1) Explain the difference between a system crash and a "disaster."

In a system crash, the CPU goes down, and disk may also crash. But stable-storage at the site is assumed to survive system crashes. In a "disaster" everything at a site is destroyed.

2) Many transactions update a common item (e.g., the cash balance at a branch), and private items (e.g., individual account balances). Explain how you can increase concurrency (and throughput) by ordering the operations of the transaction.

By defining a specific order for transactions to update shared items, you can reduce conflicts and increase concurrency. For example, if all transactions must update the cash balance at a branch before any private account balances, it can minimize contention on the branch's cash balance and allow individual account updates to proceed concurrently.