

## Student Result

**Student Name:** Mohit Tiwari

**Exam:** C++

**Score:** 36.0/45.0

**Percentage:** 80.00%

### Question-wise Summary

Sr.no	Question	Selected Answer	Correct Answer
1	<p>What will be the output of the following C++ program?</p> <pre>#include &lt;iostream&gt; using namespace std; int main() { #include &lt;cmath&gt; cout &lt;&lt; sqrt(25); return 0; }</pre>	5	Compilation error

2	<p>What will be the output of the following C++ program?</p> <pre>#include &lt;iostream&gt; using namespace std; int main() {     cout &lt;&lt; "Hello World";     return 0; }</pre>	<b>Hello World</b>	<b>Hello World</b>
3	<p>What will be the output of the following C++ program?</p> <pre>#include &lt;iostream&gt; using namespace std; int main() {     float x = 5.75;     int y = 3;     cout &lt;&lt; x / y;     return 0; }</pre>	<b>1.91</b>	<b>1.91</b>

4	What will be the output of the following program? <pre>#include &lt;iostream&gt; using namespace std; int main() { double d = 5.7; int i = static_cast&lt;int&gt;(d); cout &lt;&lt; i; return 0; }</pre>	5	5
5	What will be the output of the following C++ program? <pre>#include &lt;iostream&gt; using namespace std; int main() { const int x = 10; x = 20; cout &lt;&lt; x; return 0; }</pre>	<b>Compilation Error</b>	<b>Compilation Error</b>

6	What will be the output of the following C++ code? <pre>#include &lt;iostream&gt; using namespace std; int main() { int x = 5, y = 3; cout &lt;&lt; (x &amp; y); return 0; }</pre>	1	1
7	What will be the output of the following program? <pre>#include &lt;iostream&gt; using namespace std; int main() { int x = 5; cout &lt;&lt; ++x &lt;&lt; " " &lt;&lt; x++ &lt;&lt; " " &lt;&lt; x; return 0; }</pre>	6 7 7	6 6 7

8

What will be the output of the following C++ program?

```
#include <iostream>
using namespace std;
int main() {
    int x = 10, y = 20;
    if (x < y) { cout << "x is less than y"; }
    else if (x > y) { cout << "x is greater than y"; }
    else { cout << "x is equal to y"; }
    return 0;
}
```

**Compilation Error**

**x is less than y**

9	What will be the output of the following C++ program? <pre>#include &lt;iostream&gt; using namespace std; int main() { for (int i = 0; i &lt; 5; i++) { cout &lt;&lt; i &lt;&lt; " "; } return 0; }</pre>	<b>0 1 2 3 4</b>	<b>0 1 2 3 4</b>
10	What will be the output of the following C++ program? <pre>#include &lt;iostream&gt; using namespace std; int main() { for (int i = 0; i &lt; 5; i++) { if (i == 3) { continue; } cout &lt;&lt; i &lt;&lt; " "; } return 0; }</pre>	<b>0 1 2 4</b>	<b>0 1 2 4</b>

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What will be the output of the following C++ program?

```
#include <iostream>
using namespace std;
void displayMessage()
{ cout << "Hello from function!";
}
int main() {
displayMessage();
return 0;
}
```

**Hello  
from  
function!**

**Hello  
from  
function!**

12

What will be the output of the following C++ program?

```
#include <iostream>
using namespace std;
void display(int a) { cout << "Integer: " << a; }
void display(double a) { cout << "Double: " << a; }
int main()
{
    display(5);
    display(3.14);
    return 0;
}
```

**Integer:**  
**5**  
**Double:**  
**3.14**

**Integer:**  
**5**  
**Double:**  
**3.14**

13

What will be the output of the following C++ program?

```
#include <iostream>
using namespace std;
void greet(string name, string message = "Hello")
{ cout << message << ", " << name; }
int main()
{
    greet("Alice");
    return 0;
}
```

**Alice,  
Hello**

**Hello,  
Alice**

14	<p>What will be the output of the following C++ program?</p> <pre>#include &lt;iostream&gt; using namespace std; void countDown(int n) {     if (n &gt; 0) {         cout &lt;&lt; n &lt;&lt; " ";         countDown(n - 1);     } } int main() {     countDown(3);     return 0; }</pre>	<b>3 2 1 0</b>	<b>3 2 1</b>
15	<p>What will be the output of the following C++ program?</p> <pre>#include &lt;iostream&gt; using namespace std; inline int square(int x) {     return x * x; } int main() {     cout &lt;&lt; square(5);     return 0; }</pre>	<b>25</b>	<b>25</b>

16

What will be the output of the following C++ program?

```
#include <iostream>
using namespace std;
void displayMessage()
{ cout << "Function Pointer Example!";
}
int main() {
void (*funcPtr)()
= displayMessage;
funcPtr();
return 0;
}
```

**Function  
Pointer  
Example!**

**Function  
Pointer  
Example!**

17	What will be the output of the following C++ program? <pre>#include &lt;iostream&gt; using namespace std; int main() {     auto add = [](int a, int b) {         return a + b; };     cout &lt;&lt; add(3, 4);     return 0; }</pre>	7	7
18	What will be the output of the following C++ program? <pre>#include &lt;iostream&gt; using namespace std; int main() {     int arr[3] = {10, 20, 30};     cout &lt;&lt; arr[1];     return 0; }</pre>	20	20

19

What will be the output of the following C++ program?  
#include <iostream>  
using namespace std; int main() {  
int arr[2][3] = {{1, 2, 3}, {4, 5, 6}}; cout << arr[1][2];  
return 0;  
}

6

6

20

What will be the output of the following C++ program?

```
#include <iostream>
using namespace std;
void printArray(int arr[], int size) {
    for (int i = 0; i < size; i++) {
        cout << arr[i] << " ";
    }
}
int main() {
    int arr[3] = {1, 2, 3};
    printArray(arr, 3);
    return 0;
}
```

1 2 3

1 2 3

21	<p>What will be the output of the following C++ program?</p> <pre>#include &lt;iostream&gt; using namespace std; int main() { char str[] = "Hello"; cout &lt;&lt; str; return 0; }</pre>	<b>Hello</b>	<b>Hello</b>
22	<p>What will be the output of the following C++ program?</p> <pre>#include &lt;iostream&gt; #include &lt;string&gt; using namespace std; int main() { string str = "C++ Programming"; cout &lt;&lt; str.substr(4, 5); return 0; }</pre>	<b>Program</b>	<b>Prog</b>

23

What will be the output of the following C++ program?

```
#include <iostream>
#include <cstring>
using namespace std;
int main() {
    char str1[] = "Hello";
    char str2[] = "World";
    strcat(str1, str2);
    cout << str1;
    return 0;
}
```

**HelloWorld**

**HelloWorld**

24

What will be the output of the following C++ program?

```
#include <iostream>
#include <sstream>
using namespace std;
int main() {
    stringstream ss;
    ss << "C++" << " " << 2024;
    string result = ss.str();
    cout << result;
    return 0;
}
```

**C++**  
**2024**

**C++**  
**2024**

25	What will be the output of the following C++ program? <pre>#include &lt;iostream&gt; using namespace std; int main() { int num = 10; int* ptr = &amp;num; cout &lt;&lt; *ptr; return 0; }</pre>	<b>10</b>	<b>10</b>
26	What will be the output of the following C++ program? <pre>#include &lt;iostream&gt; using namespace std; int main() { int a = 20; int* p = &amp;a; *p = 30; cout &lt;&lt; a; return 0; }</pre>	<b>30</b>	<b>30</b>

27	What will be the output of the following C++ program? <pre>#include &lt;iostream&gt; using namespace std; int main() { int arr[3] = {1, 2, 3}; int* ptr = arr; cout &lt;&lt; *(ptr + 1); return 0; }</pre>	2	2
28	What will be the output of the following C++ program? <pre>#include &lt;iostream&gt; using namespace std; int main() { int* ptr = new int(5); cout &lt;&lt; *ptr; delete ptr; return 0; }</pre>	5	5

29	<p>What will be the output of the following C++ program?</p> <pre>#include &lt;iostream&gt; using namespace std; int main() {     int* ptr = new int(10); // Memory leak, no delete     return 0; }</pre>	<p><b>No output, but there is a memory leak</b></p>	<p><b>No output, but there is a memory leak</b></p>
30	<p>What will be the output of the following C++ program?</p> <pre>#include &lt;iostream&gt; #include &lt;memory&gt; using namespace std; int main() {     unique_ptr&lt;int&gt; ptr(new int(100));     cout &lt;&lt; *ptr;     return 0; }</pre>	<p><b>100</b></p>	<p><b>100</b></p>

31

```
What will
be the
output of
the
following
C++
program?
#include
<iostream>
using
namespace
std; void
displayMessage()
{ cout <<
"Hello
from
function
pointer!";
} int
main() {
void
(*funcPtr)()
=
displayMessage;
funcPtr();
return 0;
}
```

**Hello  
from  
function  
pointer!**

**Hello  
from  
function  
pointer!**

32

What will be the output of the following C++ program?  
#include <iostream>  
using namespace std; int main() {  
const char\* arr[] = {"Apple", "Banana", "Cherry"};  
cout << arr[1];  
return 0;  
}

**Banana**

**Banana**

33

What will be the output of the following C++ program?

```
#include <iostream>
using namespace std;
void display(int a) { cout << a << " "; }
int main() { void (*funcPtr)(int) = display; int arr[3] = {10, 20, 30}; for (int i = 0; i < 3; i++) { funcPtr(arr[i]); } return 0; }
```

10 20 30

10 20 30

34	What will be the output of the following C++ program? <pre>#include &lt;iostream&gt; using namespace std; int main() { int arr[3] = {1, 2, 3}; int* ptr = arr; cout &lt;&lt; *(ptr + 2); return 0; }</pre>	<b>3</b>	<b>3</b>
35	What will be the output of the following C++ program? <pre>#include &lt;iostream&gt; using namespace std; class MyClass { public: int x; MyClass() { x = 10; } }; int main() { MyClass obj; cout &lt;&lt; obj.x; return 0; }</pre>	<b>10</b>	<b>10</b>

36

What will be the output of the following C++ program?

```
#include <iostream>
using namespace std;
class Rectangle
{ public:
int length, width;
Rectangle(int l, int w) {
length = l; width = w; }
};
int main() {
Rectangle rect(5, 10);
cout << rect.length << " " << rect.width;
return 0;
}
```

5 10

5 10

37

What will be the output of the following C++ program?

```
#include <iostream>
using namespace std;
class Circle {
public:
double radius;
void setRadius(double r) {
radius = r; }
double getArea() { return 3.14 * radius * radius; }
};
int main() {
Circle c;
c.setRadius(5);
cout << c.getArea();
return 0;
}
```

**Compilation Error**

**78.5**

38

What will be the output of the following C++ program?

```
#include <iostream>
using namespace std;
class Test {
public:
    Test() {
        cout << "Constructor called" << endl;
    }
    ~Test() {
        cout << "Destructor called" << endl;
    }
};
int main() {
    Test obj;
    return 0;
}
```

**Destructor called**  
**Constructor called**

**Constructor called**  
**Destructor called**

39

What will be the output of the following C++ program?

```
#include <iostream>
using namespace std;
class MyClass
{ public:
  int value;
  MyClass()
  { value = 5; }
};
int main() {
  MyClass obj;
  cout << obj.value;
  return 0;
}
```

5

5

40

What will be the output of the following C++ program?  
#include <iostream>  
using namespace std; class Box {  
public: int length;  
Box(int l) { length = l; };  
int main() {  
Box b(10);  
cout << b.length;  
return 0;  
}

10

10

41

```
What will be the output of the following C++ program?  
#include <iostream>  
using namespace std;  
class Animal {  
public:  
void sound() {  
cout << "Animal Sound" << endl; }  
};  
class Dog : public Animal {  
public:  
void bark() {  
cout << "Bark" << endl; }  
};  
int main() {  
Dog d;  
d.sound();  
d.bark();  
return 0;  
}
```

**Animal  
Sound  
Bark**

**Animal  
Sound  
Bark**

42

```
What will be the output of the following C++ program?  
#include <iostream>  
using namespace std;  
class Complex {  
public: int real, imag;  
Complex() : real(0), imag(0) {}  
Complex operator + (const Complex& c) {  
Complex temp;  
temp.real = real + c.real;  
temp.imag = imag + c.imag;  
return temp; }  
void display() {  
cout << real << " + i" << imag << endl; }  
};  
int main() {  
Complex c1, c2;  
c1.real = 5;  
c1.imag = 3; c2.real = 2; c2.imag = 4;  
Complex c3 = c1 + c2;  
c3.display();  
return 0; }
```

7 + i7

7 + i7

43

What will be the output of the following C++ program?  
#include <iostream>  
using namespace std; int main() {  
int a = 5,  
b = 10;  
cout << (a + b) \* (a > b) << endl;  
return 0;  
}

0

0

44

What will be the output of the following C++ program that checks for an out-of-bounds access on a 2D array?

```
#include <iostream>
using namespace std;
int main() {
    int arr[2][2] = {{1, 2}, {3, 4}};
    cout << arr[2][2] << endl;
    // Out of bounds
    return 0;
}
```

2

**Undefined behavior**

45

What will be the output of the following C++ program that reverses each word in a string?

```
#include <iostream>
#include <sstream>
using namespace std;
int main() {
    string str = "hello world";
    stringstream ss(str);
    string word;
    while (ss >> word)
    {
        reverse(word.begin(), word.end());
        cout << word << " ";
    }
    return 0;
}
```

**olleh  
dlrow**

**olleh  
dlrow**