

T-111.2400 Basics of Digital Media

Exam 22.05.2014

Please, write the course name, date, and your name and student number in each answer paper.
Maximum for each answer is six points.

1. Media Services

Define the following concepts:

- Open Innovation
- Long Tail of Content
- Lock-in

2. Psychoacoustics

Describe briefly the following terms and acronyms:

- a) hearing range
- b) dB
- c) masking
- d) attack
- e) FFT
- f) directional hearing

3. Video

Are the following claims true or false? Right answer gives you +1 point, but false answer -1 point.
Unanswered claim equals 0 points. Total points can be 0-6.

- a) Chrominance signals describe the lightness level of an image
- b) Television uses additive colour system
- c) Quantization can be used to adjust video compression ratio
- d) In Zig-zag order, the high frequencies are before low frequencies
- e) Huffman coding is based on symbol tables
- f) DCT transform and motion estimation are mutually exclusive compression methods

4. Graphics

What are the four phases of graphics pipeline and what happens in each stage?

5. Linked Data

Compare 303 URI and Hash URI. How the RDF information is referenced in both URIs? What are the communication steps between client and server? Which use cases each URI fits better?