

T-111.2350 Multimedia Technology

Exam 15.12.2006.

Write the course name, date, your name, and your student number on each answer paper.

1. Discrete Cosine Transform

How Discrete Cosine Transform can be used in image coding? Tell, what the following items mean: Blocks, DCT Coefficients, Quantization, Zig Zag Coding, Run Length Encoding, and Statistical Coding.

2. Interchange Formats

Compare different interchange formats: QuickTime, MHEG, HTML, XML, Shockwave, and Flash. Tell, which formats are:

- open
- based on object model
- support well interaction
- utilize hyperlinks
- use scripts
- support the synchronization of different media elements

List separately the interchange formats that fulfill each requirement. Justify briefly your answer in each issue!

3. Content Production

In the lecture slides, seven typical phases of content production are discussed. Which are these seven phases and what happens in each stage?

4. Internet Quality of Service Architectures

Which are the two most common Internet quality of service architectures? Which protocols the architectures are based on? What both architectures typically require from the routers? Which are the most important advantages in both architectures? And disadvantages? Which architecture is better in your opinion (justify your selection)?

5. Real-Time Transfer Protocols

Which are the three most important real-time transfer protocols? Tell the purpose of each transfer protocol and its main tasks.