
Don't write your answers on this paper. Use only papers delivered in exam!

Write on every paper:

- course information: T-106.1043 Information Technology, basic course
- your name and your student number
- your study program
- date
- page number / number of all pages

1. Short questions, Data Representation:

a) Shortly describe the difference between analog and digital data. Give an example of a device where you can find 1) an analog signal/data, 2) a digital signal/data.

b) Calculate what is 0101112 in decimal (base 10) form

(6 points)

2. Short questions, Programming:

a) What is a data type?

b) Describe shortly the three main error types in a computer program?

c) Parameters and global variables. What is the key difference between them?

(9 points)

3.) Short questions, Internet:

a) Explain the meaning of separate parts in the address: <http://www.hut.fi>

b) How is the address <http://www.hut.fi> translated to IP -address?

(6 points)

4.) Short questions, Computer hardware:

a) Create a drawing which shows the structure of basic computer hardware. Describe each element and its main tasks shortly

b) Introduce 3 basic logic gates.

(6 points)