HELSINKI UNIVERSITY OF TECHNOLOGY
Networking Laboratory
S-38.188 Computer Networks, Spring 2004

Examination
12.05.2004
Lassila/Karvo

Write on each paper
- S-38.188 Computer Networks, Examination 12.05.2004
- your student identification number
- your name
- signature

NOTE! Avoid excessively long answers. Before answering try sketching the answer on another paper to avoid 'oh, I forgot this'-type additions.

1. Explain briefly the following acronyms/concepts. For acronyms also tell what they are short for. (6p)

   a) CoA

   b) integrity

   c) ARP

   d) BGP-4

   e) RSVP

   f) RED

2. What does intra-domain routing mean? What are the most important algorithms used in intra-domain routing? Explain their differences. (6p)

3. There are addresses at various layers in the Internet. What kind of addresses are used in Ethernet at link layer, in the IP protocol, at the transport layer in TCP/UDP protocols, and in the SMTP and HTTP application protocols? (3p)

4. Explain the name service in Internet (domain name hierarchy, administration of domain names, basic functionality, reverse name service). (6p)

5. What is DHCP used for in IPv4? How does it work? How can the same be achieved more easily in IPv6? (3p)

6. Different functional areas of network management. (6p)