

Measurement laboratory 4

2014. spring

Sample test questions (measurement 1)

These are **sample** questions what can help you during the preparation for the measurement. Besides this sample questions it is strongly advised to read the combined measurement guide and report template and the slides of the subject Computer Networks.

1. What are the IP addresses in the following range: 152.66.254.192 / 26 (in this notation the first part is the subnet address and the second is the number of 1's in the subnet mask)?
2. What are the IP addresses in the following range: 152.66.254.192 / 255.255.255.192 (in this notation the first part is the subnet address and the second is the subnet mask)?
3. What is the broadcast address on this IP range: 152.66.254.128 / 26 ?
4. What is the broadcast address on this IP range: 152.66.254.64 / 255.255.255.192 ?
5. Considering the so called ISO-OSI layered network model in what layer are the following protocols: IPv4, TCP, HTTP?
6. Considering the so called ISO-OSI layered network model in what layer are the following protocols: IPv6, UDP, FTP?
7. What does it mean that a network interface is in the so called *promiscuous* mode?
8. What is the difference between a *hub* and a *switch*?
9. What is the difference between a *switch* and a *router*?
10. What kind of ICMP messages are used during ping?
11. What is the purpose of ARP?
12. What is the purpose of DNS?
13. What is the purpose of DHCP?
14. What is the difference between the "capture" filter and the "display" filter in Wireshark?
15. What are the fields of an Ethernet / IEEE 802.3 frame?