



5014 Introduction to Management (WT 2003/4) – Final Exam

The following aids can be used: dictionary, calculator

You will be able to make a maximum of 50 points. There are a few pieces of advice we can offer:

1. Use the theoretical tools and terminology you have 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. Remember: people have to be able to decipher what you write.
5. Leave a margin for our comments, so we can give you a more detailed feedback than just the number of points.

Examiners: Prof. Dr. Raith, Prof. Dr. Erichson, Prof. Dr. Reichling, Prof. Dr. Spengler,
Prof. Dr. Burgard, Prof. Inderfurth, Prof. Luhmer, Prof. Dr. Wolff

Please solve four (4) of the following six (6) problems (maximum of 12,5 points per problem):

Examination questions:

Question 1: Terminology

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

- a) Opportunity cost
- b) Bounded rationality
- c) JIT
- d) Factoring
- e) No-par stock

Question 2: Marketing

The OVG Company observes the following pattern for its products: additional 25 units can be sold if the price falls by 1 Euro; additional 0.02 units can be sold if the average household income increases by 1 Euro. With both price and average household income set presumably at 0, demand for the product would be 100 units.

- a) Derive the demand function for the products of the OVG Company.
- b) Given the average household income of 10000 Euro, what is the revenue-maximizing price?
- c) Calculate the price elasticity of demand for the revenue maximum. Is the demand elastic or inelastic?
- d) Calculate the point elasticity of income. Is the product a normal or an inferior good?

Question 3: Personnel

- a) What does "Personnel Requirement" mean? Which factors can affect the personnel requirement of a company? Justify your answer briefly.
- b) As a production manager in a joinery it is your task to ensure the production of 800 tables a day. You know that one employee is able to build a table in 1 hour and 10 minutes. All employees work 6 hours a day. How many employees do you need to succeed in producing 800 tables?

Question 4: Production and Cost

- a) What is a learning curve?
 - b) Describe the difference between economies of scale and learning effects.
 - c) What does the term economies of scope mean? What are some of the reasons that economies of scope exist?
- Illustrate the concepts using graphs and words.

Question 5: Incorporation and Taxation

Imagine you wish to start your own business to trade automobiles and you intend to incorporate your enterprise in Germany.

- a) What alternatives do you have to legally incorporate your enterprise if you are only one person?
- b) Compare two of the legal forms you mentioned in part a) with the help of the following criteria:
 - i. Formation
 - ii. Liability
 - iii. Authority to represent, to manage and to co-determine
 - iv. Minimum capital and sharePlease answer in brief outlines!

Question 6: Operational Financial Plan

- a) On December 31st 2003 there were 100 units of material A in stock, valued at €17 per unit. In January 2004, 500 units were purchased at a price of €18 per unit. No material A was used for production in January. In February 2004, after 260 units were used for production, further 60 units were purchased at a price of €19 per unit.

Determine:

- i. the value of the material A per unit according to the weighted average method at the end of January 2004.
- ii. the value per unit of the material A used for production in January 2004.
- iii. the total value of the material A in stock on February 29th, 2004.

- b) The management of Smart Ltd. is considering investing in a new product line. The product line costs € 9000. The net cash inflow due to the new product line in the following 3 years is as follows (in Euro):

Year 1	2000
Year 2	6000
Year 3	4000

At the end of year 3, the product line must be disposed of at a cost of € 3000.

- i. What is the tied-up capital at the end of each year?
- ii. Using Net Present Value method, should the company invest in this product line?

Good Luck!