

Write on each paper

- S-38.2188 Computer Networks, Examination Mar. 6th, 2008
- 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.

Unless otherwise stated, the answer is expected in essay form.

1. Explain briefly the following acronyms/concepts. For acronyms also tell what they are short for. (6p)
 - a) MTU
 - b) DHCP
 - c) HTTP
 - d) UDP
 - e) RSVP
 - f) SNMP
2. What do the concepts "intra-AS" and "inter-AS routing" mean? Tell about the most important protocols and algorithms that are used in them. (6p)
3. Why (in general) a web page loads faster using HTTP 1.1 persistent connections compared to HTTP 1.0? Explain principle and calculate transmission time for TKK home page described in table below. Assume bottleneck speed of 8Mbit/s and round trip time 150 ms. (6 p)

File	sizes (in bytes)		
HTML file	12636		
GIF image	51270	1415	1655
bitmap image	4286		
CSS stylesheet	657	15348	1127
JavaScript file	27157		

4. How communications security may be endangered? Explain basic concepts of communications security and basic mechanisms to protect it. (6p)
5. Internet Domain Name Service(6p)