15 Lecture - CS304

Important Mcqs

1. **What is aggregation in object-oriented programming?**
   a. A type of inheritance
   b. A way of creating complex objects by combining simpler objects
   c. A type of association between classes where one class contains a collection of another class's objects
   Answer: c

   Can the contained objects in aggregation exist independently of the containing object?
   a. Yes
   b. No
   Answer: a

   How is aggregation represented in a UML class diagram?
   a. With a solid line and an arrow pointing to the contained class
   b. With a dashed line and an arrow pointing to the contained class
   c. With a dotted line and an arrow pointing to the contained class
   Answer: b

   What is the purpose of using aggregation in object-oriented programming?
   a. To create complex objects by combining simpler objects
   b. To inherit properties and behaviors from a parent class
   c. To encapsulate behavior and data
   Answer: a

   Can a class have multiple instances of another class as member variables in aggregation?
   a. Yes
   b. No
   Answer: a

   How does aggregation differ from composition?
   a. In aggregation, the contained objects cannot exist independently of the containing object
   b. In composition, the contained objects can exist independently of the containing object
   c. There is no difference between aggregation and composition
   Answer: b

   Can the contained objects be shared among multiple containing objects in aggregation?
   a. Yes
   b. No
   Answer: a

   What happens to the contained objects when the containing object is destroyed in aggregation?
   a. The contained objects are automatically destroyed

b. The contained objects continue to exist independently of the containing object
c. It depends on the implementation
Answer: b

How does aggregation support code reuse?
a. By allowing for the creation of complex objects by combining simpler objects
b. By inheriting properties and behaviors from a parent class
c. By encapsulating behavior and data
Answer: a

What are some real-world examples of aggregation?
a. A car's engine and transmission
b. A house's rooms and furniture
c. A human's body parts
Answer: b