1. Which of the following is NOT a core concept of Object-Oriented Programming (OOP)?

A) Encapsulation B) Abstraction C) Compilation D) Polymorphism

Correct Answer: C

2. What is the primary purpose of a constructor in Java?

A) To define the return type of a method. B) To create a new class. C) To initialize objects. D) To declare variables.

Correct Answer: C

3. Which keyword is used to access fields, methods, or constructors of the current object?

A) super B) this C) static D) new

Correct Answer: B

4. Which of the following statements is true about static members in Java?

A) Each object has its own copy of static fields. B) Static members can only be accessed through an object reference. C) Static members are declared using the "static" keyword. D) Static members cannot be accessed using the class name.

Correct Answer: C

5. What is Encapsulation in OOP?

A) The process of hiding implementation details. B) Declaring fields as public. C) Providing public getter and setter methods to access and modify private fields. D) Inheriting properties from another class.

Correct Answer: C

6. Which access modifier provides the most restrictive access?

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

Correct Answer: D

7. Which of the following can achieve 100% abstraction in Java?

A) Abstract classes B) Interfaces C) Concrete classes D) Inner classes

Correct Answer: B

8. Which statement is true about Abstract classes?

A) Objects of an abstract class can be created. B) Abstract classes can have constructors. C) All methods in an abstract class must be abstract. D) Abstract methods cannot be overridden.

Correct Answer: B

9. Which of the following is NOT true about Interfaces in Java?

A) Interfaces support multiple inheritance. B) Interfaces can have constructors. C) Methods in interfaces are implicitly public and abstract. D) Fields in interfaces are implicitly public, static, and final.

Correct Answer: B

10. What is Inheritance in OOP?

```
A)  The ability of a class to take on many forms.
B)  The process of hiding data.
C)  The mechanism of deriving a new class from an existing class.
D)  Defining methods with the same name but different signatures.

Correct Answer: C [cite: 267, 268, 269]
```

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

```
A)  implements
B)  inherits
C)  extends
D)  derives

Correct Answer: C [cite: 269]
```

12. Which type of inheritance is NOT directly supported by Java classes?

```
A)  Single Inheritance
B)  Multilevel Inheritance
C)  Hierarchical Inheritance
D)  Multiple Inheritance

Correct Answer: D [cite: 270]
```

13. What is achieved through method overriding?

```
A)  Compile-Time Polymorphism
B)  Run-Time Polymorphism
C)  Method Overloading
D)  Data Abstraction

Correct Answer: B [cite: 272]
```

14. How is Method Overloading achieved in Java?

```
A)  By having methods with the same name but different signatures.
B)  By having methods with the same name and same signature in
different classes.
```

C) By using the "final" keyword.
D) By using the "abstract" keyword.

Correct Answer: A [cite: 273, 274]

15. What is the purpose of the "final" keyword when applied to a method?

A) To make the method abstract.
B) To prevent the method from being overridden.
C) To overload the method.
D) To make the method static.

Correct Answer: B [cite: 275]

16. Which of the following is NOT a type of Inner Class in Java?

A) Nested Inner Class
B) Static Nested Class
C) Method Local Inner Class
D) Outer Inner Class

Correct Answer: D [cite: 277]

17. Which statement is true about Nested Inner Classes?

A) They cannot access private instance variables of the outer class.
B) They are implicitly static.
C) They can have access modifiers like private, protected, public, and default.
D) They do not need an instance of the outer class to be created.

Correct Answer: C [cite: 279, 280]

18. Which statement is true about Static Nested Classes?

A) They can access non-static members of the outer class.
B) They need an instance of the outer class to be created.
C) They are associated with the outer class itself.
D) They cannot be declared within a method.

Correct Answer: C [cite: 282, 283, 284]

19. Where can Local Inner Classes be declared?

A) Only within another class.
B) Within a method, constructor, or block.
C) Only within an interface.
D) Outside of any class.

Correct Answer: B [cite: 284, 285]

20. What is an Anonymous Inner Class?

A) An inner class with a name.
B) A static nested class.
C) An inner class that can be declared only once.

D) A class without a name that is defined and instantiated at the same time.

Correct Answer: D [cite: 286, 287]