

Data communications, spring 2007. 1. test. 23.2.2006 12:00-14:00 at E26-27.

1.

a) How circuit switched and packet switched networks differ from each other? Write an example from both of them. (3p)

b) Define protocol and its tasks. (3p)

2. How TCP/IP and OSI architectures differ from each other? Where TCP/IP and OSI architectures are used? What are the main tasks for the different layers of both architectures? (7p)

3.

a) What different kinds of wired data transfer mediums do exist? Write few sentences about each of them. (3½p)

b) What different kinds of cordless (wireless) data transfer mediums does exist? Write few sentences about each of them. (3½p)

4.

a) What are the main differences between *GSM 900* and *GSM 1800*? How GPRS, HSCSD and EDGE are related to the evolution of GSM networks? (4p)

b) What is UMTS and how does it work? Where UMTS is used? How HSDPA is related to the evolution of UMTS networks? (3p)

You can use pencil, rubber, ruler and student card.