1 **What is the correct syntax for declaring a constant integer in C++?**

a) const int x;

b) int const x;

c) const int x = 10;

d) Both a and c

**Answer: d) Both a and c**

2 **What is the output of the following code?**

#include <iostream>

int main() {

int x = 10;

std::cout << (x > 5 ? x : 5);

return 0;

}

a) 5

b) 10

c) 15

d) 0

**Answer: b) 10**

3 **Which of the following access specifiers allows access only within the class itself and its derived classes?**

a) public

b) private

c) protected

d) friend

**Answer: c) protected**

4 **What will be the output of the following code?**

#include <iostream>

class Base {

public:

virtual void show() { std::cout << "Base"; }

};

class Derived : public Base {

public:

void show() override { std::cout << "Derived"; }

};

int main() {

Base\* b = new Derived();

b->show();

delete b;

return 0;

}

a) Base

b) Derived

c) BaseDerived

d) Compilation error

**Answer: b) Derived**

5 **What is the output of the following code?**

#include <iostream>

int main() {

int arr[3] = {1, 2, 3};

std::cout << arr[2];

return 0;

}

a) 1

b) 2

c) 3

d) Compilation error

**Answer: c) 3**

6 **Which keyword is used to prevent a class from being instantiated?**

a) final

b) abstract

c) static

d) virtual

**Answer: b) abstract**

7 **What will be the output of the following code?**

#include <iostream>

int main() {

int x = 5;

int& y = x;

y = 10;

std::cout << x;

return 0;

}

a) 5

b) 10

c) 15

d) Compilation error

**Answer: b) 10**

8 **Which of the following is the correct way to declare a pure virtual function in C++?**

a) virtual void func() = 0;

b) virtual void func();

c) void func() = 0;

d) pure virtual void func();

**Answer: a) virtual void func() = 0;**

9 **What is the output of the following code?**

#include <iostream>

int main() {

const char\* str = "Hello";

str[0] = 'J';

std::cout << str;

return 0;

}

a) Hello

b) Jello

c) Compilation error

d) Runtime error

**Answer: c) complilation error**

10 **Which operator is used to access the members of a class through a pointer?**

a) ->

b) .

c) \*

d) ::

**Answer: a) ->**

11 **What is the result of the following code?**

#include <iostream>

int main() {

int a = 5;

int b = 10;

int c = a + b;

std::cout << c;

return 0;

}

a) 5

b) 10

c) 15

d) Compilation error

**Answer: c) 15**

12 **Which of the following is used to define a constant value in C++?**

a) const

b) static

c) final

d) volatile

**Answer: a) const**

13 **What will be the output of the following code?**

#include <iostream>

int main() {

int x = 10;

std::cout << ++x \* 2;

return 0;

}

a) 20

b) 22

c) 30

d) 40

**Answer: b) 22**

14 **Which type of inheritance is also known as multiple inheritance in C++?**

a) Single Inheritance

b) Multi-level Inheritance

c) Hierarchical Inheritance

d) Diamond Inheritance

**Answer: d) Diamond Inheritance**

15 **What is the output of the following code?**

#include <iostream>

void func(int a, int b = 2) {

std::cout << a + b;

}

int main() {

func(3);

return 0;

}

a) 5

b) 3

c) 7

d) Compilation error

**Answer: a) 5**