Tutorial 8

Instructions

1. Form ad-hoc groups of 2 to 3 students to solve this week's exercise.
2. Each group must answer the following review Q's
3. Each group will use shared google docs to work with all group members and tutor. The document must include the group members' names and the tutorial sheet number.

Review Questions

1. Q6-1. Compare the medium of a wired LAN with that of a wireless LAN in today's communication environment.
2. Q6-2. Explain why the MAC protocol is more important in wireless LANs than wired LANs?
3. Q6-3. Explain why there is more attenuation in a wireless LAN than in a wired LAN, ignoring the noise and the interference.
4. Why is SNR in a wireless LAN normally lower than SNR in a wired LAN?
5. Q6-5. What is multipath propagation? What is its effect on wireless networks?
6. Q6-9. There is no acknowledgment mechanism in CSMA/CD, but we need this mechanism in CSMA/CA. Explain the reason .
7. Q6-14. An AP may connect a wireless network to a wired network. Does the AP need to have two MAC addresses in this case?
8. Q6-15. An AP in a wireless network plays the same role as a link-layer switch in a wired network. However, a link-layer switch **may or may not** have a MAC address, but an AP normally **needs** a MAC address. Explain the reason.
9. Q6-12. Explain why we have only one frame type in a wired LAN, but four frame types in a wireless LAN?
10. Q6-13. Do the MAC addresses used in an 802.3 (Wired Ethernet) and the MAC addresses used in 802.11 (Wireless Ethernet) belong to two different address spaces?
11. Compare and contrast satellite-based and terrestrial wireless communications link design?