

Course: S-38.041
Date: 05.05.2004 at 9-12
Place: hall S4
Teacher: prof Heikki Hämmäinen

Each question is worth max 6 points. Answers can be written in English, Finnish, or Swedish. 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 schematically the consumer's problem in terms of utility function, product price, and producer's product cost.
2. Assume a market with positive network effects and N potential customers ($N=100$) indexed by $i = 1 \dots N$. Willingness to pay of customer i is $u_i(n) = n_i$ for a unit of good given that n other customers will be using it. Customers can always return the good and get refund if the price goes below utility. Assume price $p=900$ posted. Calculate the possible equilibrium points and define conditions for reaching them. Define the socially optimal point and conditions for reaching it.
3. How can an operator reduce the problems related to flat-rate pricing.
4. Describe the EU regulatory process schematically.
5. Using a numeric example explain the "free riding" problem of simultaneous ascending auctions.