Rajalakshmi Engineering College

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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 : 13

Section 1 : MCQ

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

Answer

MyInterface.staticMethod();

Status : Correct   *Marks : 1/1*

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 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*

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

Answer

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

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");
   }
}

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

Answer

Compilation Error

6.   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

7.   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*

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

Answer

A class can implement multiple interfaces.

Status : Correct   *Marks : 1/1*

9. 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*

10. 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

Compilation error

Status : Wrong   *Marks : 0/1*

11. 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*

12. 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*

13. 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*

14. 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*

15. 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*