**Module 2: Distribution Models and Consistency:**

**1. Define and explain sharding with a neat diagram.**

**2. What is master-slave replication? Discuss its pros and cons.**

**3. Explain the CAP theorem and its implications with examples.**

**4. Define version stamps and discuss methods for their construction.**

**5. Explain the concepts of relaxing consistency and durability.**

**6. What are quorums? Describe read and write quorums with examples.**

**7. Discuss peer-to-peer replication and its benefits.**

**8. What are the trade-offs between consistency, availability, and partition tolerance in distributed systems?**

**9. Explain how conflicts in distributed systems can be detected and resolved.**

**10. Describe combining sharding with replication for scaling NoSQL databases.**