

ECONOMICS OF BUSINESS AND LAW PROF. DR. ROLAND KIRSTEIN

11048 Introduction to Management - Final Exam (WT 2011/12)

Examiners: Prof. Dr. Kirstein, Prof. Dr. Raith, Jun.-Prof. Dr. Müller, Prof. Dr. Burgard, Prof. Dr. Chwolka, Prof. Dr. Spengler, Prof. Dr. Inderfurth, Prof. Dr. Schöndube-Pirchegger

You have 120 minutes time in which you can reach a maximum of 120 points. The final exam accounts for 50 percent of your final grade. There are a few pieces of advice we can offer at this stage:

- 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. Write legibly. The less we can read your handwriting, the fewer points you will receive.
- 5. Leave a margin for our comments.
- 6. You are welcome to use a non-programmable calculator.
- 7. Dictionaries and translators are not allowed.

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

Please solve four (4) – and <u>only</u> four – of the following five (5) problems (maximum of 30 points per problem). If you present solutions to more than four problems, only the first four solutions in your answer sheet will be graded. Therefore, make sure to cancel out clearly what should not be graded.

Marketing

- a) P. Kotler is one of the leading authorities in the field of marketing worldwide.
 - i) Give a definition of the marketing concept! (4 points)
 - ii) What is meant when P. Kotler says: "...Marketing takes an outside-in-perspective..."? (3 points)
- b) J. McCarthy defines the marketing mix by means of several marketing activities that have to be coordinated to create customer value.
 - i) Name the activities that constitute the marketing mix! (4 points)
 - ii) Determine the long-run and the short-run activities of the marketing mix. (2 points)
- c) The economist A. C. Pigou proposes three degrees of price discrimination.
 - i) Give a general definition of price discrimination! (2 points)
 - ii) Briefly describe the main ideas of the three degrees of price discrimination and give one example for each degree! (6 points)

- d) In a multidimensional approach, D.F. Abell considers three dimensions to define a corporation's business and to identify its relevant markets. State the three dimensions and give the key questions that stand behind those three dimensions! (6 points)
- e) The market potential is the maximum market size in terms of the maximum sales quantity or the maximum revenue value possible in a market. Given the following information, please calculate the market potential for 2012 in terms of volume (units) and value (\$) for a fictitious book market by means of the market-buildup method! (3 points)

expected number of buyers of books in 2012:

40 million buyers

average number of books each buyer is expected to buy in 2012:

3 units

average price of a book in 2012:

10\$

2. Basics of Accounting

- a) The main function of financial statements is to provide quantitative information. Explain briefly why managers, the supervisory board, stockholders, and creditors might be interested in accounting information! (5 points)
- b) Name two further user groups of accounting information! (2 points)
- c) Presented below is a table which contains the ending balances of accounts of the Wolfswagen Corporation at the end of the year 2011 as well as selected earnings-related information of the company for the year 2011:

| Bonds & notes payable | 85.000€ | Contributed capital | 100.000€ | |
|--------------------------------|----------|------------------------------|----------|--|
| | | Earnings before interest and | | |
| Property, plant & equipment | 165.000€ | taxes | 140.000€ | |
| 10-year bank loan | 70.000 € | Retained earnings | 135.000€ | |
| Accounts payable | 40.000 € | Interest expense | 10.000€ | |
| Inventories | 60.000€ | Accounts receivable | 30.000 € | |
| Overdraft facility (short-term | | Patent and other intangible | | |
| credit) | 20.000€ | assets | 120.000€ | |
| Corporate tax rate | 25% | Cash | ? | |

- i) Prepare a balance sheet of the Wolfswagen Corp. at the end of the year 2011. For this purpose, complete the following template that is provided on the next page, and calculate missing numbers (cash balance, balance sheet total and *subtotals*) by using fundamental accounting equations! (16 points)
- ii) Calculate the net income of the Wolfswagen Corp. for the year 2011 by using information given in the table! (3 points)
- iii) Wolfswagen Corp. regularly pays out dividends to its shareholders. Explain which of the items presented in the table are affected by a payment of dividends! What kind of annual financial statement is the primary source of information concerning dividend payouts? (4 points)

| Balance Sheet | | | | |
|------------------------|---|--|--|--|
| Current assets | € | € | | |
| | | | | |
| Total current assets | | Total current liabilities | | |
| Long-term assets | | Long-term liabilities | | |
| Total long-term assets | | Total long-term liabilities Total liabilities | | |
| v. | | Stockholders' equity | | |
| | | Total stockholders' equity | | |
| Total assets | | Total liabilities and stock- holders' equity | | |

3. Staffing

- a) What does "Personnel Assignment" mean? Why can this be a problem of personnel planning? What are the three functions of "Personnel Assignment"? (6 points)
- b) Explain briefly different methods of "Personnel Assignment" and give examples for each method! (6 points)
- c) What does "Personnel Requirement" mean? Explain briefly which factors can affect the personnel requirement of a company? (6 points)
- d) What are reasons for a change in the "Personnel Requirement" throughout a period? (2 points)
- e) Describe the main idea of and the main influencing factors on the "Personnel Equipment" problem of personnel planning! (5 points)
- As the production manager of MIKEA, it is your task to ensure the production of 650 cupboards a day. You know that one employee is able to build a cupboard in 1 hour and 55 minutes. Each employee works 7 hours a day. How many employees do you need to succeed in producing 650 cupboards? (5 points)

4. Production and Logistics

- a) Production functions vary in terms of how easily inputs can be substituted for one another. Explain the term "isoquant". (2 points)
- b) Provide graphical presentations of an isoquant for (i) fixed proportion production, (ii) perfect substitutes, and (iii) the normal case. Briefly explain each of the three cases and give a real life example. (9 points)
- c) Explain the terms "centralization of production" and "decentralization of production" and provide a graphical illustration of each. Which trade-offs have to be considered for each option? Provide a graphical illustration of this trade-off in plant location. (9 points)

d) Consider the tables below of the Pear Company assuming the following supplies, demands, and shipping costs.

| Plant | Production quantities Warehouse War | | Warehouse demands |
|-----------|-------------------------------------|--------------|----------------------|
| | (in 1,000s of units) (in 1,000s | | (in 1,000s of units) |
| Magdeburg | 45 | Haldensleben | 80 |
| Stuttgart | 120 | Hamburg | 78 |
| Munich | 95 | Berlin | 47 |
| | | Dresden | 55 |

| Shipping Costs per 1,000 Units in € | | | | | | |
|-------------------------------------|-----------|--------------|---------|--------|--|---------|
| | | | то | | | |
| | | Haldensleben | Hamburg | Berlin | | Dresden |
| FROM | Magdeburg | 250 | 420 | 380 | | 280 |
| | Stuttgart | 1,280 | 990 | 1,440 | | 1,520 |
| | Munich | 1,550 | 1,420 | 1,660 | | 1,730 |

What is the solution obtained using the Minimum Unit Cost Search method. Draw a transportation tableau with the respective transportation quantities and calculate the total transportation costs. (10 points)

5. Outsourcing and Incentives

- a) Explain the term "outsourcing". Name the criteria applicable to an outsourcing decision and potential reasons why companies outsource. (10 points)
- b) The Department of International Management at the Otto-von-Guericke-University wants to hire a student research assistant to help administrating the web sites. The department's marginal benefit of hiring the student is 20-2L, where L represents the number of hours the student is employed. The marginal costs for the hired student are 10 (money units per an hour).
 - i) Which amount of hours L maximizes the net-value? (4 points)
 - ii) Calculate the Department's total benefit and its net benefit if the student will be employed for L=5 hours? (6 points)
 - iii) Describe the potential information problems before and after hiring the student. How can these problems be solved? (10 points)