JAVA - OOPS test – 1

March-24/ java/001 Time: 02:00hrs

JAVA - OOPS

Diploma in Advance Computing

March 2024

**1.** Which of the following is not a pillar of OOP?

A. Inheritance

B. Encapsulation

**C. Compilation**

D. Polymorphism

**2.** What is encapsulation in Java?

A. Inheriting a class

**B. Hiding internal details and showing only functionality**

C. Overriding a method

D. None of the above

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

A. implement

B. import

**C. extends**

D. inherits

**4.** Which of these allows polymorphism in Java?

A. Method overloading

B. Method overriding

**C. Both A and B**

D. None

**5.** Which of the following access modifiers provides the most encapsulation?

A. public

B. protected

**C. private**

* D. default

**6.** What is the output type of the getClass() method?

A. String

B. Object

**C. Class**

D. Type

**7.** In Java, all classes by default inherit from:

**A. Object**

B. Class

C. Main

D. Root

**8.** Which of these is used to implement multiple inheritance in Java?

**A. Interface**

B. Abstract Class

C. Both

D. None

**9.** Which keyword is used to prevent inheritance?

A. static

**B. final**

C. abstract

D. sealed

**10.** What is the main purpose of an abstract class?

A. Create objects directly

B. Provide full method implementations

**C. Serve as a base class with incomplete methods**

D. Allow multiple inheritance

**11.** Can we instantiate an interface?

A. Yes

**B. No**

**12.** A method inside an interface is by default:

A. static

**B. abstract and public**

C. private

D. protected

**13.** What is dynamic method dispatch?

A. Compile-time method binding

**B. Run-time method binding**

C. Static overloading

D. None

**14.** Which concept allows you to use the same method name with different arguments?

A. Inheritance

B. Abstraction

**C. Overloading**

D. Overriding

**15.** Which OOP concept binds data and functions together?

A. Abstraction

B. Polymorphism

**C. Encapsulation**

D. Inheritance

**16.** Which keyword is used to define an interface in Java?

A. class

B. abstract

**C. interface**

D. implements

**17.** Which method is inherited from the Object class?

A. show()

**B. getClass()**

C. display()

D. None

**18.** Which of the following is true about constructors?

A. They can be inherited

**B. They can be overloaded**

C. They can be static

D. They return void

**19.** Can abstract class have a constructor in Java?

**A. Yes**

B. No

**20.** What is method overriding?

A. Changing method name

**B. Redefining inherited method in subclass**

C. Using static methods

D. Hiding methods

**21.** What is a super class?

A. Class with no parent

**B. Class that is extended**

C. Class with static methods

D. Final class

**22.** Can final methods be overridden?

A. Yes

B. No

**23.** What happens if you override equals() without overriding hashCode()?

A. Nothing

B. Code won't compile

**C. Inconsistent behaviour in Hash-based collections**

D. It’s faster

**24.** Which keyword is used to call the constructor of the parent class?

**A. super()**

B. base()

C. parent()

D. extends()

**25.** Which class is the root of the Java class hierarchy?

A. Main

B. Base

**C. Object**

D. Core

**26.** Which of the following is true about interfaces in Java?

A. Can have constructors

**B. Can extend multiple interfaces**

C. Can implement classes

D. Cannot contain constants

**27.** Which is not a type of polymorphism in Java?

A. Runtime

B. Compile-time

**C. Inheritance-based**

D. None

**28.** Which is true about abstract classes?

**A. Can have final methods**

B. Cannot have constructors

C. Cannot have any concrete method

D. Must be inherited

**29.** Which allows Java to achieve run-time polymorphism?

A. Overloading

B. Static binding

**C. Method overriding**

D. Final classes

**30.** When does dynamic binding occur?

A. Compile time

B. Load time

**C. Run time**

D. Debug time

**31.** Which of the following is true about Java methods?

A. Cannot be overloaded

B. Only static methods can be overridden

**C. Overridden methods are bound at runtime**

D. Private methods can be overridden

**32.** What is the default access modifier for a class?

A. public

B. private

C. protected

**D. package-private (default)**

**33.** Can an interface extend another interface?

**A. Yes**

B. No

**34.** Can a class extend multiple classes in Java?

A. Yes

**B. No**

**35.** What is the output of calling toString() on an object, if not overridden?

A. Class name

B. Hash code

**C. Both A and B**

D. Null

**36.** Which of the following is used to achieve abstraction?

A. Interfaces only

B. Abstract classes only

**C. Both**

D. Neither

**37.** Can static methods be overridden?

A. Yes

**B. No (they are hidden, not overridden)**

**38.** Which concept allows creating multiple methods with the same name in a class?

A. Inheritance

**B. Overloading**

C. Abstraction

D. Encapsulation

**39.** Can constructors be abstract?

A. Yes

**B. No**

**40.** Which modifier is used to define constants in interfaces?

A. static

B. final

C. public

**D. All of the above**

**41.** What is "is-a" relationship in OOP?

**A. Inheritance**

B. Encapsulation

C. Abstraction

D. Polymorphism

**42.** Which OOP concept is implemented using getter and setter methods?

A. Abstraction

B. Polymorphism

**C. Encapsulation**

D. Inheritance

**43.** What is the correct order of constructor calls in inheritance?

A. Child to Parent

**B. Parent to Child**

C. Random

D. Compiler decides

**44.** What happens when a subclass has a method with the same name as its superclass, but with a different signature?

A. Overrides

**B. Overloads**

C. Hides

D. Throws error

**45.** Which of the following can access private members of a class?

A. Subclasses

B. Same package classes

**C. Only that class**

D. All of the above

**46.** Which of the following does not support polymorphism?

**A. Final class**

B. Interface

C. Abstract class

D. Inheritance

**47.** Can a class implement multiple interfaces?

**A. Yes**

B. No

**48.** Can an interface have default methods in Java 8+?

**A. Yes**

B. No

**49.** Which of the following is true about final variables?

A. They can be reassigned

B. They can be declared without initialization

**C. They must be initialized once**

D. They are always static

**50.** Which class method is called before an object is garbage collected?

A. dispose()

B. delete()

**C. finalize()**

D. clean()