

Written Exam Economics summer 2016

## **Managerial Accounting**

17<sup>th</sup> June 2016

(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 consists of 4 pages in total**

## Exercise 1

French Fun manufactures and sells a single product. You are given the following information concerning its operations for the year ended December 31st, 2015 is shown in Exhibit 1:

Exhibit 1: Actual accounting data for 2015.

	Units	EUR
<b>Sales</b>	30.000	
Opening inventory	1.200	
Closing inventory	6.000	
Selling price per unit		74,00
<b>Fixed costs:</b>		
Manufacturing overhead		278.400
Marketing and administrative overhead		680.000
<b>Variable costs per unit:</b>		
Direct materials		14,00
Direct manufacturing labor		15,00
Manufacturing overhead		6,00
Marketing and administrative overhead		5,40

In the year ended 31<sup>st</sup> December 2014, the company produced 33.000 units. Variable costs per unit were the same in 2014 as they are in 2015 (see Exhibit 1) while fixed manufacturing overheads were in total 330.000 EUR in 2014.

## Questions

1. Calculate the inventory value and profit or loss for the year ended 31st December 2015 using:
  - a. Variable costing
  - b. Absorption costing.
2. Explain the purposes of the two approaches as well as their major advantages and disadvantages using each of the two approaches.

## Exercise 2

Danish Fruit Import A/S has had financial losses last year. In an effort to solve the problem, the CEO has requested that the statement of profit or loss should be segmented by sales region. An attempt to prepare a segmented statement is given below. This statement is covering last year's activity. It should be noticed that cost of goods sold and shipping expense are both variable while all other costs are fixed.

Danish Fruit Import A/S is a wholesale company of different kinds of fruits (e.g. apples, pears, oranges, bananas). It purchases from producers from different countries including Denmark and distributes them in the three sales territories. The three sales territories are almost of the same size, and each has its own manager and sales staff.

	Sales territories			
	In 1.000 DKK	København	Sjælland & Fyn	Jylland
Sales		225.000	400.000	375.000
Less regional expenses (traceable):				
Cost of goods sold		81.450	140.000	188.250
Advertising		54.000	100.000	105.000
Salaries		45.000	44.000	67.500
Utilities		6.750	6.000	7.500
Depreciation		13.500	14.000	15.000
Shipping expense		8.550	16.000	14.250
Total territorial expenses		209.250	320.000	397.500
Territorial profit (loss) before corporate expenses		15.750	80.000	(22.500)
Less corporate expenses:				
Advertising (general)		9.000	16.000	15.000
General administrative expense		40.000	40.000	40.000
Total corporate expenses		49.000	56.000	55.000
Operating profit (loss)		(33.250)	24.000	(77.500)

## Questions

1. Explain the strengths and weaknesses that you see in the statement of profit or loss that is prepared above.
2. Based on your answer of question 2 prepare a more informative segmented statement of profit or loss for the month using the contribution approach. Explain shortly the advantages of your proposed format.
3. Analyse the new statement that you prepared in Question 3 above. Which important points would you bring to the attention of the management group that might help to improve the company's performance?

## Exercise 3

### Questions

1. Explain the purposes of the different types of responsibility centers which exist (e.g. profit centers), and give examples of the organizational units (e.g. Manufacturing, Sales, Accounting), where the different types are typically used.
2. Give an explanation of the measures that can be used to measure the performance of the different types of responsibility centers.
3. Explain the concept of "transfer pricing". Discuss the different pricing methods that exist and discuss their strengths and weaknesses in relation to (sub) optimization and performance measurement.