

41 Lecture - CS506

Important Mcqs

Sure, here are 10 multiple-choice questions related to Layers and Tiers, along with their solutions and multiple options:

****Question 1: What is the primary purpose of using layers in a software architecture?***

- A) Separating components in different locations.
- B) Simplifying user interactions.
- C) Achieving efficient code reuse and modularity.
- D) Managing user authentication.

****Solution: C) Achieving efficient code reuse and modularity.****

****Question 2: In the OSI networking model, which layer is responsible for routing and forwarding data?***

- A) Physical Layer.
- B) Data Link Layer.
- C) Network Layer.
- D) Transport Layer.

****Solution: C) Network Layer.****

****Question 3: In a three-tier architecture, what does the presentation tier handle?***

- A) Data storage and retrieval.
- B) User interface and interaction.
- C) Business logic processing.
- D) Network routing.

****Solution: B) User interface and interaction.****

****Question 4: Which term refers to a specific instance of a layer or tier in a system?***

- A) Class.
- B) Object.
- C) Method.
- D) Function.

****Solution: B) Object.****

****Question 5: What is the purpose of the data tier in a three-tier architecture?***

- A) Managing user interactions.
- B) Processing business logic.
- C) Storing and retrieving data.
- D) Handling network communication.

****Solution: C) Storing and retrieving data.****

****Question 6: In the OSI model, which layer is responsible for establishing, managing, and terminating connections between devices?***

- A) Session Layer.
- B) Transport Layer.
- C) Presentation Layer.
- D) Application Layer.

****Solution: A) Session Layer.****

****Question 7: Which architecture separates components based on their functional roles and responsibilities?***

- A) Object-Oriented Architecture.
- B) Layered Architecture.
- C) Monolithic Architecture.
- D) Peer-to-Peer Architecture.

****Solution: B) Layered Architecture.****

****Question 8: What is a benefit of using a multi-tier architecture?***

- A) Reduced development complexity.
- B) Easier debugging of the entire system.
- C) Centralized control of all components.
- D) Limited scalability options.

****Solution: B) Easier debugging of the entire system.****

****Question 9: Which tier of a three-tier architecture handles business rules and processes?***

- A) Presentation Tier.
- B) Logic Tier.
- C) Data Tier.
- D) Application Tier.

****Solution: B) Logic Tier.****

****Question 10: In a network protocol stack, what term is often used interchangeably with "layer"?***

- A) Component.
- B) Tier.
- C) Level.
- D) Phase.

****Solution: C) Level.****