Exam structure

1. Ten true/false type questions (10 p)

2. Ten "gaps in text", missing terms should be given (10 p)

3. Essay question from list on following slides (10 p)

4. Another essay question from list on following slides (10 p)

5. Calculation-based PHY-layer task (10 p)

Essay questions (1)

Explain the Bluetooth frequency hopping access scheme

Describe some typical Bluetooth usage models

MAC vs. IP addressing in IEEE 802.11 networks

Describe the procedures that take place when a wireless station connects to a WLAN

Explain the differences between CSMA/CA and CSMA/CD

Why and how are network allocation vectors (NAV) used?

Describe CSMA/CA operation in IEEE 802.11 networks

Modulation methods in IEEE 802.11b and 802.11a/g

TEKNILLINEN KORKEAKOULU

Essay questions (2)

Explain the basic QoS mechanisms of IEEE 802.11e

List the four main security requirements of a secure transmission system

Explain a basic public key cryptography scheme

Explain the meaning of IEEE 802.1X authentication and EAP

Describe the basic IEEE 802.16 TDD frame structure

How is uplink/downlink separation achieved in IEEE 802.11, 802.15 and 802.16 networks?

Dynamic bandwidth and QoS management in IEEE 802.16 networks