

## Examination

Kurssi:

S-38.115 Merkinantoprotokollat / Kevät -2003

S-38.115 Signalling Protocols / Spring-2003

Opettaja:

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Pvm:

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Vastaa tiiviisti viiteen (5) kysymykseen. You may answer in English or in Finnish. Give compact answers to the five (5) questions:

# Kysymys/Question

Give the types of traffic in comparison to network hierarchy – define terms such as incoming traffic and all similar terms.

### 2. Kysymys/Question

Give a list of advantages and disadvantages of CCS7. Compare the <u>scalability</u> of CCS7 signaling networking capabilities with IP-networking capabilities.

## 3. Kysymys/Question

Explain the concept of the PDP context. Give two examples of usage of a PDP context for a purpose. Give highlights of protocol procedures for PDP contexts. Relate the procedures to network elements.

#### 4. Kysymys/Question

Show main signal flows for policy decision and enforcement using COPS. Give an example of the use of COPS in the context of 3G (purpose and involved network elements).

#### 5. Kysymys/Question

Explain how SIP messages are routed to elements that process SIP. Explain how the elements get to see the responses to the requests that they have processed. Explain also how loops are prevented (a loop occurs for example when A has set call forwarding to B who has set call forwarding to A).

