# Instituto Universitário de Lisboa MANAGEMENT ACCOUNTING I Ist Mid-term Test School Year 2012/2013 Ist Year Management March 20, 2013 Time: 75 minutes

Course	Class

Name\_\_\_\_\_

Attention:

1 - You must keep the test stapled. You have to deliver it with the test sheet .

2 – The questions are only considered correct if duly justified by the calculations.

#### PART I (Based on this test sheet answer the questions 1 to 7 inclusive)

SOFOP company produces and markets only one product S from the conversion of the raw material M.

Regarding the accounting of February, year N, the following data are known:

• Costs and expenses per functions  $(in \in)$ :

Description	Manufacturing	Distribution	Administrative	Total
	Function	Function	Function	
Cons. secondary materials	5 000	4 000	-	9 000
Supplies and services	20 000	6 000	4 000	30 000
Salaries	25 000	10 000	5 000	40 000
Depreciation	10 000	5 000	6 000	21 000
Total	60 000	25 000	15 000	100 000

- Theoretical social expenses calculated at the rate of 50% have an effect on the salaries. This rate is used both in Profit & Loss Statement per Natures and in Profit & Loss Statement per Functions.
- The salaries of the manufacturing function correspond 80% to Direct Labour and 20% to Indirect Labour.

No.

Monthly variation of the raw materials stocks:

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Description	MU	Quantity	Unit Cost
Opening stock	ton	2 000 tons	30€
Purchases	ton	3 000 tons	25€
Consumptions	ton	?	-
Closing stock	ton	500 tons	-

• Monthly variation of the products stocks:

Description	Finished Product	PiP
Opening stock	1.000 Units at 25 €/Unit	22 000€
Production	7 000 Units	-
Sales	7 500 Units at 40€/ unit	-
Closing stock	?	6 000€

#### PART II

### (Based on this test sheet answer the questions 8 to 15 inclusive)

CAT company produces and markets the product G. The profit & loss statement per functions regarding January, year N, using the variable costing system, is as follows.

Description	Value (€)
Sales	180 000
MCPS + NPMC	98 000
Gross profit	82 000
Distribution expenses	
Variable	24 000
Fixed	30 000
Administrative expenses (fixed)	20 000
Operational profit	8 000
Financing expenses (fixed)	12 500
Profit before taxes	(4 500)

#### Supporting data:

- Selling price: 75 €/unit
- Quantity produced: 3 000 units
- Standard (normal) capacity : 4 000 units
- Manufacturing fixed costs: 50 000 €
- There were no opening stocks of finished products

Course	Class	
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# PART I

#### (Based on this test sheet answer the questions 1 to7 inclusive) Mark for each correct answer - 1,2 values

Questions	Solving
1. The value of monthly expenses for Direct Labour is:	Direct Labour = 25 000 x 0.8 x 1.5 = <b>30 000€</b>
<ul> <li>a) 30 000€</li> <li>b) 20 000€</li> <li>c) 37 500€</li> <li>d) None of the previous ones</li> </ul>	
2. Monthly Manufacturing Overheads are:	Manufacturing Overheads = 25 000 x 0.2 x 1.5 + 5 000 + 20 000 + 10 000 = <b>42 500</b> €
<ul> <li>a) 40 000€</li> <li>b) 42 500€</li> <li>c) 35 000€</li> <li>d) None of the previous ones</li> </ul>	
3. Considering that the monthly conversion costs are 72 500 $\in$ and that the	MCMP = consumed RM + CC = 121 500 + 72 500 = <b>194 000 €</b>
company adopts the <u>weighted average</u> <u>cost</u> , the value of MCMP is: a) 194 000€	Quantities consumed = $2\ 000 + 3\ 000 - 500 = 4\ 500\ tons$ WAC = $(2\ 000\ x\ 30\ell + 3\ 000\ x\ 25\ell)$ /5 000 tons = $27\ell/ton$
<ul> <li>b) 121 500€</li> <li>c) 195 000€</li> <li>d) None of the previous ones</li> </ul>	Consumed RM = 4 500 tons x 27€= 121 500 €
4. Considering that the MCMP is 194 000 €, the unit MCFP of product S is:	MCFP = Opening stock PiP + MCMP − Closing stock PiP = $22\ 000 + 194\ 000 - 6\ 000 = 210\ 000$ €
<ul> <li>a) 25€/Unit</li> <li>b) 35 €/Unit</li> <li>c) 30 €/Unit</li> <li>d) None of the previous ones</li> </ul>	Unit MCFP = 210 000 / 7 000 units = <b>30€/Unit</b>

Questions	Solving
<ul> <li>5. Assuming that the unit MCFP of S is 30 €/unit, and that the company adopts <u>FIFO</u>, the MCPS of S would be:</li> <li>a) 225 000€</li> <li>b) 220 000€</li> <li>c) 222 500€</li> <li>d) None of the previous ones</li> </ul>	MCPS = 1 000 x 25 + 6 500 x 30 = 25 000 + 195 000 = <b>220 000€</b>
<ul> <li>6. Assuming that the unit MCFP of S is 30 €/unit, and that the company adopts <u>FIFO</u>, the variation of stocks in production to include in the P&amp;L per natures is:</li> <li>a) (6 000 €)</li> <li>b) (10 000 €)</li> <li>c) (26 000 €)</li> <li>d) None of the previous ones</li> </ul>	Closing stock – Opening stock (S) = $500 \times 30 - 1\ 000 \times 25$ = $15\ 000 - 25\ 000 = -10\ 000 \in$ Closing stock – Opening stock (PiP) = $6\ 000 - 22\ 000 = -6\ 000 \in$ Stocks variation = $-10\ 000 - 16\ 000 = -26\ 000 \in$
<ul> <li>7. Assuming that the monthly MCPS is 202.500 €, the monthly operational profit is:</li> <li>a) 57 500€</li> <li>b) 50 000€</li> <li>c) 67 500€</li> <li>d) None of the previous ones</li> </ul>	Operational Profit = Sales - MCPS - Distribution expenses - Administrative Expenses = 7 500 x 40 - 202 $500 - 30\ 000 - 17\ 500 = 50\ 000 \in$ Distribution expenses = 4 000 + 6 000 + 10 000 x 1.5 + 5 $000 = 30\ 000 \in$ Administrative Expenses = 4 000 + 5 000 x 1.5 + 6 000 = $17\ 500 \in$

## PART II

# (Based on this test sheet answer the questions 8 to 15 inclusive) Mark for each correct answer - 1,2 values

Questions	Solving
<ul> <li>8. The variable manufacturing costs of the monthly production are:</li> <li>a) 60 000€</li> <li>b) 48 000€</li> <li>c) 80 000€</li> <li>d) None of the previous ones</li> </ul>	Units sold = $180\ 000 \notin 75 \oplus 2400\ units$ MCPS + NPMC (using VC system) = $98\ 000 \oplus$ Manufacturing variable costs in MCPS = $98\ 000 - 50\ 000$ = $48\ 000 \oplus$ Variable manufacturing costs of the monthly production = $48\ 000/2\ 400\ x\ 3\ 000 = 60\ 000 \oplus$
<ul> <li>9. Assuming that the variable manufacturing costs of the monthly production are 60 000 €, using the rational costing (RC) system, the sales cost (MCPS) is:</li> <li>a) 88 000€</li> <li>b) 97 500€</li> <li>c) 78 000€</li> <li>d) None of the previous ones</li> </ul>	RC System $\Rightarrow$ MCFP = 60 000 + (50 000/4 000 x 3 000) = 97 5000€ MCPS = 97 500 /3 000 x 2 400 = <b>78 000</b> €
<ul> <li>10. Assuming the same as in the previous question, using the absorption costing (AC) system, the manufacturing costs to include in the P&amp;L per functions are:</li> <li>a) 88 000€</li> <li>b) 110 000€</li> <li>c) 50 000€</li> <li>d) None of the previous ones</li> </ul>	AC system ⇒ MCFP = 60 000 + 50 000 = 110 000€ MCPS = 110 000 /3 000 x 2 400 = <b>88 000</b> €
<ul> <li>11. Using the VC system, the amount of the manufacturing fixed costs to include in the P&amp;L per functions are:</li> <li>a) 0€</li> <li>b) 50 000€</li> <li>c) 40 000€</li> <li>d) None of the previous ones</li> </ul>	VC System ⇒ All manufacturing fixed costs in NPMC = <b>50 000 €</b>

Questions	Solution
12. Assuming that the variable	Quantities sold = 180 000/75 = 2 400 units
60 000 €, the unit variable cost of the $60 \text{ cost}$	Unit variable manuf. cost = 60 000/3 000 uni = 20 €/uni
manufacturing) is:	Unit variable non-manuf. cost = 24 000/2 4000 = 10 €/uni
a) <b>30€</b>	Unit variable cost (total) = 30 €/ton
<ul> <li>c) 28€</li> <li>d) None of the previous ones</li> </ul>	
13. Assuming that the unit variable	FC = 50 000 + 30 000 + 20 000 + 12 500 = 112 500€
and non-manufacturing) is 30€, the break-even point of the company is:	Q <sup>'</sup> = 112 500 / (75 – 30) = 2 500 Units
<ul> <li>a) 2 500 Units</li> <li>b) 3 750 Units</li> <li>c) 3 000 Units</li> <li>d) None of the previous ones</li> </ul>	
14. Assuming that the break-even point of the company is 2 500 units, the margin of safety of the company in January year N was:	Margin of Safety = $(2\ 400 - 2\ 500) / 2\ 500 \ x\ 100 = -4\%$
a) +4% b) -4%	
<ul><li>c) 20%</li><li>d) None of the previous ones</li></ul>	
15. Assuming the same as in the	
previous question, the foreseeable profit for the company, in the relevant	R = $(3\ 000 - 2\ 500)$ x 45 = 22 500€ Or
range, in case of selling all the monthly production is:	45 x 3 000 − 112 500 = 22 500 €
a) 67 500€ b) 85 000€	
<ul> <li>c) 22 500€</li> <li>d) None of the previous ones</li> </ul>	
a) none of the previous ones	

Now answer the following theoretical questions. Each CORRECT answer IS WORTH 1 MARK. Attention! If you make a MISTAKE, 0.25 MARKS per answer will be DISCOUNTED

Questions
16. The difference between the cost of sales (MCPS) and the manufacturing costs of production of a specific period results from:
<ul> <li>a) Existing closing stocks (inventory) of finished production;</li> <li>b) Existing variations of stocks of finished products and of products in progress;</li> <li>c) Not all bought materials are consumed;</li> <li>d) None of the previous ones.</li> </ul>

17. Using the rational costing system (RCS), the fixed manufacturing costs included in the calculation of the MCFP are:

- a) The manufacturing fixed costs proportional to the capacity of production effectively being used;
- b) The manufacturing fixed costs of the period when all production is sold;
- c) The manufacturing fixed costs proportional to the capacity of production not being used;
- d) None of the previous ones.