CS373 **Computer Networks and Communications**

Assignment # 1 Due Date: February 06, 2001

- In the future, when everyone has a home terminal connected to a computer network, instant public referendums on important pending legislation will become possible. ultimately, existing legislatures could be eliminated, to let the will of the people be expressed directly. The positive aspects of such a direct democracy are fairly obvious; discuss some of the negative aspects.
- An alternative to LAN is simply a big timesharing system with terminals for all users. Give two advantages of a client-server system using a LAN.
- What are the SAP addresses in FM radio broadcasting?
- What are two reasons for using layered protocols?
- Two blue armies are each poised on opposite hills preparing to attack a single red army in the valley. The red army can defeat either of the blue armies separately but will fail to defeat both blue armies if they attack simultaneously. The blue armies communicate via an unreliable communications system (a foot soldier). The commander, with one of the blue armies, would like to attack at noon. His problem is this: If he sends a message ordering the attack, he cannot be sure it will get through. He could ask for acknowledgement, but that might not get through. Is there a protocol that the two blue armies can use to avoid defeat?