1. Where is the data link layer implemented?

2. Suppose we are using CRC, the packet has d bits, and the generator has r bits.
   a. How big is the entire packet?
   b. How many bits will the CRC have?
   c. Which errors can be detected by the CRC? d. What is the checking procedure at the receiver?

3. Give three examples of channel partitioning protocols.

4. What is the main difficulty in designing random access protocols?

5. Why is Slotted Aloha more efficient than Pure Aloha?

6. What is the advantage of using CSMA/CD instead of just CSMA?

7. Are MAC addresses flat or hierarchical?

8. How is a destination IP address converted into the destination MAC address?

9. What made Ethernet so popular?

10. Which random access protocol does Ethernet use?

11. In which layers do hubs, switches, and routers operate?

12. What is the main advantage of using a switch instead of a hub?

13. How does a switch know where to send a packet when the filtering table is empty?
    How does a switch learn?

14. What is byte stuffing?