



Introduction to Management (11048) – Retake Final Exam ST 2010

You have 120 minutes to reach a maximum of 50 points. There are a few pieces of advice we can offer at this stage:

- 1. Use the theoretical tools and terminology you learned in class and from the textbook.
2. Make sure there is a clear structure in your argument. Use some time to sort your ideas before you start writing the version you want to submit.
3. Use the time you have! If you are ready much earlier than we planned, you should wonder if you forgot something.
4. The less we can understand from your handwriting, the fewer points you will likely receive.
5. Leave a margin for our comments.
6. You are welcome to use a non-programmable calculator.

Last Name, First Name: _____ Student ID-number: _____

Here is the set of problems:

Examiners: Prof. Dr. Kirstein, Prof. Dr. Raith, Prof. Dr. Spengler, Prof. Dr. Chwolka, Prof. Dr. Burgard, Prof. Dr. Inderfurth, Prof. Dr. Schöndube-Pirchegger, Prof. Dr. Wolff, Dr. Wu

Please solve four (4) - and only four - of the following five problems (maximum of 12.5 points per problem):

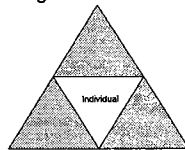
1. Definitions

Define the following terms. Feel free to illustrate your definitions by examples.

- a) Benchmarking
b) Complements
c) Asset Turnover Ratio
d) Opportunity Costs
e) Upstream integration

2. Personnel

- a) What are central problems of personnel management? How do these problems relate to the figure below? Label and explain this figure.



- b) What is an adverse selection problem? What is a moral hazard problem? Explain the concepts using an example for each problem. Suggest two standard solutions to each problem.

3. Production and logistics

A company runs 3 plants (A, B, C) and 3 warehouses (X, Y, Z). The goods produced in the plants have to be transported to the warehouses in a cost-efficient way. The production quantities in plant A are 10 units, in plant B 20 units and in plant C 30 units, respectively. The quantities needed in the warehouses to be distributed to the final customers are 20 units in X, 25 units in Y and 15 units in Z. Transportation cost from plant A is 5 € per unit to warehouses X and Y and 4 € per unit to Z. Transportation from plant B to X and Z costs 3 € per unit and to warehouse Y 2 € per unit. Finally, transportation cost per unit is 1 € from plant C to X and 5 € from plant C to Y and Z.

- a) Draw a transportation tableau which includes all data given above.
b) Use the transportation tableau to develop a cost-efficient transportation plan by applying the minimum cost search method.
c) Fill the transportation quantities from (b) in the following table and calculate the total transportation costs of the company.

Table with 5 columns: from, to, X, Y, Z. Rows: A, B, C.

4. Vertical integration and outsourcing

- a) Four factors can make the costs of nonmarket transactions lower than the costs of market exchanges. Please explain these factors. You can use an example for explanation.
b) In addition to asset specificity, uncertainty also influences the procurement decisions. With three levels of asset specificity and three levels of uncertainty, what are the suitable procurement decisions under the different levels? You are welcome to use a graph to illustrate.

5. Outsourcing and Vertical Integration

- a) Costner Corp. is the only producer of an oil-separation machine at a constant marginal cost of \$4,000. The demand for the machine in the Gulf of Mexico is: P = 60,000 - 100Q

What is the profit-maximizing price and quantity? What are the profits from this activity?

- b) Now suppose that Costner Corp. sells its machines through an independent distributor, Gulf Cleaner, which has the exclusive right to sell new machines from Costner Corp in the Gulf of Mexico. Under the contract, Costner Corp. sets the wholesale price, and Gulf Cleaner selects the quantity to purchase and the retail price. The only cost facing Gulf Cleaner is the wholesale price of the machine. Costner Corp. and Gulf Cleaner both strive to maximize their own profits. What are (1) the wholesale price, (2) the retail price, (3) the quantity sold, and (4) the combined profits of Costner Corp. and Gulf Cleaner?
c) Describe how Costner Corp. might use a two part pricing scheme to eliminate this successive monopoly problem with Gulf Cleaner. (No calculations are necessary).