Exam 26.04.2013

521340S Communication Networks I (Tietoliikenneverkot I)

1. Discuss in detail Shortest Path Routing Algorithm and in particular

    a) Dijkstra algorithm
    b) Bellman Ford algorithm
    c) Floyd-Marshal algorithm
    d) Network aggregation

2. What are the characteristics of equivalent TCP protocol (congestion control) in sensor networks?

3. Discuss in detail the following issues in network security

    a) Cryptographic authentication
    b) An asymmetric two-way authentication.
    c) Operation of public key encryption system
    d) Key management

4. Discuss in detail the following issues in network management

    a) The Simple Network Management Protocol
    b) Distributed Network Management
    c) Mobile Agent Based Network Management
    d) Ad Hoc Network Management

5. Explain the evolution from 3G to 4G.