VIT - Vellore

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BCSE102P_Structured and Object Oriented Programming Lab_VL2024250501996

VIT V_Structured and OOP_Lab 5_MCQ

Attempt : 1
Total Mark : 20
Marks Obtained : 20

Section 1 : MCQ

1. What will the output of the below code be?

```
#include <iostream>
using namespace std;
class FriendClass;
class MyClass {
public:
   int data;
public:
   friend void displayData(const MyClass& obj);
};
void displayData(const MyClass& obj) {
   cout << "Data: " << obj.data << endl;
}
```

```
int main() {
    MyClass obj1, obj2;
    obj1.data = 60;
    obj2.data = 70;
    displayData(obj1);
    displayData(obj2);
    return 0;
}
```

Answer

Data: 60 Data: 70

Status : Correct ***Marks : 1/1***

2. Which of the following statements about the printline and print_line member functions is true?

Note: This question was asked in a Capgemini interview.

```
class MyClass {
public:
    inline void printline() {
        cout << "This is an inline member function." << endl;
    }

    void print_line();
};

void MyClass::print_line() {
    cout << "This is a non-inline member function." << endl;
}
```

Answer

printline is inline, and print_line is non-inline.

Status : Correct ***Marks : 1/1***

3. _____ represents an entity in the real world with its identity and behaviour.

Answer

An object

Status : Correct ***Marks : 1/1***

4. What is the main purpose of the constructor?

Answer

Establish the class invariant

Status : Correct ***Marks : 1/1***

5. Member functions of a generic class are _____

Answer

Automatically generic

Status : Correct ***Marks : 1/1***

6. Which data members among the following are static by default?

Answer

const

Status : Correct ***Marks : 1/1***

7. What will be the output of the following program?

```
#include <iostream>
using namespace std;
class Box {
   double width;
   public:
      friend void printWidth( Box box );
      void setWidth( double wid );
};
```

```
void Box::setWidth(double wid) {
    width = wid;
}
void printWidth(Box box) {
    box.width = box.width * 2;
    cout << box.width << endl;
}
int main() {
    Box box;
    box.setWidth(10.0);
    printWidth( box );
    return 0;
}
```

Answer

20

Status : Correct ***Marks : 1/1***

8. What is the output for the following code?

Note: This question was asked in a Wipro interview.

```
#include <iostream>
using namespace std;
inline int square(int x) {
    return x * x;
}
int main() {
    int result = square(5 + 3);
    cout << result;
    return 0;
}
```

Answer

The code will compile and run, printing "64" as the output.

Status : Correct ***Marks : 1/1***

9. What is the output of the code?

Note: This question was asked in a Wipro interview.

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

class MyClass {
public:
    inline void displayMessage() {
        cout << "Hello, World!" << endl;
    }
};

int main() {
    MyClass obj;
    obj.displayMessage();

    return 0;
}
```

Answer

Hello, World!

Status : Correct ***Marks : 1/1***

10. What is getattr() used for?

Answer

To access the attribute of the object

Status : Correct ***Marks : 1/1***

11. Which is the correct syntax for declaring static data member?

Answer

static dataType memberName;

Status : Correct ***Marks : 1/1***

12. What will be the output of the below code?

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

class MyClass;
void performCalculation(int value);
class MyClass {
   friend void performCalculation(int value);
};
void performCalculation(int value) {
   int result = value * 5 + 10;
   cout << "Result: " << result << endl;
}
int main() {
   int data = 7;
   performCalculation(data);
   return 0;
}
```

Answer

Result: 45

Status : Correct ***Marks : 1/1***

13. What is the output for the following code?

```
#include <iostream>
using namespace std;
void increment(int& num) {
   num++;
}
int main() {
   int x = 5;
   increment(x);
   cout << "After increment: x = " << x;
   return 0;
}
```

Answer

After increment: x = 6

Status : Correct ***Marks : 1/1***

14. Where does the object is created?

Answer

class

Status : Correct ***Marks : 1/1***

15. What are inline member functions?

Answer

Member functions whose definition is expanded in place of its call

Status : Correct ***Marks : 1/1***

16. What will be the output of the following program?

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

void fun(int a, int b = 10, int c = 20) {
    cout << a << " " << b << " " << c << endl;
}

int main() {
    fun(5);
    fun(5, 12);
    fun(5, 12, 17);
    return 0;
}
```

Answer

5 10 205 12 205 12 17

Status : Correct *Marks : 1/1*

17. What will be the output of the following program?

Note: This is a question asked in a CoCubes interview.

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

void modifyValue(int& num) {
    num *= 2;
}

int main() {
    int value = 10;
    modifyValue(value);
    cout << value;
    return 0;
}
```

Answer

20

Status : Correct *Marks : 1/1*

18. What is the output for the following code?

```
#include <iostream>
using namespace std;
void swap(int& a, int& b) {
    int temp = a;
    a = b;
    b = temp;
}
int main() {
    int x = 5, y = 10;
    swap(x, y);
    cout << "After swapping: x = " << x << ", y = " << y;
```

```
    return 0;
}
```

Answer

After swapping: x = 10, y = 5

Status : Correct ***Marks : 1/1***

19. What will be printed if no symbol is provided as an argument when calling printNumber?

```
#include <iostream>
using namespace std;
void printNumber(int num, char symbol = '#') {
    for (int i = 0; i < num; i++) {
        cout << symbol;
    }
}

int main() {
    int count = 6;
    printNumber(count);
    return 0;
}
```

Answer

The symbol # appears six times.

Status : Correct ***Marks : 1/1***

20. What will be the value of the result when calling calculatePower (base, power)?

```
#include <iostream>
using namespace std;
int calculatePower(int base, int exponent = 2) {
    int result = 1;
    for (int i = 0; i < exponent; i++) {
        result *= base;
```

```
    }
    return result;
}
int main() {
    int base = 3;
    int power = 4;
    int result = calculatePower(base, power);
    cout << result;
    return 0;
}
```

Answer

81

Status : Correct ***Marks : 1/1***