1. What is the role of middleware in a distributed system?

2. What is a three tiered client-server architecture?

3. When a transaction is aborted, we have said that the world is restored to its previous state as though the transaction had never happened. We lied. Give an example where resetting the world is impossible.

4. What is the difference between a vertical distribution and a horizontal distribution?

5. Not every peer in a peer-to-peer network should become a superpeer. What are reasonable requirements that a superpeer should meet?

6. In a structured overlay network, messages are routed according to the topology of the overlay. What is an important disadvantage of this approach?

7. Consider a chain of processes P1...Pn implementing a multitiered client-server architecture. Process Pi is client of process Pi+J, and Pi will return a reply to Pi-I only after receiving a reply from Pi+1. What are the main problems with this organization when taking a look at the request-reply performance at process Pi?

8. Would it make sense to limit the number of threads in a server process?

9. Statically associating only a single thread with a lightweight process is not such a good idea. Why not?

10. Is a server that maintains a TCP/IP connection to a client stateful or stateless?