

# 14 Lecture - CS504

## Important Mcqs

**Q: What is the primary goal of Object-Oriented Analysis and Design (OOAD)?** a) Code optimization b) Writing pseudocode c) Developing modular and maintainable software d) Testing and debugging **Solution: c) Developing modular and maintainable software**

**Q: Which UML diagram is used to depict the dynamic behavior of a system?** a) Class Diagram b) Sequence Diagram c) Use Case Diagram d) State Diagram **Solution: b) Sequence Diagram**

**Q: What does the term "Encapsulation" mean in OOAD?** a) Hiding the implementation details of a class b) Creating multiple objects from a class c) Representing a whole-part relationship between classes d) Defining relationships between classes **Solution: a) Hiding the implementation details of a class**

**Q: In OOAD, what is the purpose of the "Factory Method" design pattern?** a) To allow a class to have multiple constructors b) To ensure a class has only one instance c) To provide an interface for creating objects, allowing subclasses to decide which class to instantiate d) To define a one-to-many dependency between objects **Solution: c) To provide an interface for creating objects, allowing subclasses to decide which class to instantiate**

**Q: Which principle of OOAD states that a class should have only one reason to change?** a) Abstraction b) Polymorphism c) Single Responsibility Principle d) Inheritance **Solution: c) Single Responsibility Principle**

**Q: What is the purpose of the "Observer" design pattern in OOAD?** a) To define a one-to-many dependency between objects b) To hide the internal state of an object c) To ensure a class has only one instance d) To allow objects of different classes to be treated as instances of the same class **Solution: a) To define a one-to-many dependency between objects**

**Q: Which UML diagram is used to model the static structure of a system?** a) Activity Diagram b) Object Diagram c) State Diagram d) Class Diagram **Solution: d) Class Diagram**

**Q: What is the purpose of "Abstraction" in OOAD?** a) To allow multiple inheritance in Java b) To hide the internal state of an object c) To represent a relationship between classes d) To hide unnecessary details and show only relevant information **Solution: d) To hide unnecessary details and show only relevant information**

**Q: In OOAD, what is the key principle violated if a subclass does not call the superclass method in the overridden method?** a) Encapsulation b) Polymorphism c) Inheritance d) Abstraction **Solution: c) Inheritance**

**Q: What does the "CRC cards" technique in OOAD stand for?** a) Class-Responsibility-Collaboration cards b) Class-Relationship-Configuration cards c) Collaboration-Responsibility-Configuration cards d) Collaboration-Relationship-Creation cards **Solution: a) Class-Responsibility-Collaboration cards**