# 4 Lecture - CS506

## **Important Mcqs**

Sure, here are 10 multiple-choice questions (MCQs) related to Object-Oriented Programming along with their solutions and options:

\*\*Question 1:\*\* What is encapsulation in Object-Oriented Programming?

- \*\*Options:\*\*
- A) Inheritance
- B) Polymorphism
- C) Data hiding and bundling
- D) Abstraction

\*\*Solution:\*\* C) Data hiding and bundling

**\*\***Question 2:\*\* Which OOP concept allows a class to inherit properties and behaviors from another class?

- \*\*Options:\*\*
- A) Encapsulation
- B) Polymorphism
- C) Abstraction
- D) Inheritance

\*\*Solution:\*\* D) Inheritance

\*\*Question 3:\*\* What does the "this" keyword refer to in Java?

\*\*Options:\*\*

- A) The current instance of the class
- B) The superclass
- C) A reserved keyword
- D) A static method

\*\*Solution:\*\* A) The current instance of the class

\*\*Question 4:\*\* Which OOP principle allows a single interface to be implemented by multiple classes?

- \*\*Options:\*\*
- A) Encapsulation
- B) Polymorphism
- C) Inheritance
- D) Abstraction

#### \*\*Solution:\*\* B) Polymorphism

**\*\*Question 5:\*\*** What is a constructor in OOP?

\*\*Options:\*\*

- A) A method used to destroy objects
- B) A method used to create objects
- C) A keyword to access class properties
- D) A data type used for class design

\*\*Solution:\*\* B) A method used to create objects

#### \*\*Question 6:\*\* In OOP, what does the term "method overloading" mean?

\*\*Options:\*\*

- A) Creating a new method in a subclass
- B) Changing the name of a method in a class
- C) Creating multiple methods in a class with the same name but different parameters
- D) Overriding a superclass method in a subclass

\*\*Solution:\*\* C) Creating multiple methods in a class with the same name but different parameters

**\*\***Question 7:\*\* Which access modifier in Java allows a variable or method to be accessible within the same package?

- \*\*Options:\*\*
- A) private
- B) public
- C) protected
- D) default

#### \*\*Solution:\*\* D) default

#### **\*\*Question 8:\*\*** What is a class in Object-Oriented Programming?

\*\*Options:\*\*

- A) An instance of an object
- B) A blueprint for creating objects
- C) A type of variable
- D) A static method

**\*\***Question 9:\*\* Which OOP concept allows a class to have multiple methods with the same name but different parameters?

- \*\*Options:\*\*
- A) Overloading
- B) Overriding
- C) Inheritance
- D) Polymorphism

#### \*\*Solution:\*\* A) Overloading

### \*\*Question 10:\*\* What is abstraction in OOP?

- \*\*Options:\*\*
- A) A way to hide implementation details and show only necessary features of an object
- B) A type of error in programming
- C) A data type in Java
- D) A way to create instances of a class

\*\*Solution:\*\* A) A way to hide implementation details and show only necessary features of an object