TTY/TITE/JH TLT-2486 Advanced topics in broadband networks Exam 26.1.2009

You may answer in English or Finnish. You'll get 0-6 points from each of the five questions. Typically, 50 %, i.e., 15 points, is the requirement for passing the exam.

- Discuss about whether TCP or UDP should be used as the transport protocol of streaming applications. What are the drawbacks and benefits of these alternatives? What kind of requirements and restrictions do different applications set on the choice of the transport protocol?
- 2. What are the basic features of the RTSP protocol? Why is it needed in streaming, or is it? What if we wouldn't use RTSP at all?
- 3. a) What is the role of SIP in multimedia streaming?
  - b) What kind of security threats are possible with SIP?
  - c) What kind of security mechanisms can be used with the above threats?
- 4. Explain the functions of the SAP and SDP protocols. How is SDP related to SAP?
- Give the name and file extension of at least six common container formats for streaming data, their owners (company name or standards organization), and typical codecs that can be used with these containers.