

Website: www.VCEplus.io

Twitter: https://twitter.com/VCE_Plus

Exam Code: CPA-21-02

Exam Name: CPA - C++ Certified Associate Programmer



Exam A

QUESTION 1

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

```
#include <iostream>
using namespace std;
int main()
{
    int i = 0;
    i++;
    goto lab;
    i++;
lab:
    cout<<i;
    return 0;
}
```

- A. It prints: 0
- B. It prints: 34
- C. It prints: 1
- D. It prints: 3

Correct Answer: C

Section:

QUESTION 2

What is the output of the program?

```
#include <iostream>
#include <string>
using namespace std;
int main()
{
    char str[] = 'Hello\0\World\0';
    cout << str;
    return 0;
}
```

- A. It prints: Hello
- B. It prints: World
- C. It prints: HW
- D. It prints: World\0World

Correct Answer: A

Section:

QUESTION 3

www.VCEplus.io

If there is one, point out an error in the program

```
#include <iostream>
using namespace std;
int main()
{
    int c = 'a';
    switch(i)
    {
    case '2':
        cout<<'OK';
    case '1':
        cout<<'Error';
    default:
        break;
    }
    return 0;
}
```

- A. No Error
- B. Use of undeclared identifier 'i'
- C. Illegal use of 'continue'
- D. Illegal use of 'break'

Correct Answer: B

Section:

www.VCEplus.io

QUESTION 4

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

```
#include <iostream>
#include <string>
using namespace std;
class A {
    int x;
protected:
    int y;
public:
    int z;
    A() { x=1; y=2; z=3; }
};
class B : public A {
    string z;
public:
    void set() { y = 4; z = 'John'; }
    void Print() { cout << y << A::z; }
};
int main () {
    B b;
    b.set();
    b.Print();
}
```

```
return 0;  
}
```

- A. It prints: 4John
- B. It prints: 2John
- C. It prints: 23
- D. It prints: 43

Correct Answer: D
Section:

QUESTION 5

Which code, inserted at line 10, generate the output '50'?

```
#include <iostream>  
using namespace std;  
class Base {  
int age;  
public:  
Base () {  
age=5;  
};  
//insert code here  
void Print() { cout << age;}  
};  
void setAge(Base &ob) {ob.age = 0;}  
int main () {  
Base a;  
a.Print();  
setAge(a);  
a.Print();  
return 0;  
}
```

- A. friend void setAge(Base ob);
- B. friend void setAge(Base *ob);
- C. friend void setAge(Base &ob);
- D. None of these

Correct Answer: C
Section:

QUESTION 6

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

```
#include <iostream>  
using namespace std;  
class First  
{  
public:  
First() { cout << 'Constructor';}
```

www.VCEplus.io

```
void Print(){ cout<<'from First';}  
};  
int main()  
{  
First FirstObject;  
FirstObject.Print();  
}
```

- A. It prints: Constructorfrom First
- B. It prints: Constructor
- C. It prints: from First
- D. None of these

Correct Answer: A

Section:

QUESTION 7

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

```
#include <iostream>  
#include <string>  
using namespace std;  
void fun(int i);  
int main()  
{  
int i=0;  
i++;  
for (i=0; i<=5; i++)  
{  
fun(i);  
}  
return 0;  
}  
void fun(int i)  
{  
if (i==3)  
return;  
cout << i;  
}
```

- A. It prints: 05
- B. It prints: 012345
- C. It prints: 01245
- D. It prints: 0

Correct Answer: C

Section:

QUESTION 8

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

```
#include <iostream>
using namespace std;
int main()
{
    int i = 5;
    do {
        i--;
        cout<<i;
    }
    while(i >= 0);
    return 0;
}
```

- A. It prints: 43210?1
- B. It prints: ?1
- C. It prints: 4321
- D. It prints: 1

Correct Answer: A
Section:

QUESTION 9

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

```
#include <iostream>
#include <string>
using namespace std;
string fun(string, string);
int main()
{
    string s='Hello';
    cout << fun(s, ' World');
    return 0;
}
string fun(string s1, string s2)
{
    return s1+s2;
}
```

- A. It will print: Hello World
- B. It will print: Hello
- C. It will print: World
- D. It will print: HW

Correct Answer: A
Section:

QUESTION 10

What is not inherited from the base class?

www.VCEplus.io

- A. constructor
- B. destructor
- C. operator=()
- D. operator+()

Correct Answer: A, B, C

Section:

QUESTION 11

How many times will the program print 'HELLO' ?

```
#include <iostream>
using namespace std;
int main()
{
cout<<'HELLO';
main();
return 0;
}
```

- A. 65536
- B. 32769
- C. 1
- D. Till stack overflows

Correct Answer: D

Section:

QUESTION 12

What is the output of the program?

```
#include <iostream>
#include <string>
using namespace std;
union t
{
char c;
int i;
};
class First
{
union t u;
public:
First() {
u.c = 'A';
}
void Print(){
cout << u.c;
}
};
int main()
```

www.VCEplus.io

```
{  
First *t = new First();  
t?>Print();  
}
```

- A. Garbage value
- B. It prints: A
- C. It prints: A 65
- D. Compilation error

Correct Answer: B
Section:

QUESTION 13

What is the output of the program?

```
#include <iostream>  
#include <string>  
using namespace std;  
class First  
{  
string name;  
public:  
First() {  
name = 'Alan';  
}  
void setName(string n) {this?>name = n;}  
void setName() {this?>name = 'John';}  
void Print(){  
cout << name;  
}  
};  
int main()  
{  
First ob1,*ob2;  
ob2 = new First();  
First *t;  
t = &ob1;  
t?>setName();  
t?>Print();  
t = ob2;  
t?>setName('Steve');  
ob2?>Print();  
}
```

- A. It prints: JohnSteve
- B. It prints: AlanAlan
- C. It prints: AlanSteve
- D. It prints: JohnAlan

www.VCEplus.io

Correct Answer: A

Section:

QUESTION 14

What is the output of the program given below?

```
#include <iostream>
using namespace std;
int main (int argc, const char * argv[])
{
float f=?10.501;
cout<<(int)f;
}
```

- A. 0
- B. 11
- C. ?10
- D. ?11

Correct Answer: C

Section:

QUESTION 15

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

Correct Answer: D

Section:

www.VCEplus.io

QUESTION 16

Which code, inserted at line 10, generates the output '2?1'?

```
#include <iostream>
#include <string>
using namespace std;
class A {
protected:
int y;
public:
int z;
};
//insert code here
public:
void set() {
y = 2;
z = 3;
}
void Print() { cout << y << z; }
};
int main () {
B b;
b.set();
b.z = ?1;
b.Print();
return 0;
}
```

- A. class B : private A {
- B. class B : public A {
- C. class B : protected A {
- D. class B {

Correct Answer: B

Section:

QUESTION 17

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

```
#include <iostream>
using namespace std;
class First
{
public:
void Print(){ cout<<'from First';}
};
class Second:public First
{
public:
void Print(){ cout<< 'from Second';}
};
```

www.VCEplus.io

```
void fun(First *obj);
int main()
{
    First FirstObject;
    fun(&FirstObject);
    Second SecondObject;
    fun(&SecondObject);
}
void fun(First *obj)
{
    obj?>Print();
}
```

- A. It prints: from First
- B. It prints: from Firstfrom First
- C. It prints: from Firstfrom Second
- D. It prints: from Secondfrom Second

Correct Answer: B

Section:

QUESTION 18

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

```
#include <iostream>
using namespace std;
int f(int a, int b);
int main()
{
    float b;
    b = f(20,10);
    cout << b;
    return 0;
}
int f(int a, int b)
{
    return a/b;
}
```

- A. It prints: 2
- B. It prints: 5
- C. It prints: 10
- D. It prints: 0

Correct Answer: A

Section:

QUESTION 19

If there is one, point out an error in the program

```
#include <iostream>
```

www.VCEplus.io

```
using namespace std;
int main()
{
    int i=1;
    for(;;)
    {
        cout<<i++;
        if(i>5)
            break;
    }
    return 0;
}
```

- A. Error in "if" statement
- B. Error in "for" loop
- C. No error
- D. Error in break statement

Correct Answer: C

Section:

QUESTION 20

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

```
#include <iostream>
using namespace std;
class A
{
    public:
    virtual void Print(){ cout<<'A';}
};
class B:public A
{
    public:
    virtual void Print(){ cout<< 'B';}
};
int main()
{
    A *obj;
    A ob1;
    obj = &ob1;
    obj->Print();
    B ob2;
    obj = &ob2;
    obj->Print();
}
```

- A. It prints: AB
- B. It prints: AA
- C. It prints: BA

www.VCEplus.io

D. It prints: BB

Correct Answer: A

Section:

QUESTION 21

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

```
#include <iostream>
using namespace std;
void set(struct person*);
struct person
{
    char name[25];
    int age;
};
int main()
{
    struct person e = {'Steve', 30};
    set(&e);
    cout<< e.name << ' ' << e.age;
    return 0;
}
void set(struct person *p)
{
    p->age = p->age + 1;
}
```

www.VCEplus.io

- A. Error: in prototype declaration unknown struct person
- B. Error: in structure
- C. It prints: Steve 31
- D. None of these

Correct Answer: C

Section:

QUESTION 22

What happens if you try to compile and run this program?

```
#include <iostream>
using namespace std;
int main (int argc, const char * argv[])
{
    print('Test');
    return 0;
}
void print(int c[])
{
    cout<<c;
}
```

- A. It prints: Test
- B. Compilation fails
- C. Program terminates abnormally
- D. None of these

Correct Answer: B

Section:

QUESTION 23

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

Correct Answer: A

Section:

QUESTION 24

What is the output of the program?

```
#include <iostream>
#include <string>
using namespace std;
int main()
{
string s1='World';
string s2;
s2='Hello' + s1;
```

www.VCEplus.io

```
cout << s2;  
return( 0 );  
}
```

- A. It prints: HelloWorld
- B. It prints: Hello
- C. It prints: World
- D. Compilation error

Correct Answer: A

Section:

QUESTION 25

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];  
        s.insert(1,'ow');  
        cout << s;  
    }  
    return( 0 );  
}
```

- A. It prints: How
- B. It prints: Ht
- C. It prints: Hoto
- D. It prints: Howtow

Correct Answer: D

Section:

QUESTION 26

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

```
#include <iostream>  
using namespace std;  
int op(int x, int y)  
{  
    int i;  
    i = x + y;  
    return i;  
}  
int main()  
{
```

www.VCEplus.io

```
int i=1, j=2, k, l;  
k = op(i, j);  
l = op(j, i);  
cout<< k << ' ' << l;  
return 0;  
}
```

- A. It prints: 1,2
- B. It prints: ?1,1
- C. It prints: 1,1
- D. It prints: 3,3

Correct Answer: D
Section:

QUESTION 27

What will the variable 'y' be in class B?

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

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

Correct Answer: C
Section:

QUESTION 28

Which of the following structures are correct?

```
1:  
struct s1{  
    int x;  
    char c;  
};  
2:  
struct s2{
```

www.VCEplus.io


```
float f;  
struct s2 *s;  
};  
3:  
struct s3{  
float f;  
in i;  
}
```

- A. 1
- B. 2
- C. 3
- D. All of these

Correct Answer: A, B

Section:

QUESTION 29

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

www.VCEplus.io

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

Correct Answer: A

Section:

QUESTION 30

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

```
#include <iostream>
using namespace std;
class A {
public:
int x;
A() { x=0;}
};
class B : protected A {
public:
int y;
using A::x;
B(int y) {this?>y = y;}
void Print() { cout << x << y; }
};
int main () {
B b(5);
b.Print();
return 0;
}
```

- A. It prints: 05
- B. It prints: 0
- C. It prints: 5
- D. It prints: 15

Correct Answer: A

Section:

QUESTION 31

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

```
#include <iostream>
using namespace std;
void print(char *c);
int main (int argc, const char * argv[])
{
print('Test');
return 0;
}
void print(char *c)
{
```

www.VCEplus.io

```
cout<<c;  
}
```

- A. It prints: Test
- B. It prints: T
- C. It prints: st
- D. None of these

Correct Answer: A
Section:

QUESTION 32

What is the output of the program given below?

```
#include <iostream>  
using namespace std;  
int main (int argc, const char * argv[])  
{  
    enum state { ok, error, warning};  
    enum state s1, s2, s3, s4;  
    s1 = ok;  
    s2 = warning;  
    s3 = error;  
    s4 = ok;  
    cout << s1<< s2<< s3<< s4;  
    return 0;  
}
```

- A. 1234
- B. compilation fails
- C. 0210
- D. 1322

Correct Answer: C
Section:

QUESTION 33

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

```
#include <iostream>  
using namespace std;  
int main()  
{  
    int *t;  
    t = new int[2];  
    for (int i=0; i<2; i++) {  
        t[i] = i;  
    }  
    cout << t[1];  
}
```

www.VCEplus.io

- A. It prints: 0
- B. It prints: 1
- C. It prints: 10
- D. It prints: ?1

Correct Answer: B
Section:

QUESTION 34

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

Correct Answer: A
Section:

QUESTION 35

What is the output of the program if character "1" is supplied as input?

```
#include <iostream>
using namespace std;
int main () {
    int c;
    cin >> c;
    try
    {
        switch (c)
        {
            case 1:
                throw 20;
            case 2:
                throw 5.2f;
            case 3:
                throw 'a';
        }
    }
}
```

www.VCEplus.io

```
}  
}  
catch (int e)  
{ cout << 'int exception. Exception Nr. ' << e; }  
catch (float e)  
{ cout << 'float exception. Exception Nr. ' << e; }  
catch (...)  
{ cout << 'An exception occurred.'; }  
return 0;  
}
```

- A. It prints: float exception. Exception Nr. 5.2
- B. It prints: int exception. Exception Nr. 20
- C. It prints: An exception occurred
- D. Compilation Error

Correct Answer: B

Section:

QUESTION 36

Which of the following is a correct way to define the function fun() in the program below?

```
#include <iostream>  
#include <sstream>  
#include <string>  
using namespace std;  
int main()  
{  
    int a[2][2];  
    fun(a);  
    return 0;  
}
```

- A. void fun(int *p[2]) {}
- B. void fun(int *p[2][2]) {}
- C. void fun(int *p[][2]) {}
- D. void fun(int p[][2]) {}

Correct Answer: D

Section:

QUESTION 37

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

```
#include <iostream>  
using namespace std;  
class A  
{  
public:  
    virtual void Print()=0;  
};
```

www.VCEplus.io

```
class B:public A
{
public:
virtual void Print(){ cout<< 'B';}
};
int main()
{
B ob2;
A *obj;
obj = &ob2;
obj?>Print();
}
```

- A. It prints: B
- B. It prints: A
- C. It prints: AB
- D. It prints: BA

Correct Answer: A
Section:

QUESTION 38

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

```
#include <iostream>
#include <string>
using namespace std;
class A {
public:
int age;
A () { age=5; };
};
class B : private A {
string name;
public:
B () { name='Bob'; };
void Print() {
cout << name << age;
}
};
int main () {
B b,*ob;
ob = &b;
ob?>age = 10;
ob?>Print();
return 0;
}
```

- A. It prints: Bob55
- B. It prints: Bob1

www.VCEplus.io

- C. It prints: 10
- D. Compilation error

Correct Answer: D

Section:

QUESTION 39

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(0.5) || fun(0);
    cout << i;
    return 0;
}
```

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

Correct Answer: A

Section:

QUESTION 40

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, z;
    A() : x(1), y(2), z(0) {}
    A(int a, int b) : x(a), y(b) { z = x * y;}
    void Print() { cout << z; }
};
class B : public A {
public:
    int y;
    B() : A() {}
    B(int a, int b) : A(a,b) {}
    void Print() { cout << z; }
};
```

www.VCEplus.io

```
int main () {  
A b(2,5);  
b.Print();  
return 0;  
}
```

- A. It prints: 10
- B. It prints: 2
- C. It prints: 5
- D. It prints: 1

Correct Answer: A

Section:

QUESTION 41

Which code, inserted at line 18, generates the output 'AB'

```
#include <iostream>  
using namespace std;  
class A  
{  
public:  
void Print(){ cout<< 'A';}  
void Print2(){ cout<< 'a';}  
};  
class B:public A  
{  
public:  
void Print(){ cout<< 'B';}  
void Print2(){ cout<< 'b';}  
};  
int main()  
{  
B ob2;  
//insert code here  
ob2.Print();  
}
```

- A. ob2?>A::Print();
- B. ob2.B::Print();
- C. ob2?>B::Print();
- D. ob2.A::Print();

Correct Answer: D

Section:

QUESTION 42

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

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

www.VCEplus.io


```
int main()
{
    int a=5;
    cout << ((a < 5) ? 9.9 : 9);
}
```

- A. It prints: 9
- B. It prints: 9.9
- C. Compilation error
- D. None of these

Correct Answer: A

Section:

QUESTION 43

Which definitions are correct?

- A. int age;
- B. int double;
- C. char c;
- D. int char;

Correct Answer: A, C

Section:

QUESTION 44

Which code, inserted at line 8, generates the output '100'?

```
#include <iostream>
using namespace std;
int fun(int);
int main()
{
    int *x = new int;
    *x=10;
    //insert code here
    return 0;
}
int fun(int i)
{
    return i*i;
}
```

- A. cout << fun(*x) ;
- B. cout << fun(10);
- C. cout << fun(5) ;
- D. cout << fun(y) ;

Correct Answer: A, B

www.VCEplus.io

Section:**QUESTION 45**

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(2);
    cout << i;
    return 0;
}
```

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

Correct Answer: B

Section:**QUESTION 46**

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

```
#include <iostream>
using namespace std;
int main()
{
    int i = 5;
    cout<<'Hello World' << ++i;
    return 0;
}
```

- A. It prints: Hello World6
- B. It prints: Hello
- C. It prints: World
- D. It prints: Hello World5

Correct Answer: A

Section:**QUESTION 47**

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

```
#include <iostream>
using namespace std;
class Base {
    static int age;
```

```
public:
Base () {}
~Base () {}
void setAge(int a=20) {age = a;}
void Print() { cout << age;}
};
int Base::age=0;
int main () {
Base a;
a.setAge(10);
a.Print();
a.setAge();
a.Print();
return 0;
}
```

- A. It prints: 10
- B. It prints: 20
- C. It prints: 1020
- D. It prints: 2010

Correct Answer: C

Section:

QUESTION 48

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

```
#include <iostream>
using namespace std;
class A {
public :
void print() {
cout << 'A ' ;
}
};
class B {
public :
void print() {
cout << 'B ' ;
}
};
int main() {
B sc[2];
B *bc = (B*)sc;
for (int i=0; i<2;i++)
(bc++)->print();
return 0;
}
```

- A. It prints: A A

www.VCEplus.io

- B. It prints: B B
- C. It prints: A B
- D. It prints: B A

Correct Answer: B

Section:

QUESTION 49

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

```
#include <iostream>
#include <string>
using namespace std;
class complex{
double re;
double im;
public:
complex() : re(1),im(0.4) {}
bool operator==(complex &t);
};
bool complex::operator == (complex &t){
if((this?>re == t.re) && (this?>im == t.im))
return true;
else
return false;
}
int main(){
complex c1,c2;
if (c1==c2)
cout << 'OK';
else {
cout << 'ERROR';
}
}
```

- A. It prints: OK
- B. It prints: ERROR
- C. Compilation error
- D. Runtime error.

Correct Answer: A

Section:

QUESTION 50

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

```
#include <iostream>
using namespace std;
int main()
{
int i = 4;
```

www.VCEplus.io

```
while(i >= 0) {  
    cout<<i;  
    i??;  
}  
return 0;  
}
```

- A. It prints:"43210"
- B. It prints:"3210"
- C. It prints: "3210?1"
- D. None of these

Correct Answer: A
Section:

QUESTION 51

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

```
#include <iostream>  
using namespace std;  
#define A 1  
int main()  
{  
    #if A  
    cout<<'Hello';  
    #endif  
    cout<<'world';  
    return 0;  
}
```

- A. It will print: Helloworld
- B. It will print: Hello
- C. It will print: world
- D. It will print: 0

Correct Answer: A
Section:

QUESTION 52

What will be the output of the program?

```
#include <iostream>  
#include <string>  
using namespace std;  
int fun(int);  
int main()  
{  
    float k=3;  
    k = fun(k);  
    cout<<k;  
    return 0;  
}
```

www.VCEplus.io

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

- A. 3
- B. 5
- C. 4
- D. 5

Correct Answer: C
Section:

QUESTION 53

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

```
#include <iostream>  
using namespace std;  
int main()  
{  
    const char *s;  
    char str[] = 'Hello';  
    s = str;  
    while(*s) {  
        cout << *s++;  
    }  
    return 0;  
}
```

- A. It prints: el
- B. It prints: Hello
- C. It prints: H
- D. It prints: o

Correct Answer: B
Section:

QUESTION 54

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

```
#include <iostream>  
#include <string>  
using namespace std;  
int main()  
{  
    string s1[] = {'How' , 'to' };  
    s1[0].swap(s1[1]);  
    for (int i=0; i<2; i++) {  
        cout << s1[i];  
    }  
}
```

www.VCEplus.io

```
}  
return( 0 );  
}
```

- A. It prints: Hoto
- B. It prints: toHow
- C. It prints: Ht
- D. It prints: to

Correct Answer: B

Section:

QUESTION 55

What will variable 'y' be in class B?

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

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

Correct Answer: C

Section:

QUESTION 56

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

www.VCEplus.io

```
#include <iostream>
using namespace std;
int fun(int x)
{
    return 4 * x;
}
int main()
[
    cout << fun(0) && fun(1);
}
```

- A. It prints: 4
- B. It prints: 1
- C. It causes a compilation error
- D. It prints: 0

Correct Answer: C

Section:

QUESTION 57

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

```
#include <iostream>
using namespace std;
int lessthan(int i, int j)
{
    return i < j;
}
int main()
{
    cout << (lessthan(10, 20) ^ lessthan(20, 10));
}
```

- A. It prints: 1
- B. It causes a compilation error
- C. It prints: -1
- D. It prints: 0

Correct Answer: A

Section:

QUESTION 58

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


```
#include <iostream>

using namespace std;

int main()
{
    int x, y = 10;
    float f;
    f = 5.2e1;
    x = static_cast<int>(f);
    cout << x;
    f = static_cast<float>(y);
    cout << f;
}
```

- A. It prints: 5.2110.0
- B. It prints: 5.210.0
- C. It prints: 52.10
- D. It prints: 5210

Correct Answer: C

Section:

QUESTION 59

What is the expected result of the following program?

```
#include <iostream>
#include <string>

using namespace std;

int main()
{
    string s1[]= {"A", "B"};
    string s;

    for (int i=0; i<2, i++) {
        s = s1[i];
        if (i==0)
            s.insert(1, "C");
        else
            s.push_back('D');
        cout << s;
    }
}
```

- A. It prints: ABCD

www.VCEplus.io

- B. It prints: ACBD
- C. It prints: ACDB
- D. It prints: CABD

Correct Answer: B

Section:

QUESTION 60

The following declaration:

```
int i = 0b10;
```

- A. is invalid
- B. sets variable i with an integer value equal to 10
- C. sets variable i with an integer value equal to 2 (10 binary)
- D. sets variable i with an integer value equal to 8 (10 octal)

Correct Answer: D

Section:

QUESTION 61

Which of the following operators accept integer arguments only? (Choose two.)

- A. |
- B. | |
- C. ~
- D. !

Correct Answer: A, C

Section:

QUESTION 62

Which of the following expressions decrement variable i by 2? (Choose two.)

- A. i &= 0x03;
- B. i -= 2;
- C. ----j; i----
- D. ----i----

Correct Answer: B, C

Section:

QUESTION 63

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

www.VCEplus.io

```
#include <iostream>

using namespace std;

int main()
{
    int i = 1;
    for (i =10; i > -1; i /=2)
        if(!i)
            break;
    cout << s;
}
```

- A. It prints: 1
- B. It causes a compilation error
- C. It prints: -1
- D. It prints: 0

Correct Answer: B

Section:

QUESTION 64

What is the expected result of the following program?

```
#include <iostream>

using namespace std;

int main()
{
    int i = 4;
    do{
        cout << i;
        i--;
        if(i % 2 != 0)
            break;
    } while(i > 0);
}
```

- A. It prints: 4
- B. The program enters an infinite loop
- C. It prints: 42
- D. It prints: 420

Correct Answer: C

Section:

www.VCEplus.io