Student Result

Student Name: Siddhant Sangram Patil

Exam: C++

Score: 40.0/45.0

Percentage: 88.89%

Question-wise Summary

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

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

4	What will be the output of the following program?
	#include <iostream>
	using namespace std; int main() {
	double d = 5.7; int i = static_cast<int>(d);
	cout << i;
	return 0;
	}
		5	**5**

5	What will be the output of the following C++ program?
	#include <iostream>
	using namespace std; int main() {
	const int x = 10; x = 20;
	cout << x; return 0; }
		Compilation Error	**Compilation Error**

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

7	What will be the output of the following program?
	#include <iostream>
	using namespace std; int main() {
	int x = 5;
	cout << ++x << " " << x++ << " " << x; return 0; }
		5 6 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; }	**x is less than y**	**x is less than y**

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

11	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; }	**Hello, Alice**	**Hello, Alice**

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

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? #include <iostream> using namespace std; int main() { auto add = [](int a, int b) { return a + b; }; cout << add(3, 4); return 0; }	**7**	**7**
18	What will be the output of the following C++ program? #include <iostream> using namespace std; int main() { int arr[3] = {10, 20, 30}; cout << arr[1]; return 0; }	**Compilation Error**	**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	What will be the output of the following C++ program? #include <iostream> using namespace std; int main() { char str[] = "Hello"; cout << str; return 0; }	**Hello**	**Hello**
22	What will be the output of the following C++ program? #include <iostream> #include <string> using namespace std; int main() { string str = "C++ Programming"; cout << str.substr(4, 5); return 0; }	**Prog**	**Prog**

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

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

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

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

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; }	**78.5**	**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; }	**Constructor called Destructor 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; }	**Undefined behavior**	**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**