

# 20 Lecture - CS504

## Important Mcqs

**Q: What do Interaction Diagrams in UML illustrate?** a) Static structure of classes and objects b) Dynamic behavior of the system over time c) Use cases and actors in the system d) Relationships between classes and objects **Solution: b) Dynamic behavior of the system over time**

**Q: Which type of Interaction Diagram shows the chronological sequence of message exchanges between objects?** a) Class Diagram b) Communication Diagram c) State Diagram d) Sequence Diagram **Solution: d) Sequence Diagram**

**Q: What is the primary purpose of using Sequence Diagrams?** a) To depict the static relationships between classes b) To model the concurrency of the system c) To visualize object interactions over time d) To represent the inheritance hierarchy of classes **Solution: c) To visualize object interactions over time**

**Q: In a Sequence Diagram, what do the vertical dotted lines represent?** a) Control flow of the program b) Activation lifeline of an object c) Communication between objects d) Creation of new objects **Solution: b) Activation lifeline of an object**

**Q: What does the arrowhead in a Sequence Diagram indicate?** a) The end of a message b) The direction of message flow c) The start of a new object's lifeline d) The activation of an object **Solution: b) The direction of message flow**

**Q: Which Interaction Diagram emphasizes the relationships between objects rather than the time sequence of messages?** a) Communication Diagram b) State Diagram c) Collaboration Diagram d) Deployment Diagram **Solution: a) Communication Diagram**

**Q: In a Communication Diagram, how are objects represented?** a) With boxes b) With rectangles c) With circles d) With triangles **Solution: a) With boxes**

**Q: What is the purpose of the numbering on messages in a Communication Diagram?** a) To indicate the order of message exchanges b) To represent the priority of messages c) To show the types of messages being exchanged d) To indicate the number of objects in the system **Solution: a) To indicate the order of message exchanges**

**Q: Which Interaction Diagram emphasizes the dynamic behavior of a single object?** a) State Diagram b) Sequence Diagram c) Communication Diagram d) Use Case Diagram **Solution: a) State Diagram**

**Q: What do Interaction Diagrams provide in the context of software development?** a) Visualization of static class relationships b) Illustration of the software architecture c) Dynamic representation of object interactions and behavior d) Description of the hardware configuration **Solution: c) Dynamic representation of object interactions and behavior**