Q6:

synchronization: it is the capability to control the access of multiple threads to any shared resource. it only allow one thread to access the shared resource.

Reason:

1. to prevent thread interference

2.to prevent consistency problem

Q7:

Deadlock: It is a state of a system in which no single process/thread can execute an action.

Reason:

A deadlock happens when two threads each wait for a resource held by the other, so neither can proceed.

**Q8**:

What happens if you call the start() method on a thread that is already running?   
🡺 *An IllegalThreadState exception will be thrown. There is no way to get a thread back to the "waiting to be started" state after it has been started, so whatever the state the thread is in after the first start, it will be in the wrong state for the second one.*

Can you re- start a thread object that has moved to the dead state?

*🡺 Threads that have died cannot be restarted, although the object that contains thread can still exist*

Why are the Thread classes suspend(), resume(), and stop() methods deprecated?

How do you stop a thread naturally?