

Guiding solution

To

**Managerial Accounting**

Final Exam/ Elective Course

June 2013

(3-hour closed book exam)

### Exercise 1

*Cost of goods manufactured:*

Direct materials used		13.050.000
Direct manufacturing labour costs		5.100.000
Indirect manufacturing costs:		
Property tax on plant building	450.000	
Plant utilities	2.560.000	
Depreciation of plant building	1.350.000	
Depreciation of plant equipment	1.650.000	
Plant repairs and maintenance	2.400.000	
Indirect manufacturing labour costs	3.450.000	
Indirect materials used	1.650.000	
Miscellaneous plant overhead	<u>600.000</u>	<u>14.100.000</u>
Manufacturing costs incurred during 2012		32.250.000
Add opening work in progress stock, 1 January 2012		<u>3.000.000</u>
Total manufacturing costs to account for		35.250.000
Deduct closing work in progress stock, 31 December 2012		<u>3.900.000</u>
Cost of goods manufactured		<u>31.350.000</u>

*Cost of goods sold for the year ended 31 December 2012 (in DKK):*

Opening finished goods, 1 January 2012	4.050.000
Cost of goods manufactured (above)	<u>31.350.000</u>
Cost of goods available for sale	35.400.000
Closing finished goods, 31 December 2011	<u>5.100.000</u>
Cost of goods sold	<u>30.300.000</u>

### Exercise 2

1.

<u>(DKK)</u>	<u>Product 1</u>	<u>Product 2</u>
Direct manufacturing product costs		
Direct materials	<u>4.075</u>	<u>2.921</u>
Indirect manufacturing product costs		
Materials handling (85*DKK12; 46*DKK12)	1.020	552
Assembly management (3.2*DKK400; 1.9*DKK400)	1.280	760
Machine insertion of parts (49*DKK7; 31*DKK7)	343	217
Manual insertion of parts		

(36*DKK21; 15*DKK21)	756	315
Quality testing		
(1.4*DKK250; 1.1* DKK250)	<u>350</u>	<u>275</u>
Total manufacturing overhead costs	<u>3.749</u>	<u>2.119</u>
Total manufacturing overhead costs	<u><u>7.824</u></u>	<u><u>5.040</u></u>

2.

The explanation should among other cover:

- The contents and structure of Activity Based Costing
- Absorption Costing – allocation of manufacturing overheads to products; ABC focus on tracing cost of resources to activities and from there to cost objects (products, customers etc.)
- Absorption Costing – focus on inventory valuation; ABC focus on cost of activities as well as profitability of products, customers etc.
- Use of single volume driver (Absorption Costing) versus many cost drivers (ABC)
- Other relevant arguments

3.

- Absorption costing simpler to use than ABC
- ABC has a better tracing of costs than Absorption Costing
- Other relevant arguments

### Exercise 3

1.

$$\text{Sales – volume variance of revenue} = \left( \frac{\text{Actual sales}}{\text{Quantity in units}} - \frac{\text{Budgeted sales}}{\text{Quantity in units}} \right) \times \text{Budget net revenue per ticket}$$

Best category tickets =	(13,200 – 16,000) × DKK 200 =	DKK 560,000U
Discounted tickets =	(15,400 – 12,000) × DKK 50 =	<u>DKK 170,000 F</u>
All tickets =		<u><u>DKK 390,000U</u></u>

2.

- Commentary of the results
- Some suggestions on what could be done related to pricing

#### **Exercise 4**

**1.**

The explanation should among other cover:

- BSC is a balanced measurement system that is good to measure on the strategic success
- BSC consist of four perspectives: Financial, customer, internal and learning & growth
- It should have a cause and effect between the measures and also a balance between lead and lag indicators
- Other relevant arguments

**2.**

- Financial measures are lagging indicators while many non-financial measures are leading indicators
- Non-financial measures are easier to understand at lower organization levels than financial measures
- Other relevant arguments