Rajalakshmi Engineering College

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Batch: 2028

Degree: B.E - CSE



2024_28_III_OOPS Using Java Lab

REC_2028_OOPS using Java_Week 7_MCQ

Attempt : 1 Total Mark : 15 Marks Obtained : 15

Section 1: MCQ

1. What is the output of the following code?

```
interface MathOperations {
    static int square(int x) {
        return x * x;
    }
}

public class Main {
    public static void main(String[] args) {
        System.out.println(MathOperations.square(5));
    }
}

Answer
25
```

Status: Correct Marks: 1/1

2. How can a class explicitly call a default method from an interface if there is a naming conflict?

Answer

Using InterfaceName.super.methodName();

Status: Correct Marks: 1/1

3. Which of the following is the correct way to declare an interface in Java?

Answer

```
interface Vehicle { void start();}
```

Status: Correct Marks: 1/1

4. Can a Java interface contain both default and static methods?

Answer

Yes, an interface can have both default and static methods.

Status: Correct Marks: 1/1

5. What is the output of the following code?

```
interface A {
    static void display() {
        System.out.println("Static method in A");
    }
}
class B implements A {
    static void display() {
        System.out.println("Static method in B");
}
```

```
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    public class Main {
       public static void main(String[] args) {
         B.display();
    }
    Answer
     Static method in B
     Status: Correct
                                                                       Marks: 1/1
 6. How do you call a static method from an interface MyInterface?
    Answer
    MyInterface.staticMethod();
     Status: Correct
                                                                       Marks: 1/1
    7. What is the output of the following code?
    interface A {
      default void show() {
         System.out.println("A's Default Method");
     }
    class B {
       public void show() {
         System.out.println("B's Method");
     }
    class C extends B implements A {
```

```
public class Main {
 public static void main(String[] args) {
     C obj = new C();
     obj.show();
 Answer
 B's Method
 Status: Correct
                                                                   Marks: 1/1
8. Which of the following statements about Java interfaces is true?
Answer
A class can implement multiple interfaces.
 Status: Correct
                                                                   Marks: 1/1
9. Which of the following statements is true regarding default methods in
 Java interfaces?
 Answer
A default method can be overridden in a class implementing the interface.
                                                                   Marks : 1/1
Status: Correct
10. What is the output of the following code?
interface A {
   default void show() {
     System.out.println("A's Default Method");
 }
interface B {
 default void show() {
     System.out.println("B's Default Method");
```

```
class C implements A, B {
   public void show() {
       A.super.show();
   }
}

public class Main {
   public static void main(String[] args) {
       C obj = new C();
       obj.show();
}

Answer

A's Default Method
```

11. What happens when an implementing class does not override a default method from an interface?

Answer

Status: Correct

The default method's implementation from the interface will be used.

Status: Correct Marks: 1/1

Marks: 1/1

12. If a class implements two interfaces that have the same default method, what must the class do?

Answer

The class must override the method to resolve ambiguity.

Status: Correct Marks: 1/1

13. What is the primary purpose of static methods in Java interfaces?

Answer

They allow an interface to provide helper methods without requiring an implementing class.

Status: Correct Marks: 1/1

14. Consider a class implementing an interface and extending a class, both having a method with the same name. Which method gets called?

Answer

The method from the superclass

Status: Correct Marks: 1/1

15. What is the output of the following code?

```
interface X {
    default void show() {
        System.out.println("X's Default Method");
    }
}
interface Y {
    default void show() {
        System.out.println("Y's Default Method");
    }
}
class Z implements X, Y {
    public void show() {
        System.out.println("Z's Method");
    }
}
public class Main {
    public static void main(String[] args) {
        Z obj = new Z();
}
```

obj.show(); 240701502 240701502 Answer Z's Method Status: Correct Marks: 1/1 240701502 240701502 240701502 240701502 240701502