

# Rajalakshmi Engineering College

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Batch: 2028

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## 2024\_28\_III\_OOPS Using Java Lab

### REC\_2028\_OOPS using Java\_Week 7\_MCQ

Attempt : 1

Total Mark : 15

Marks Obtained : 12

#### **Section 1 : MCQ**

1. Which of the following statements about Java interfaces is true?

**Answer**

A class can implement multiple classes and interfaces together.

**Status : Wrong**

**Marks : 0/1**

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

**Answer**

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

**Status : Correct**

**Marks : 1/1**

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

**Answer**

The class must declare itself abstract.

**Status : Wrong**

**Marks : 0/1**

4. 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**

5. 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**

6. 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**

7. How do you call a static method from an interface MyInterface?

**Answer**

MyInterface.staticMethod();

**Status : Correct**

**Marks : 1/1**

8. 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.

**Status : Correct**

**Marks : 1/1**

9. 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 interface is called, but only if it is declared as static

**Status : Wrong**

**Marks : 0/1**

10. 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**

11. 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

12. 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

**Status :** Correct

**Marks :** 1/1

13. 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");
    }
}
```

```
public class Main {
    public static void main(String[] args) {
        B.display();
    }
}
```

```
}
```

**Answer**

Static method in B

**Status : Correct**

**Marks : 1/1**

14. 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**

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();  
    }  
}
```

**Answer**

Z's Method

**Status :** Correct

**Marks :** 1/1