

5 Lecture - CS506

Important Mcqs

Certainly, here are 10 multiple-choice questions (MCQs) related to the concept of Inheritance in Object-Oriented Programming, along with their solutions and options:

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

****Options:****

- A) Copying code from one class to another
- B) Sharing data between objects
- C) A way to access private methods
- D) A mechanism to acquire attributes and behaviors from a superclass

****Solution:** D) A mechanism to acquire attributes and behaviors from a superclass**

****Question 2:** In OOP, what is a superclass?**

****Options:****

- A) A class that inherits from another class
- B) A class that is at the top of the hierarchy
- C) A class that has only private methods
- D) A class that has only public attributes

****Solution:** B) A class that is at the top of the hierarchy**

****Question 3:** What is a subclass in inheritance?**

****Options:****

- A) A class that has no attributes
- B) A class that extends another class
- C) A class that is private
- D) A class that cannot have methods

****Solution:** B) A class that extends another class**

****Question 4:** Which keyword is used to indicate inheritance in Java?**

****Options:****

- A) extends
- B) inherits
- C) derives
- D) includes

****Solution:** A) extends**

****Question 5:** What does method overriding involve?**

****Options:****

- A) Creating new methods in a subclass
- B) Changing the name of a method in a subclass
- C) Providing a specific implementation for a method in a subclass
- D) Copying methods from a superclass to a subclass

****Solution:** C) Providing a specific implementation for a method in a subclass**

****Question 6:** What is the purpose of the "super" keyword in Java?**

****Options:****

- A) It creates a new instance of a class.
- B) It refers to the superclass of a class.
- C) It is used to call private methods.
- D) It is a reserved keyword and has no specific purpose.

****Solution:** B) It refers to the superclass of a class.**

****Question 7:** In a subclass, can you access private members of the superclass?**

****Options:****

- A) Yes, directly
- B) Yes, using the "super" keyword
- C) No, private members are not accessible in subclasses
- D) Only if the subclass has the same name as the superclass

****Solution:** C) No, private members are not accessible in subclasses**

****Question 8:** What does a subclass inherit from its superclass?**

****Options:****

- A) Only attributes
- B) Only methods
- C) Both attributes and methods
- D) Constructors only

****Solution:** C) Both attributes and methods**

****Question 9:** How does inheritance contribute to code reusability?**

****Options:****

- A) It allows copying code from one class to another.
- B) It enables sharing private methods between classes.
- C) It promotes the reuse of attributes only.
- D) It facilitates the reuse of attributes and methods from a superclass.

****Solution:** D) It facilitates the reuse of attributes and methods from a superclass.**

****Question 10:** What's the term for a class that inherits from another class directly above it?**

****Options:****

- A) Ancestor class
- B) Sibling class
- C) Descendant class
- D) Derived class

****Solution:** D) Derived class**