Name of the Bundle	Advanced Bundle V2	Subject	Java Programming V2
Topic	Class & Objects	Last updated on	06 January 2026

1. Java is a _____ programming language.
    a. Functional
    b. Object-Oriented
    c. Theoretical
    d. All the above

    Ans: b. Object-Oriented

    Explanation: Everything in Java is implemented using Object-Oriented principles.

2. _____ represents an entity in the real world that can be distinctly identified.
    a. A class
    b. An object
    c. A method
    d. A data field

    Ans: b. An object

    Explanation: An object represents a real-world entity that can be distinctly identified, like a car, person, or book in programming. It is an instance of a class.

3. What is an object in Java?
    a. static reference
    b. template or blueprint
    c. instance of class
    d. entity in memory

    Ans: c. instance of class

    Explanation: An object in Java is an instance of a class, created from the blueprint (class) that defines its properties and behaviors.

Name of the Bundle	Advanced Bundle V2	Subject	Java Programming V2
Topic	Class & Objects	Last updated on	06 January 2026

4. What is a class in Java?
    a. static reference
    b. template or blueprint
    c. instance of a class
    d. user-defined data type

Ans: b. template or blueprint

Explanation: A class in Java defines the structure and behavior of objects, acting as a blueprint to create instances.

5. _____ allocated memory space to hold their data values.
    a. Classes
    b. Variables
    c. Operators
    d. Objects

Ans: d. Objects

Explanation: Objects are allocated different memory spaces to hold their data values.

6. In oop, creating an object is also called a/an _____
    a. Instantiation
    b. Object
    c. Inheritance
    d. Polymorphism

Ans: a. Instantiation

Explanation: When you create an object, you are instantiating a class, meaning you are creating an instance of the class.

Name of the Bundle	Advanced Bundle V2	Subject	Java Programming V2
Topic	Class & Objects	Last updated on	06 January 2026

7. _____ is a construct that defines objects of the same type.
    a. A class
    b. An object
    c. A method
    d. A data field

Ans: a. A class

Explanation: A class is a blueprint or template in Object-Oriented Programming (OOP) that defines the structure and behavior of objects of the same type.

8. A_____defines the attribute of an object
    a. Program
    b. Class
    c. Inherited
    d. Duplicate

Ans: b. Class

Explanation: In object-oriented programming, instance variables are the attributes that define the characteristics of an instance (or object) of a class.

9. The _____ defines the kind of attribute
    a. Program
    b. Variables
    c. Property
    d. Class

Ans: d. Class

Explanation: A class defines the structure and type of attributes for objects.

Name of the Bundle	Advanced Bundle V2	Subject	Java Programming V2
Topic	Class & Objects	Last updated on	06 January 2026

10. To define an object's behaviour _____ are created.
    a. Instances
    b. Programs
    c. Methods
    d. Functions

Ans: c. Methods

Explanation: In object-oriented programming, methods define an object's behavior.

11. In java _____ can be defined only inside a class.
    a. Instances
    b. Programs
    c. Methods
    d. Functions

Ans: c. Methods

Explanation: In Java, methods can only be defined inside a class.

12. _____ keyword returns a reference to an object that represents an instance of the class.
    a. new
    b. New
    c. NEW
    d. nEW

Ans: a. new

Explanation: In Java, the new keyword is used to create new objects.

Name of the Bundle	Advanced Bundle V2	Subject	Java Programming V2
Topic	Class & Objects	Last updated on	06 January 2026

13. Instance variables and instance methods are accessed via _____.
    a. Classes
    b. Variables
    c. Operators
    d. Objects

Ans: d. Objects

Explanation: Instance variables and instance methods are accessed via objects. An object represents an instance of a class and contains its own data and behaviors.

14. Objects can be referred by using _____ Operator.
    a. Colon(:)
    b. Underscore (_)
    c. Dot(.)
    d. Angle bracket(<)

Ans: c. Dot(.)

Explanation: In Java, objects are referred to using the dot (.) operator. It is used to access the properties (instance variables) and methods of an object.

15. When the programmer declares a _____ , the object is not created.
    a. Class
    b. Variable
    c. Operator
    d. Method

Ans: a. Class

Explanation: When a class is declared, no object is created. Objects are created later using the new keyword.

Name of the Bundle	Advanced Bundle V2	Subject	Java Programming V2
Topic	Class & Objects	Last updated on	06 January 2026

16. Reference variable does not refer to any object and its initial value is _____ by default
    a. Zero
    b. One
    c. Null
    d. Minus one

Ans: c. Null

Explanation: A reference variable is null by default, meaning it doesn't point to any object.

17. Which is the correct way of creating an object of MyClass:
    a. MyClass obj = new MyClass();
    b. MyClass obj = new MyClass;
    c. obj = new MyClass();
    d. new MyClass obj;

Ans: a. MyClass obj = new MyClass();

Explanation: MyClass obj = new MyClass(); which creates an object of MyClass. This correctly declares and initializes the object in one statement.

18. Which of the following statements is incorrect?
    a. Each Java program must contain at least one main() method
    b. A Java class can exist without a main() method
    c. We can only have one main() method in a program
    d. main() method must be public

Ans: a. Each Java program must contain at least one main() method

Explanation: Classes can exist without main().Only the class that is executed needs main().

Name of the Bundle	Advanced Bundle V2	Subject	Java Programming V2
Topic	Class & Objects	Last updated on	06 January 2026

19. A Java class can contain_____.
    a. Variables
    b. Methods, Constructors
    c. Inner Classes (A class inside another class)
    d. All the above

Ans: d. All the above

Explanation: A Java class can contain variables (fields), methods, constructors, and even other classes (called inner classes) inside it.

20. Which of the following are characteristics of an object?
    a. State
    b. Behavior
    c. Identity
    d. All of the above

Ans: d. All of the above

Explanation: An object has three characteristics: its state (data), behavior (methods), and identity (uniqueness).

21. A variable, which gets memory at runtime when an object is created is called?
    a. static variable
    b. local variable
    c. instance variable
    d. global variable

Ans: c. instance variable

Explanation: An instance variable is a variable that gets memory at runtime when an object is created

Name of the Bundle	Advanced Bundle V2	Subject	Java Programming V2
Topic	Class & Objects	Last updated on	06 January 2026

22. The new keyword is used for_____.
    a. allocating memory at runtime
    b. allocating memory at compile time
    c. releasing memory at runtime
    d. initializing variables

Ans: a. allocating memory at runtime

Explanation: The new keyword in Java is used to allocate memory for objects at runtime.

23. What is an object in Java?
    a. A reference to a class
    b. A runtime entity
    c. A method
    d. An attribute

Ans: b. A runtime entity

Explanation: An object in Java is created while the program is running and represents an instance of a class.

24. What are the main components of a class?
    a. Attributes and Packages
    b. Objects and References
    c. Methods and Attributes
    d. Constructors and Destructors

Ans: c. Methods and Attributes

Explanation: A class in Java consists of attributes (data) and methods (functions) that define its behavior.

Name of the Bundle	Advanced Bundle V2	Subject	Java Programming V2
Topic	Class & Objects	Last updated on	06 January 2026

25. What does the state of an object represent?
    a. The methods an object can execute
    b. The data (values) of an object
    c. The unique identity of the object
    d. The behavior of the object

Ans: b. The data (values) of an object

Explanation: The state of an object refers to the data or values stored in its attributes, which can change over time based on the object's behavior.

26. How does the JVM uniquely identify each object?
    a. Using the object's behavior
    b. Using the object's state
    c. Using the object's identity
    d. Using the object's methods

Ans: c. Using the object's identity

Explanation: The JVM uniquely identifies each object using its identity, which is typically represented by the memory address where the object is stored.

27. Which of the following is NOT a characteristic of an object in Java?
    a. State
    b. Behavior
    c. Identity
    d. Constructor

Ans: d. Constructor

Explanation: An object has state (data), behavior (methods), and identity (uniqueness), while a constructor just initializes the object.

Name of the Bundle	Advanced Bundle V2	Subject	Java Programming V2
Topic	Class & Objects	Last updated on	06 January 2026

28. What is the primary relationship between a class and an object?
    a. A class is an instance of an object.
    b. An object is a blueprint for a class.
    c. A class defines the structure, and an object is the implementation.
    d. A class and an object are the same.

Ans: c. A class defines the structure, and an object is the implementation.

Explanation: A class is like a plan, and an object is a real example created from that plan.

29. Which of these is an example of creating an object in Java?
    a. Car car = new Car();
    b. int car = 5;
    c. class Car {}
    d. Car();

Ans: a. Car car = new Car();

Explanation: This is how you create an object in Java. It declares a reference variable car of type Car and uses the new keyword to create an instance of the Car class.

30. Which of the following is the correct syntax for defining a class in Java?
    a. class { field; method; }
    b. class <class_name> { field; method; }
    c. <class_name> class { field; method; }
    d. class <field> { method; }

Ans: b. class <class_name> { field; method; }

Explanation: This syntax defines a class with a name, and inside it, you declare fields (attributes) and methods (functions).

Name of the Bundle	Advanced Bundle V2	Subject	Java Programming V2
Topic	Class & Objects	Last updated on	06 January 2026

31. Which of the following is a correct rule for naming a class in Java?
    a. Class names should start with a lowercase letter.
    b. Class names should always be in uppercase letters.
    c. Class names should start with a capital letter.
    d. Class names can only contain numbers and symbols.

Ans: c. Class names should start with a capital letter.

Explanation: In Java, it's a convention to start class names with an uppercase letter, and subsequent words are written in camel case (e.g., MyClass).

32. Which of the following is NOT a valid class name in Java?
    a. Car
    b. Bike123
    c. myCar
    d. 2Wheeler

Ans: d. 2Wheeler

Explanation: In Java, class names cannot start with a number. Therefore, 2Wheeler is invalid. Class names must start with a letter, underscore (_), or dollar sign ($).

33. Where does the new keyword allocate memory for objects in Java?
    a. Stack memory
    b. Register memory
    c. Heap memory
    d. Cache memory

Ans: c. Heap memory

Explanation: In Java, the new keyword allocates memory for objects in the heap memory. The heap is where all dynamically created objects are stored during runtime.

Name of the Bundle	Advanced Bundle V2	Subject	Java Programming V2
Topic	Class & Objects	Last updated on	06 January 2026

34. How can you initialize an object in Java?
    a. By using a constructor
    b. By using a reference variable
    c. By using a method
    d. All of the above

Ans: d. All of the above

Explanation: In Java, you can initialize an object using a constructor, a reference variable, or a method. All these ways allow setting values or initializing the object.

35. Which option allows you to modify object values after initialization?
    a. Constructor
    b. Method
    c. Reference variable
    d. Static method

Ans: b. Method

Explanation: A method is used to modify an object's values after it has been initialized.

36. _____variables define the attributes of an object.
    a. Program
    b. Instance
    c. Inherited
    d. Duplicate

Ans: b. Instance

Explanation: Instance variables define the attributes of an object, as each object can have its own unique set of values for these variables.

Name of the Bundle	Advanced Bundle V2	Subject	Java Programming V2
Topic	Class & Objects	Last updated on	06 January 2026

37. Which of the following is the correct use of the membership (dot) operator . in Java?
    a. To access instance variables and methods of a class or object
    b. To compare two objects
    c. To create an object in Java
    d. To allocate memory dynamically

Ans: a. To access instance variables and methods of a class or object

Explanation: The membership (dot) operator . in Java is used to access variables and methods of a class or object.

38. Which part is the class name in the statement:

Dog d = new Dog();

    a. Dog
    b. d
    c. new
    d. Dog()

Answer: a. Dog

Explanation: Dog is the class name used to create the object.

39. What is the error in the statement: Car c = Car();
    a. Missing new keyword
    b. Constructor name is incorrect
    c. Both missing new and the constructor incorrect
    d. No error

Answer: c. Both missing new and the constructor incorrect

Explanation: Object creation must use new, and constructor must be called as new Car().

Name of the Bundle	Advanced Bundle V2	Subject	Java Programming V2
Topic	Class & Objects	Last updated on	06 January 2026

40. In the code below, which one is the object?

```
class Dog {

   void bark() { }

}
Dog d = new Dog();
```

a. Dog
b. bark()
c. d
d. new Dog

Answer:c. d

Explanation: d is the reference variable that refers to the object.

41. A group of similar objects is represented by a _____.

a. Class
b. Package
c. Method
d. Variable

Answer: a. Class

Explanation: A class is a blueprint that represents similar objects.

Name of the Bundle	Advanced Bundle V2	Subject	Java Programming V2
Topic	Class & Objects	Last updated on	06 January 2026

42. Identify the variable and method in the code:

```
class Car {

   int a;       // A

   void add() { } // B

}
```

a. a = method, add() = variable
b. a = variable, add() = method
c. Both are methods
d. Both are variables

Answer: b. a = variable, add() = method

Explanation: a stores data, and add() performs an action.

43. Which is the correct way to call a class method?

```
class A {
   void show() { }
}
```

a. show.A();
b. A.show();
c. A a = new A(); a.show();
d. A.show(a);

Answer: c. A a = new A(); a.show();

Explanation: A non-static method is called using an object.

Name of the Bundle	Advanced Bundle V2	Subject	Java Programming V2
Topic	Class & Objects	Last updated on	06 January 2026

44. A class is a _____ and an object is a _____.

a. Physical entity, logical entity
b. Blueprint, instance
c. Instance, blueprint
d. Method, class

Answer: b. Blueprint, instance

Explanation: A class defines structure; an object is its real form.

45. What is the output of the program?

```
class Pen {
   Pen() {
      System.out.print("Pen object ");
   }
}
Pen p = new Pen();
Pen q = new Pen();
```

a. Pen object
b. Pen object Pen object
c. No output
d. Error

Answer: b. Pen object Pen object

Explanation: The constructor runs each time an object is created.