

1. Which OOP concept in Java allows different classes to be treated as one type through a common interface?

- A) Encapsulation
- B) Inheritance
- C) Polymorphism
- D) Abstraction

Answer: C

2. Which keyword in Java is used to prevent method overriding?

- A) static
- B) final
- C) abstract
- D) private

Answer: B

3. Which keyword in Java is used to call the parent class constructor?

- A) this
- B) super
- C) parent
- D) base

Answer: B

4. Which OOP principle restricts direct access to object data and methods?

- A) Encapsulation
- B) Inheritance
- C) Polymorphism
- D) Abstraction

Answer: A

5. Which access modifier allows visibility only within the same package?

- A) private
- B) protected
- C) default
- D) public

Answer: C

6. What is the output of:

```
class Test {  
    int x;  
    Test(int x){ this.x = x; }  
    public static void main(String[] args){
```

```
Test t = new Test(5);  
System.out.println(t.x);  
}  
}
```

- A) 0
- B) 5
- C) Compilation error
- D) Null

Answer: B

7. Which OOP concept is achieved using method overloading?

- A) Run-time polymorphism
- B) Compile-time polymorphism
- C) Abstraction
- D) Encapsulation

Answer: B

8. Which of the following allows multiple inheritance in Java?

- A) Classes
- B) Interfaces
- C) Abstract classes
- D) Final classes

Answer: B

9. Which class is the root of the Java class hierarchy?

- A) Object
- B) Class
- C) Base
- D) Super

Answer: A

10. Which is true about constructors in Java?

- A) Constructors can be inherited
- B) Constructors cannot be inherited
- C) Constructors can return values
- D) Constructors must be abstract

Answer: B

11. Which method is automatically called when an object is created?

- A) finalize()

- B) constructor
- C) destructor
- D) new()

Answer: B

12. Which OOP principle provides different implementations of the same method name?

- A) Encapsulation
- B) Polymorphism
- C) Inheritance
- D) Abstraction

Answer: B

13. Which Java feature hides implementation details and shows only functionality?

- A) Inheritance
- B) Abstraction
- C) Polymorphism
- D) Encapsulation

Answer: B

14. What happens if a class has multiple constructors with different parameters?

- A) Error
- B) Constructor overloading
- C) Constructor overriding
- D) Ambiguity

Answer: B

15. Which method is used to compare object contents in Java?

- A) ==
- B) equals()
- C) compareTo()
- D) compare()

Answer: B

16. Which keyword is used to inherit a class in Java?

- A) extends
- B) implements
- C) inherits
- D) super

Answer: A

17. Which keyword is used to inherit an interface in Java?

- A) extends
- B) implements
- C) interface
- D) super

Answer: B

18. Which of the following is true for abstract classes?

- A) They can be instantiated
- B) They may have abstract and concrete methods
- C) They must only contain abstract methods
- D) They cannot have constructors

Answer: B

19. Which is true about method overriding in Java?

- A) Return type must be same or covariant
- B) Method must have same name and parameters
- C) Access modifier cannot be more restrictive
- D) All of these

Answer: D

20. Which OOP principle helps to reuse code in Java?

- A) Encapsulation
- B) Inheritance
- C) Abstraction
- D) Polymorphism

Answer: B

21. Which operator is used to allocate memory for an object?

- A) malloc
- B) alloc
- C) new
- D) create

Answer: C

22. Which Java feature prevents modification after object creation?

- A) final class
- B) immutable class
- C) static class
- D) private class

Answer: B

23. Which class cannot be subclassed in Java?

- A) final class
- B) abstract class
- C) private class
- D) static class

Answer: A

24. Which concept is applied when the same method name exists in both superclass and subclass?

- A) Overloading
- B) Overriding
- C) Abstraction
- D) Encapsulation

Answer: B

25. Which of the following demonstrates polymorphism?

- A) Method overloading
- B) Method overriding
- C) Both A and B
- D) None

Answer: C

26. Which method is inherited by all Java classes?

- A) toString()
- B) main()
- C) hash()
- D) run()

Answer: A

27. Which keyword is used to prevent inheritance of a class?

- A) static
- B) final
- C) protected
- D) private

Answer: B

28. Which keyword can be used to refer current object?

- A) this
- B) super

- C) object
- D) self

Answer: A

29. Which keyword is used to invoke parent class methods?

- A) this
- B) super
- C) base
- D) root

Answer: B

30. Which statement about interfaces in Java is correct?

- A) Interfaces can have constructors
- B) Interfaces cannot be instantiated
- C) Interfaces can extend classes
- D) Interfaces cannot have static methods

Answer: B

31. Which method is called when an object is garbage collected?

- A) finalize()
- B) destroy()
- C) end()
- D) close()

Answer: A

32. Which keyword is used to define constants in Java?

- A) const
- B) final
- C) static
- D) define

Answer: B

33. Which OOP principle is implemented by hiding fields using private and providing getters/setters?

- A) Abstraction
- B) Encapsulation
- C) Polymorphism
- D) Inheritance

Answer: B

34. What is the default superclass of all classes in Java?

- A) Base
- B) Object
- C) Class
- D) Super

Answer: B

35. Which statement about abstract methods is true?

- A) Abstract methods must have a body
- B) Abstract methods cannot be declared inside abstract class
- C) Abstract methods must be overridden in subclass
- D) Abstract methods can be private

Answer: C

36. Which of the following allows achieving abstraction in Java?

- A) Abstract class
- B) Interface
- C) Both A and B
- D) None

Answer: C

37. Which Java feature allows binding at runtime?

- A) Early binding
- B) Dynamic binding
- C) Static binding
- D) Compile-time binding

Answer: B

38. Which OOP principle is violated if fields are declared public?

- A) Polymorphism
- B) Inheritance
- C) Encapsulation
- D) Abstraction

Answer: C

39. Which keyword is used to explicitly call another constructor in same class?

- A) super()
- B) this()
- C) constructor()
- D) create()

Answer: B

40. Which keyword makes a variable shared by all objects of a class?

- A) final
- B) static
- C) const
- D) global

Answer: B

41. Which keyword ensures that a method belongs to the class rather than an object?

- A) final
- B) static
- C) abstract
- D) protected

Answer: B

42. Which feature allows creating multiple methods with same name but different parameters?

- A) Overriding
- B) Overloading
- C) Abstraction
- D) Encapsulation

Answer: B

43. Which OOP principle ensures only relevant details are exposed to user?

- A) Encapsulation
- B) Abstraction
- C) Polymorphism
- D) Inheritance

Answer: B

44. Which method in Java is overridden to provide custom object comparison?

- A) toString()
- B) equals()
- C) compareTo()
- D) finalize()

Answer: B

45. Which method in Java is overridden to provide custom object representation as string?

- A) toString()
- B) equals()
- C) hashCode()



D) compareTo()

Answer: A

46. Which OOP concept allows same message to be interpreted differently by objects?

A) Encapsulation

B) Polymorphism

C) Abstraction

D) Inheritance

Answer: B

47. Which class in Java cannot be extended?

A) final class

B) abstract class

C) base class

D) Object class

Answer: A

48. Which is true about static methods in Java?

A) They cannot access instance variables

B) They cannot be overridden

C) They belong to class, not objects

D) All of these

Answer: D

49. Which is true about Java inheritance?

A) Supports single inheritance with classes

B) Supports multiple inheritance with interfaces

C) Default superclass is Object

D) All of these

Answer: D

50. Which of these is an example of runtime polymorphism?

A) Method overriding

B) Method overloading

C) Constructor overloading

D) Static methods

Answer: A