

Wireless networks, answers Exam Part 1

Exercise 1 (6 points)

What are the first two steps required to connect to the 802.11 basic service set?

Page 286-287, LAB1

The first two steps are authentication and association. Authentication can be Open or Shared key. Association means that client can send data through the AP.

Exercise 2 (5 points)

What is a difference between Access Point and Wireless Router?

Page 347, LAB1 & LAB3

Wireless Router has separate routed interface and is Layer 3 device.

Exercise 3 (5 points)

Compare Lightweight and Autonomous Access Points.

Page 329-333, LAB1 & LAB3

Autonomous: configuration settings and security settings exist in the AP itself.

Lightweight: limited software capabilities. All configuration settings and security settings are configured on the WLAN controller.

Exercise 4 (6 points)

Describe short Peer-to-Peer Attacks.

Page 472, LAB 3 & Seminar

There is risk for Peer-to-Peer Attacks when client configured in Ad Hoc mode (IBSS). All Ad Hoc communications are peer-to-peer and any user who can connect wirelessly with another user can gain access to any resource available on either computer. A personal firewall is used to mitigate Peer-to-Peer Attacks.

Exercise 5 (8 points)

What security solutions are defined by WPA2 ?

Page 446 LAB3 & Seminar

WPA-personal : Authentication :WPA2 PSK/ WPA2 Preshared Key, encryption method CCMP/TKIP, cipher AES/RC4, key – dynamic

WPA-Enterprise: Authentication :802X/EAP, encryption method CCMP/TKIP, cipher AES/RC4, key – dynamic