QUIZIZZ **Worksheets**

Name

OOPS JAVA UNIT-3 TEST-2

Class

Total questions: 15

Worksheet time: 30mins

Date

Instructor name: Mr. PRASHANT ATMAKURI

1. What keyword is used to inherit a class in Java?

   a) implements   b) extends

   c) uses   d) inherits

2. Which of the following is true about the superclass and subclass relationship in Java?

   a) A subclass must override all the methods from its superclass.

   b) A superclass can inherit from a subclass.

   c) A subclass cannot access the private members of its superclass.

   d) A subclass inherits all the methods and fields from its superclass, including private fields.

3. What is method overriding in Java?

   a) Changing the value of a method's parameters in the subclass.

   b) Calling a method from the superclass in the subclass.

   c) Providing a specific implementation of a method that is already provided by its superclass.

   d) Removing a method from the superclass in the subclass.

4. Which of the following is a correct way to call a superclass method from a subclass in Java?

   a) methodName();   b) super.methodName();

   c) this.methodName();   d) superclass.methodName();

5. If a method is declared as final in the superclass, what can the subclass do with this method?

   a) The subclass can override the method.

   b) The subclass can delete the method.

   c) The subclass can only call the method, not override it.

   d) The subclass cannot override the method.

6. Which of the following is NOT a rule for method overriding in Java?

   a) A method declared final cannot be overridden.

   b) The argument list must exactly match that of the overridden method.

   c) The overriding method must always be static if the overridden method is static.

   d) The return type must be the same or a subtype of the return type declared in the original overridden method.

7. What happens if the `@Override` annotation is used with a method that does not override a superclass method?

   a) The program will compile without any errors.

   b) The method will be ignored during execution.

   c) The compiler will generate an error.

   d) The program will throw a runtime exception.

8. In Java, which keyword is used to refer to the parent class of a class?

   a) parent

   b) base

   c) super

   d) this

9. Which of the following statements is true about constructors and inheritance in Java?

   a) Constructors are not inherited.

   b) A subclass must override all the constructors of its superclass.

   c) Only parameterless constructors are inherited.

   d) A subclass inherits all the constructors of its superclass.

10. What is the output of the following code snippet if `class B extends A` and both classes have a method `display()` that prints "A" in class A and "B" in class B, and method `display()` of class B calls `super.display()`? ```java B obj = new B(); obj.display(); ```

a) B

b) BA

c) A

d) AB

11. Which principle of Object-Oriented Programming is demonstrated by method overriding?

a) Polymorphism

b) Abstraction

c) Encapsulation

d) Inheritance

12. What access modifier should be used for a superclass method to ensure that it can be overridden by any subclass in any package?

a) private

b) public

c) protected

d) default

13. If a subclass in Java has the same method signature as a method in the superclass, but does not use the `@Override` annotation, what is this an example of?

a) Method hiding

b) Method overriding

c) A compile-time error

d) Method overloading

14. Which of the following is true about the `super` keyword in Java?

a) It can be used to call both methods and constructors of the superclass.

b) It can only be used to call constructors of the superclass.

c) It can only be used within static methods.

d) It is optional when calling methods of the superclass.

15. In Java, if a subclass defines a static method with the same signature as a static method in the superclass, what is this an example of?

a) Method hiding

b) Method overloading

c) Method overriding

d) Illegal code

Answer Keys

1. b) extends

2. c) A subclass cannot access the private members of its superclass.

3. c) Providing a specific implementation of a method that is already provided by its superclass.

4. b) super.methodName();

5. d) The subclass cannot override the method.

6. c) The overriding method must always be static if the overridden method is static.

7. c) The compiler will generate an error.

8. c) super

9. a) Constructors are not inherited.

10. d) AB

11. a) Polymorphism

12. b) public

13. b) Method overriding

14. a) It can be used to call both methods and constructors of the superclass.

15. a) Method hiding