Exam 11.05.2010



Puu-28.4021 Production investment planning

You may answer to the questions either in Finnish or English.

- 1. Explain briefly the following terms (á 1 point = max 8 points)
 - i. internal customer of a process
 - ii. flow diagram
- iii. major process decisions
- iv. disadvantages of globalization
- v. dominant factors in manufacturing
- vi. preference matrix

- vii. load-distance score for a facility location
- viii. forward integration of a company
- 2. Forecasting product demand patterns. Write an essay, in which you explain the different demand patterns, the basic principles of designing the forecasting system and some of the qualitative and quantitative forecasting techniques available. (max 6 points)
- 3. In January 2010, Vyborgskaya Cellulose, a Russian pulp and paper company, released the following piece of news:

"Vyborgskaya Cellulose and Ekman & Co collaborate on the world's largest wood pellet plant



Vyborgskaya Cellulose is building the world's largest wood pellet plant at its facility in Russia near the border with Finland. Production capacity will be over 900,000 tons per year. Construction of the plant is underway and production is planned to start in the third quarter of this year."

Write an essay, in which you analyse the possible reasons behind this decision. Consider at least the following issues: What have been the factors that the company has considered in locating the new facility? What data has it utilized and how to evaluate alternative location options? What do you think have been the alternatives for the location and why? (max. 6 points)