

CS3.301: Operating Systems and Networks

IIIT Hyderabad

Quiz 8

1. “The 3G technology has evolved due to spectrum scarcity”. Justify.
2. What is the tradeoff between the “Bitmap Collision Free” and the “CSMA-Collision Detection” protocols?
3. Why transport layer is called the end-to-end layer?
4. What is the tradeoff between “error detection” and “error correction” methods?
5. We have developed an operating system producer and consumer paradigm to communicate between the CPU and peripherals. How is the communication between two computers over networks different or similar to the producer and consumer paradigm?
6. Suppose there is a change in the service provided at layer  $k$ . How does this impact services at layers “ $k-1$ ” and “ $k+1$ ”?
7. What will happen if we send the digital bits without modulation? Explain the purpose of modulation in data transmission.
8. We have developed a producer and consumer paradigm in operating systems to communicate between CPU and peripherals. How is the communication between two computers over networks different or similar to the producer and consumer paradigm?
9. Explain the tradeoffs between the “Go-Back-N” Sliding Window Protocol and the “Selective Repeat” Sliding Window Protocol.
10. Why Nonpersistent CSMA Protocol gives better performance than the 1-Persistent CSMA Protocol? Discuss.