1. Java is a _____ language, which means it can run on any platform without modification.
   a) Interpreted
   b) Compiled
   c) Both a) and b)
   d) None of the above
   Answer: b) Compiled

2. Which of the following is NOT a feature of Java?
   a) Automatic memory management
   b) Multiple inheritance
   c) Platform independence
   d) Object-oriented
   Answer: b) Multiple inheritance

3. Java supports multithreading, allowing you to _____.
   a) Execute multiple programs simultaneously
   b) Execute multiple threads within a program
   c) Execute programs written in multiple languages
   d) Execute remote procedures
   Answer: b) Execute multiple threads within a program

4. Java uses a _____ to handle input and output.
   a) file system
   b) console
   c) scanner
   d) streams
   Answer: d) streams

5. Which keyword is used to explicitly specify that a method or class cannot be overridden or extended?
   a) final
   b) static
   c) private
   d) abstract
   Answer: a) final

6. In Java, every statement must end with a _____.
   a) semicolon (;)
   b) comma (,)
   c) colon (:)
   d) period (.)
   Answer: a) semicolon (;)

7. The entry point of a Java program is the _____ method.
   a) main
   b) start
   c) run
   d) execute
   Answer: a) main

8. What is the correct syntax for a single-line comment in Java?
   a) /* This is a comment */
   b) # This is a comment
   c) // This is a comment
   d) <!-- This is a comment -->
   Answer: c) // This is a comment

9. Which package is imported by default in Java?

a) java.io
b) java.util
c) java.lang
d) java.math
Answer: c) java.lang

10. To compile a Java program named "MyProgram.java", you would run the command:
a) javac MyProgram.java
b) java MyProgram.java
c) compile MyProgram.java
d) javac compile MyProgram.java
Answer: a) javac MyProgram.java

11. Which of the following is NOT a valid Java identifier?
a) _variable
b) 123variable
c) $variable
d) variable123
Answer: b) 123variable

12. Java keywords are in lowercase letters. True or False?
a) True
b) False
Answer: b) False

13. Which of the following is NOT a valid Java token?
a) switch
b) ( )
c) "Hello, World!"
d) [ ]
Answer: c) "Hello, World!"

14. What is the purpose of the 'new' keyword in Java?
a) To declare a new method
b) To create an instance of a class
c) To define a new package
d) To initialize a variable
Answer: b) To create an instance of a class

15. Java is a case-sensitive language. True or False?
a) True
b) False
Answer: a) True

16. Which statement is used to terminate a loop prematurely in Java?
a) continue
b) return
c) break
d) stop
Answer: c) break

17. The 'if-else' statement is used for _____ execution in Java.
a) sequential
b) conditional
c) repetitive
d) parallel
Answer: b) conditional

18. The 'switch' statement works with which data types in Java?
a) int, double, and boolean
b) int, char, and String
c) float, long, and byte
d) String, boolean, and double
Answer: b) int, char, and String

19. What is the output of the following code snippet?

```
int x = 10;
if (x > 5) {
   System.out.println("Hello");
} else if (x > 7) {
   System.out.println("Hi");
} else {
   System.out.println("Hey");
}
```

a) Hello
b) Hi
c) Hey
d) It won't print anything.
Answer: a) Hello

20. The 'do-while' loop in Java will always execute its body at least once. True or False?
a) True
b) False
Answer: a) True

21. Which data type is used to store whole numbers in Java?
a) float
b) int
c) double
d) byte
Answer: b) int

22. What is the size of the 'char' data type in Java?
a) 8 bits
b) 16 bits
c) 32 bits
d) It varies depending on the platform.
Answer: b) 16 bits

23. Which data type is used to store decimal numbers with single precision in Java?
a) float
b) double
c) decimal
d) real
Answer: a) float

24. The 'boolean' data type can have three possible values: True, False, and _____.
a) Maybe
b) Null
c) Unknown
d) None of the above
Answer: d) None of the above

25. Which data type is used to store characters in Java?

a) char
b) string
c) character
d) txt
Answer: a) char

26. What is typecasting in Java?
a) Creating a new data type
b) Converting one data type to another
c) Declaring variables with the 'typecast' keyword
d) Assigning a value to a variable
Answer: b) Converting one data type to another

27. Which type of typecasting is done implicitly by the compiler?
a) Upcasting
b) Downcasting
c) Automatic casting
d) Manual casting
Answer: c) Automatic casting

28. What will happen if you try to cast a larger data type into a smaller data type without explicit casting?
a) It will compile successfully.
b) It will throw a runtime exception.
c) It will give a warning but still compile.
d) It is not possible to cast larger types to smaller types without explicit casting.

Answer: b) It will throw a runtime exception.

29. Which type of typecasting requires explicit casting?
a) Upcasting
b) Downcasting
c) Implicit casting
d) Automatic casting
Answer: b) Downcasting

30. What is the correct way to perform explicit typecasting in Java?
a) (int)value
b) (double)value
c) (float)value
d) (type)value
Answer: d) (type)value

31. In Java, arrays are _____ data structures.
a) linear
b) hierarchical
c) nonlinear
d) random
Answer: a) linear

32. How do you declare an array in Java?
a) int[] arr;
b) arr = new int[];
c) int arr();
d) int arr = new array;
Answer: a) int[] arr;

33. What is the index of the first element in an array in Java?
a) 0
b) 1
c) -1
d) It depends on the size of the array.
Answer: a) 0

34. To access the last element of an array named 'arr', you would use the index _____.
a) arr.length - 1
b) arr.length
c) arr.length + 1
d) arr.lastIndex
Answer: a) arr.length - 1

35. What is the output of the following code snippet?

```
int[] numbers = {1, 2, 3, 4, 5};
System.out.println(numbers[3]);
```

a) 1
b) 2
c) 3
d) 4
Answer: d) 4

1. Java applications are compiled into bytecode, which is executed by the _____.
a) Java Compiler
b) Operating System
c) Java Virtual Machine (JVM)
d) Processor
Answer: c) Java Virtual Machine (JVM)

2. Java supports the concept of a _____, which is a blueprint for creating objects.
a) variable
b) reference
c) method
d) class
Answer: d) class

3. Which access modifier allows a method or variable to be accessible only within the same package?
a) public
b) private
c) protected
d) default
Answer: d) default

4. The process of combining data and behavior in a single unit is known as _____.
a) encapsulation
b) polymorphism
c) inheritance
d) abstraction
Answer: a) encapsulation

5. Which feature of Java allows you to create a new class that is a more specialized version of an existing class?
a) Inheritance
b) Abstraction
c) Encapsulation
d) Polymorphism
Answer: a) Inheritance

6. What is the correct syntax for declaring a constant variable in Java?
   a) const int MY_CONSTANT = 10;
   b) final int MY_CONSTANT = 10;
   c) var MY_CONSTANT = 10;
   d) static final int MY_CONSTANT = 10;
   Answer: d) static final int MY_CONSTANT = 10;

7. Which method is used to print formatted output in Java?
   a) System.print()
   b) print()
   c) System.out.println()
   d) printf()
   Answer: d) printf()

8. How do you comment multiple lines of code in Java?
   a) /* This is a comment */
   b) // This is a comment
   c) <!-- This is a comment -->
   d) /* This is a comment /* Another comment */ */
   Answer: a) /* This is a comment */

9. The 'this' keyword in Java is used to _____.
   a) refer to the current instance of the class
   b) declare a new object
   c) access a superclass method
   d) call a static method
   Answer: a) refer to the current instance of the class

10. Which package is used for input and output operations in Java?
    a) java.util
    b) java.io
    c) java.net
    d) java.lang
    Answer: b) java.io

11. Which of the following is a valid Java keyword used for exception handling?
    a) error
    b) exception
    c) try
    d) catch
    Answer: c) try

12. What is the purpose of the 'import' statement in Java?
    a) To import classes from other packages
    b) To import external libraries
    c) To import native code
    d) To import static methods
    Answer: a) To import classes from other packages

13. Which of the following is NOT a valid Java operator?
    a) >>
    b) <<<
    c) >>>
    d) >==
    Answer: d) >==

14. Which statement is used to define a loop that will continue to execute until a given condition is false?
a) for
b) while
c) do-while
d) loop
Answer: b) while

15. What will be the output of the following code snippet?

```
int a = 5;
int b = 2;
int result = a / b;
System.out.println(result);
```

a) 2.5
b) 2
c) 2.0
d) 2.25
Answer: b) 2

16. The 'continue' statement is used to _____.
a) exit the loop completely
b) skip the current iteration and continue with the next iteration of the loop
c) terminate the program
d) create a new loop
Answer: b) skip the current iteration and continue with the next iteration of the loop

17. Which statement is used to define a block of code that will be executed repeatedly as long as a given condition is true?
a) loop
b) do-while
c) while
d) for
Answer: c) while

18. In Java, the 'break' statement is used to exit _____.
a) a loop
b) a method
c) a class
d) the JVM
Answer: a) a loop

19. Which of the following is NOT a valid control flow statement in Java?
a) if-else
b) switch-case
c) goto
d) try-catch
Answer: c) goto

20. What will be the output of the following code snippet?

```
int num = 10;
if (num > 5) {
   System.out.println("Greater than 5");
} else if (num > 8) {
   System.out.println("Greater than 8");
} else {
   System.out.println("Less than or equal to 5");
}
```

a) Greater than 5

b) Greater than 8
c) Less than or equal to 5
d) It won't print anything.
Answer: a) Greater than 5

21. What is the size of the 'double' data type in Java?
a) 4 bytes
b) 8 bytes
c) 16 bytes
d) It varies depending on the platform.
Answer: b) 8 bytes

22. Which data type is used to store true/false values in Java?
a) bool
b) boolean
c) bit
d) logical
Answer: b) boolean

23. Java supports automatic type conversion from _____ to _____.
a) int, double
b) float, double
c) int, String
d) double, String
Answer: b) float, double

24. Which data type is used to store large integer numbers in Java?
a) int
b) long
c) short
d) byte
Answer: b) long

25. What will be the output of the following code snippet?

```
char letter = 'A';
System.out.println((int)letter);
```

a) A
b) 65
c) 66
d) It won't print anything.
Answer: b) 65

26. What is the result of the following operation in Java?

```
int x = 10;
double y = 3.5;
double result = x / y;
```

a) 2.85714285714
b) 2
c) 3
d) 2.5
Answer: b) 2

27. Which type of typecasting is done implicitly by the compiler?
a) Upcasting
b) Downcasting
c) Widening casting
d) Narrowing casting

Answer: c) Widening casting

28. What will happen if you try to cast a double into an int without explicit casting?
a) It will compile successfully.
b) It will throw a runtime exception.
c) It will give a warning but still compile.
d) It is not possible to cast double to int without explicit casting.
Answer: d) It is not possible to cast double to int without explicit casting.

29. What is the output of the following code snippet?

```
int num1 = 10;
int num2 = 4;
double result = (double) num1 / num2;
System.out.println(result);
```

a) 2.0
b) 2.5
c) 2
d) 2.25
Answer: b) 2.5

30. Which type of typecasting requires explicit casting?
a) Upcasting
b) Downcasting
c) Implicit casting
d) Automatic casting
Answer: b) Downcasting

31. Which statement is used to find the length of an array in Java?
a) array.length()
b) array.length
c) length(array)
d) size(array)
Answer: b) array.length

32. In Java, can the size of an array be changed after it is initialized?
a) Yes, using the resize() method
b) Yes, using the expand() method
c) No, the size is fixed after initialization
d) No, the size can only be changed when declaring the array
Answer: c) No, the size is fixed after initialization

33. What is the output of the following code snippet?

```
int[] numbers = {1, 2, 3, 4, 5};
int sum = 0;
for (int i = 0; i < numbers.length; i++) {
   sum += numbers[i];
}
System.out.println(sum);
```

a) 15
b) 10
c) 14
d) 5
Answer: a) 15

34. Which of the following statements is used to copy the contents of one array into another in Java?
a) array2 = array1;
b) array2 = array1.copy();

c) arraycopy(array1, array2);
d) System.arraycopy(array1, 0, array2, 0, array1.length);
Answer: d) System.arraycopy(array1, 0, array2, 0, array1.length);

35. What is the correct syntax for declaring and initializing a 2-dimensional array in Java?
a) int[][] arr = new int[3][3]{{1, 2, 3}, {4, 5, 6}, {7, 8, 9}};
b) int[][] arr = {{1, 2, 3}, {4, 5, 6}, {7, 8, 9}};
c) int[3][3] arr = {{1, 2, 3}, {4, 5, 6}, {7, 8, 9}};
d) int[3][3] arr = new int{{1, 2, 3}, {4, 5, 6}, {7, 8, 9}};
Answer: b) int[][] arr = {{1, 2, 3}, {4, 5, 6}, {7, 8, 9}}

1. OOP stands for _____.
a) Object-Oriented Procedure
b) Object-Oriented Program
c) Object-Oriented Programming
d) Object-Oriented Protocol
Answer: c) Object-Oriented Programming

2. Which of the following is NOT a key principle of OOP?
a) Inheritance
b) Encapsulation
c) Procedural Programming
d) Polymorphism
Answer: c) Procedural Programming

3. OOP provides a way to model real-world entities as _____.
a) variables
b) methods
c) objects
d) functions
Answer: c) objects

4. Which concept in OOP refers to the ability of an object to take on multiple forms?
a) Polymorphism
b) Inheritance
c) Abstraction
d) Encapsulation
Answer: a) Polymorphism

5. Which OOP concept allows you to define a new class based on an existing class?
a) Encapsulation
b) Polymorphism
c) Inheritance
d) Abstraction
Answer: c) Inheritance

6. A class is a _____ in object-oriented programming.
a) blueprint for objects
b) collection of methods
c) data structure
d) variable container
Answer: a) blueprint for objects

7. An object is an _____ of a class.
a) instance
b) attribute
c) method

d) variable
Answer: a) instance

8. Which keyword is used to create an object of a class in Java?
a) class
b) object
c) new
d) this
Answer: c) new

9. The process of creating an object from a class is known as _____.
a) encapsulation
b) instantiation
c) inheritance
d) abstraction
Answer: b) instantiation

10. What is the relationship between a class and an object?
a) A class is a blueprint for objects, and an object is an instance of a class.
b) A class is a child of an object, and an object is a parent of a class.
c) A class and an object are the same things in OOP.
d) A class is an instance of an object.
Answer: a) A class is a blueprint for objects, and an object is an instance of a class.

11. What does the 'static' keyword mean in Java?
a) It indicates that the variable or method belongs to the class and not to any specific instance of the class.
b) It means that the variable or method can only be accessed by the class that defines it.
c) It specifies that the variable or method is constant and cannot be changed.
d) It is used to declare a variable that cannot be modified after initialization.
Answer: a) It indicates that the variable or method belongs to the class and not to any specific instance of the class.

12. Which of the following CANNOT be marked as static?
a) Variables
b) Methods
c) Constructors
d) Inner classes
Answer: d) Inner classes

13. Static variables are also known as _____ variables.
a) constant
b) instance
c) local
d) class
Answer: d) class

14. How do you access a static variable or method from a class?
a) By using the 'new' keyword
b) By using the 'this' keyword
c) By using the 'static' keyword
d) By using the class name
Answer: d) By using the class name

15. Can a static method access non-static (instance) variables directly?
a) Yes
b) No
Answer: b) No

16. What is a constructor in Java?
a) A method that returns a value
b) A method that is used to create objects
c) A method that is defined inside another method
d) A method that is used to declare variables
Answer: b) A method that is used to create objects

17. Which of the following is true about constructors?
a) Constructors can have a return type.
b) Constructors cannot have parameters.
c) If a class does not define any constructors, the compiler creates a default constructor.
d) Constructors cannot be overloaded.
Answer: c) If a class does not define any constructors, the compiler creates a default constructor.

18. What is the purpose of a parameterized constructor?
a) To create a single instance of a class
b) To create multiple instances of a class with different values
c) To access static variables and methods
d) To provide default values to variables
Answer: b) To create multiple instances of a class with different values

19. Can a class have more than one constructor?
a) Yes, but only if they have different names
b) No, a class can have only one constructor
c) Yes, as long as they have different parameter lists
d) Yes, but only if they have the same return type
Answer: c) Yes, as long as they have different parameter lists

20. What is the first line of code in a constructor used for?
a) Initializing variables
b) Declaring variables
c) Defining the return type
d) Calling another constructor in the same class
Answer: d) Calling another constructor in the same class

21. In Java, the 'this' keyword refers to _____.
a) the current object instance
b) the superclass
c) the current method
d) the static context
Answer: a) the current object instance

22. Which of the following is a valid use of the 'this' keyword?
a) To call a static method
b) To create a new object
c) To access a static variable
d) To refer to an instance variable with the same name as a parameter
Answer: d) To refer to an instance variable with the same name as a parameter

23. The 'this' keyword can be used inside a constructor to _____.
a) call another constructor of the same class
b) create a new object
c) access a superclass method
d) access a static variable
Answer: a) call another constructor of the same class

24. Which statement is true about using the 'this' keyword in a static method?

a) The 'this' keyword is not allowed in static methods.
b) The 'this' keyword refers to the current instance of the class.
c) The 'this' keyword refers to the class itself.
d) The 'this' keyword refers to the superclass.
Answer: a) The 'this' keyword is not allowed in static methods.

25. When is the 'this' keyword primarily used in Java?
a) In method overloading
b) In inheritance
c) In constructor chaining
d) In polymorphism
Answer: c) In constructor chaining

26. Inheritance is the process by which one class _____.
a) is composed of multiple classes
b) can have multiple instances
c) acquires the properties and behaviors of another class
d) is derived from an interface
Answer: c) acquires the properties and behaviors of another class

27. Which keyword is used to implement inheritance in Java?
a) use
b) inherit
c) implements
d) extends
Answer: d) extends

28. The class that is being inherited from is known as the _____ class.
a) derived
b) base
c) subclass
d) derived
Answer: b) base

29. What is the main advantage of using inheritance in Java?
a) It allows for code reuse and promotes the concept of hierarchy.
b) It provides a way to create objects without using constructors.
c) It allows for multiple inheritance.
d) It ensures that all methods are static.
Answer: a) It allows for code reuse and promotes the concept of hierarchy.

30. What is the access modifier used to indicate that a class member can only be accessed within its own class and its subclasses?
a) public
b) private
c) protected
d) static
Answer: c) protected

31. In Java, the 'super' keyword is used to _____.
a) call a superclass method
b) access a static variable
c) refer to the current object instance
d) create a new object
Answer: a) call a superclass method

32. Which of the following statements is true about the 'super' keyword?

a) The 'super' keyword can only be used in constructors.
b) The 'super' keyword can only be used inside static methods.
c) The 'super' keyword always refers to the object instance of the subclass.
d) The 'super' keyword can be used in both constructors and methods.
Answer: d) The 'super' keyword can be used in both constructors and methods.

33. In a subclass, when do you typically call the 'super' constructor?
a) After calling the subclass constructor
b) Before calling the subclass constructor
c) When the superclass is abstract
d) When the superclass does not have a constructor
Answer: b) Before calling the subclass constructor

34. What happens if you don't explicitly call a superclass constructor using the 'super' keyword in a subclass constructor?
a) The superclass constructor is called automatically.
b) The subclass will not compile.
c) The subclass constructor will throw an exception.
d) The subclass constructor will have an infinite loop.
Answer: a) The superclass constructor is called automatically.

35. When using the 'super' keyword to call a superclass method, how do you differentiate it from a local method with the same name?
a) Use the 'super' keyword before the method name.
b) Use the 'this' keyword before the method name.
c) Call the superclass method inside a try-catch block.
d) Rename the local method to avoid conflicts.
Answer: a) Use the 'super' keyword before the method name.

36. Polymorphism in Java allows you to _____.
a) define multiple constructors in a class
b) have multiple methods with the same name but different parameters
c) create multiple objects of a class
d) call a method from different classes
Answer: b) have multiple methods with the same name but different parameters

37. Method overloading in Java means _____.
a) using the same method name in multiple classes
b) calling the same method repeatedly
c) creating multiple methods with the same name but different parameters in the same class
d) creating multiple methods with the same name and parameters in the same class
Answer: c) creating multiple methods with the same name but different parameters in the same class

38. Which of the following is NOT a way to achieve method overloading in Java?
a) Using different return types for the methods
b) Using different access modifiers for the methods
c) Using different numbers of parameters for the methods
d) Using different data types for the parameters of the methods
Answer: a) Using different return types for the methods

39. Method overriding in Java allows a subclass to _____.
a) hide the superclass methods
b) modify the superclass methods
c) add new methods to the superclass
d) replace the superclass methods with new implementations
Answer: d) replace the superclass methods with new implementations

40. What is the relationship between the overridden method in the subclass and the superclass method?
a) They have different names.
b) They have different return types.
c) They have the same method signature (name, parameters, and return type).
d) They are defined in different classes.
Answer: c) They have the same method signature (name, parameters, and return type).

41. Abstraction in Java refers to _____.
a) hiding the internal details and showing only the relevant features of an object
b) creating objects from a class
c) accessing static variables and methods
d) implementing multiple interfaces in a class
Answer: a) hiding the internal details and showing only the relevant features of an object

42. Which keyword is used to achieve abstraction in Java?
a) abstract
b) abstraction
c) hide
d) show
Answer: a) abstract

43. Abstract classes in Java can have _____.
a) abstract methods and concrete methods
b) only abstract methods
c) only concrete methods
d) only static methods
Answer: a) abstract methods and concrete methods

44. An abstract method is a method that _____.
a) has no implementation and ends with a semicolon
b) is declared as 'abstract' and has a method body
c) can be marked as 'private'
d) is defined in an abstract class
Answer: a) has no implementation and ends with a semicolon

45. Which of the following statements is true about abstract classes in Java?
a) You can create an object of an abstract class.
b) An abstract class must be inherited by a subclass to be used.
c) An abstract class cannot have any instance variables.
d) An abstract class can be marked as 'final.'
Answer: b) An abstract class must be inherited by a subclass to be used.

Topic: Encapsulation

46. Encapsulation in Java means _____.
a) creating multiple objects of a class
b)

restricting access to certain data and methods of a class
c) using the 'static' keyword to access class members
d) hiding the internal implementation details of a class
Answer: b) restricting access to certain data and methods of a class

47. Which access modifier provides the highest level of encapsulation in Java?
a) public
b) private
c) protected

d) package-private (default)
Answer: b) private

48. Which of the following is NOT an example of encapsulation?
a) Using access modifiers to control access to class members
b) Creating getter and setter methods for class variables
c) Declaring all methods as 'static'
d) Using private instance variables
Answer: c) Declaring all methods as 'static'

49. What is the purpose of using getter and setter methods?
a) To hide the internal implementation details of a class
b) To provide public access to private instance variables
c) To create new instances of a class
d) To implement multiple interfaces in a class
Answer: b) To provide public access to private instance variables

50. Which of the following statements is true about encapsulation?
a) Encapsulation allows unrestricted access to all class members.
b) Encapsulation promotes data security and code maintainability.
c) Encapsulation is achieved by declaring all class members as 'public.'
d) Encapsulation is not considered a fundamental OOP principle.
Answer: b) Encapsulation promotes data security and code maintainability.

51. An abstract class cannot be _____.
a) inherited
b) instantiated
c) extended
d) overridden
Answer: b) instantiated

52. Which of the following statements is true about abstract classes in Java?
a) An abstract class must have at least one abstract method.
b) An abstract class cannot have a constructor.
c) An abstract class can be marked as 'final.'
d) An abstract class can have both abstract and concrete methods.
Answer: d) An abstract class can have both abstract and concrete methods.

53. An abstract method must be declared in an abstract class using the _____ keyword.
a) abstract
b) concrete
c) void
d) this
Answer: a) abstract

54. What is the primary purpose of an abstract class in Java?
a) To prevent multiple inheritance
b) To create objects without using constructors
c) To define common behaviors for its subclasses
d) To restrict access to its methods and variables
Answer: c) To define common behaviors for its subclasses

55. Which of the following statements is true about abstract classes and interfaces?
a) An abstract class can extend multiple interfaces.
b) An abstract class can implement multiple interfaces.
c) An abstract class can have both abstract and final methods.
d) An abstract class cannot be inherited by a subclass.

Answer: b) An abstract class can implement multiple interfaces.

56. An interface in Java is a _____.
a) blueprint for a class
b) collection of abstract and concrete methods
c) concrete class
d) group of objects
Answer: a) blueprint for a class

57. Which keyword is used to declare an interface in Java?
a) interface
b) abstract
c) implements
d) interface class
Answer: a) interface

58. An interface can have _____ methods.
a) only abstract
b) only concrete
c) both abstract and concrete
d) neither abstract nor concrete
Answer: a) only abstract

59. In Java, a class can implement _____ interfaces.
a) multiple
b) only one
c) up to three
d) only two
Answer: a) multiple

60. What is the purpose of using interfaces in Java?
a) To achieve multiple inheritance
b) To provide a blueprint for a class to implement specific methods
c) To allow classes to inherit from multiple abstract classes
d) To create new instances of a class
Answer: b) To provide a blueprint for a class to implement specific methods

61. An interface method can be declared with the following access modifiers, except _____.
a) public
b) private
c) protected
d) default (package-private)
Answer: b) private

62. Which of the following statements is true about interfaces in Java?
a) An interface can have instance variables with any access modifier.
b) An interface can have private methods with a method body.
c) An interface cannot extend multiple interfaces.
d) An interface can have constructors.
Answer: c) An interface cannot extend multiple interfaces.

63. A class that implements an interface must provide concrete implementations for all _____ methods of the interface.
a) private
b) abstract
c) static
d) final

Answer: b) abstract

64. Can an interface extend another interface in Java?
a) Yes
b) No
Answer: a) Yes

65. What happens if a class implements multiple interfaces with methods that have the same name but different implementations?
a) The class will not compile.
b) The class must provide a new implementation for the conflicting methods.
c) The class can inherit the implementation from one of the interfaces.
d) The class must use the 'super' keyword to call the conflicting methods.
Answer: b) The class must provide a new implementation for the conflicting methods.