; }
};
int main()
{
B ob2;
C ob3;
A *obj;
obj = &ob2;
obj->Print();
obj = &ob3;
obj->Print();
}
```

- A.It prints: BC
- B.It prints: CB
- C.It prints: CC
- D.It prints: BB

Answer: A

17.What will the variable "age" be in class B?

```
class A {
int x;
protected:
int y;
```

```
public:
int age;
};
class B : private A {
string name;
public:
void Print() {
cout << name << age;
}
};
```

- A.public
- B.private
- C.protected
- D.None of these

Answer: B

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

```
#include <iostream>
using namespace std;
int x=5;
static int y;
int i=0;
void static myFunction()
{
y=x++ + ++i;
}
int main (int argc, const char * argv[])
{
x++;
myFunction();
cout<<y<<" "<<x<<" " << i;
}
```

- A.Compilation fails
- B.It prints: 5 5 0
- C.It prints: 7 7 1
- D.It prints: 6 5 1

Answer: C

19.Which of the structures is incorrect?

```
1:
struct s1{
int x;
long int li;
};
```

2:

```
struct s2{  
float f;  
struct s2 *s;  
};
```

3:

```
struct s3{  
float f;  
struct s3 s;  
};
```

A.1

B.2

C.3

D.2, 3

Answer: C

20.What is the output of the program?

```
#include <iostream>  
#include <string>  
using namespace std;  
int main()  
{  
string s1="Wo";  
string s2;  
s2 = s1;  
string s3;  
s3 = s2.append("rldHello");  
cout << s3;  
return( 0 );  
}
```

A.It prints: WorldHello

B.It prints: HelloWo

C.It prints: World

D.It prints: Hello

Answer: A