## S-38.041 Networking Business

Each question is worth max 6 points. Answers are preferably written in English but Finnish and Swedish are also accepted. Answers must be short and concise. Please indicate if you have participated the voluntary mobile operator business game session to compensate one question.

- 1. Explain the following techno-economic terms briefly (max 5 sentences per term).
  - a. Consumer's switching cost
  - b. Nash equilibrium
  - c. Long-run incremental cost
  - d. Price discrimination
  - e. Bill-and-keep
  - f. Simultaneous ascending auction

2. Explain schematically the consumer's problem in terms of utility function, product price, and producer's product cost.

3. What is a congestion price? How can it be used to theoretically maximize the social surplus? What prevents the use of congestion pricing in practice?

4. Describe schematically the GRX-based charging model for roaming traffic between GPRS operators.

5. Explain Porter's model for competition ("5 forces") and apply it for analyzing the market position of a virtual mobile network operator.