## Written Exam for the M.Sc. in Economics summer 2013

# **Managerial Accounting**

Final Exam/ Elective Course

22 June 2013

(3-hour closed book exam)

Please note that the language used in your exam paper must correspond to the language of the title for which you registered during exam registration. I.e. if you registered for the English title of the course, you must write your exam paper in English. Likewise, if you registered for the Danish title of the course or if you registered for the English title which was followed by "eksamen på dansk" in brackets, you must write your exam paper in Danish.

This exam question consists of 3 pages in total including this page.

#### **Exercise 1**

The Company chief accountant has left the company. The CEO that does not have much insight into accounting has asked you to help him to structure the accounting information. He has provided you with the following accounting data for 2012 (in DKK):

Direct materials used	13.050.000
Direct manufacturing labor	5.100.000
Indirect manufacturing labor	3.450.000
Indirect materials used	1.650.000
Marketing and distribution costs	5.550.000
Property tax on plant building	450.000
Finished goods stock, 1 January 2012	4.050.000
Work in Progress Stock, 31 December 2012	3.900.000
Plant Utilities	2.550.000
General and administrative costs	6.450.000
Depreciation of plant building	1.350.000
Depreciation of plant equipment	1.650.000
Finished goods stock, 31 December 2012	5.100.000
Work in progress stock, 1 January 2012	3.000.000
Plant repairs and maintenance	2.400.000
Miscellaneous plant overhead	600.000

## Required

Based on the accounting information above calculate cost of goods manufactured and cost of goods sold.

#### Exercise 2

Aarhus Printers A/S has specialized in producing different kinds of printers to the Northern Europe business (professional) market. The manufacturing costs are calculated according to an Activity Based Costing system. The product characteristics for two of the best-selling products are as follows:

DKK2.921
46 parts
1,9 hours
15 parts
31 parts
1,1 hours

The company has the following manufacturing overhead cost pools:

Manufacturing	Cost Driver	Cost driver rate
Overhead cost pool	(allocation base)	(allocation rate)
Materials handling	Number of parts	DKK 12 per part
Assembly management	Hours of assembly time	DKK 400 per hour assembly time
Machine insertion of parts	Number of machine inserted parts	DKK 7 per machine inserted part
Manual insertion of parts	Number of manually inserted parts	DKK 21 per manually inserted part
Quality testing	Hours of quality testing	DKK 250 per testing hour

### Required

- 1. Calculate the manufacturing costs of the two products
- 2. Explain the main contents and differences between Activity Based Costing and Absorption Costing
- 3. Explain the what advantages and disadvantages that are connected to the use of Activity Based Costing and Absorption Costing

## Exercise 3<sup>1</sup>

F.C. København is a football team that plays in the Danish Superliga. They play in PARKEN stadium that is owned by PARKEN Sport & Entertainment A/S. The stadium has a capacity of approximately 40.000 seats. For simplicity, we assume that there are two price categories of tickets the best category and the discounted category (20.000 seats for the discounted category and 20.000 seats for the best category). The owners of the stadium charges the club a per-ticket charge for the use of the stadium. The tickets are sold through a reservation network, which charges F.C. København a fee per ticket. F.C Københavns net revenue in 2012 is as follows:

	Best category	Discounted category
Selling price	350DKK	140DKK
Stadium fee	100DKK	60DKK
Reservation network fee	50DKK	30KKK
Net revenue per ticket	200DKK	50DKK

The actual and budgeted average attendance rates for the 2012 season are:

	Budgeted seats sold	Actual seats sold
Best category	16.000	13.200
Discounted category	12.000	15.400
Total	28.000	28.600

It should be noted that there were no difference between the budgeted and the actual net revenue for best category and the discounted category seats.

#### Required

- 1. Calculate the sales volume variance for individual product net revenues and total revenues for F.C København.
- 2. Please comment on the results

#### Exercise 4

- 1. Explain the purpose and content of a Balanced Scorecard.
- 2. Explain the main reasons why companies need to use non-financial measures in addition to financial measures

<sup>&</sup>lt;sup>1</sup> Even though you may recognize the name of the football club most of the case and its data is fictions.