Exam 8.2.2013

521340S Communication Networks I (Tietoliikenneverkot I)

- 1. Discuss in detail TCP protocols:
 - a. Reno/New Reno protocol
 - b. Random Early Detection (RED) protocol
 - c. Vegas version of TCP and the Explicit Congestion Notification (ECN)
- 2. Discuss in detail the following issues in sensor networks
 - a. Data centric routing
 - b. Data aggregation
 - c. Flooding/gossiping
 - d. Data funneling
- 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
- 4. Discuss in detail Ad Hoc Network Management
- 5. Explain the evolution from GSM/GPRS to UMTS