ISCTE Business School
Instituto Universitário de Lisboa

MANAGEMENT ACCOUNTING I

MANAGEMENT

School Year 2014/2015

Case 2 for Assessment

EMBALA company produces and markets a type of packages named MBL. At the present time the company only uses 75% of its standard (normal) capacity, selling only on the domestic market.

Regarding the year N and using the **Absorption Costing System**, the following P&L Statement per Functions was prepared:

Description	Value (€)
Sales	300 000
MCPS+NPMC	200 000
Gross Profit	100 000
Selling (distribution) Expenses	
Variable	20 000
Fixed	30 000
Administrative Expenses (fixed)	15 000
Operational Profit	35 000
Financial Expenses (fixed)	15 000
Profit before Taxes	20 000

The following data are also known:

- Opening stock: 0
- Closing stock: 10 000 units
- There is no Production in Progress
- Standard (normal) capacity: 40 000 units
- Monthly manufacturing costs:
  - Variable 120 000 €
  - Fixed 180 000 €

Presenting the calculations, it is required:

1. Prepare the Profit & Loss Statement, using the rational costing system and the variable costing system (Appendix 1);
2. Explain, using the notion of fixed manufacturing costs, the difference of the profits obtained using the rational and the variable costing systems (Appendix 2);
3. Ascertain the breakeven point and the margin of safety of the company in the year N (Appendix 3);
4. Estimate the profit, if the company would sell all of its production (Appendix 4);
5. To succeed in increasing the market share, the company's managers consider the possibility of decreasing the selling price in 5€ per unit. Calculate the minimum quantity that the company should sell to reach its threshold of profitability, considering that all the remaining assumptions do not change (Appendix 4);
6. The company considers the possibility to export to the external market 6 000 units at the selling price of 10 €/unit, but the unit variable selling (distribution) expenses will increase 1.5 €/unit. Should the company approve this business, maintaining the current production sold on the national market? (Appendix 5).

Case for Assessment 2 - APPENDICES

Appendix 1

P&L Statement per Functions

Description	RC System (€)	VC System (€)
Sales	300 000	300 000
MCPS+NPMC	215 000	260 000
Gross Profit	85 000	40 000
Selling (Distribution) Expenses		
Variable	20 000	20 000
Fixed	30 000	30 000
Administrative Expenses (fixed)	15 000	15 000
Operational Profit	20 000	-25 000
Financial Expenses (Fixed)	15 000	15 000
Profit before Taxes	5 000	-40 000

AP = 40 000 Units x 0.75 = 30 000 Units

Quant. Sold = 30 000 – 10 000 = 20 000 Units

SP = 300 000/20 000 Units = 15 €/Unit

<u>RC System</u>

MCFP = 120 000 + 180 000 x 0.75 = 255 000 €

MCPS = 255 000/30 000 x 20 000 = 170 000 €

NPMC = 180 000 x 0.25 = 45 000 €

MCPS + NPMC = 170 000 + 45 000 = 215 000 €

<u>VC System</u>

MCFP = 120 000 €

MCPS = 120 000/30 000 x 20 000 = 80 000 €

NPMC = 180 000 €

MCPS + NPMC = 80 000 + 180 000 = 260 000 €

Appendix 2

	RC System	VC System
Fixed manufacturing costs:		
In MCPS	(1)90 000	0
In NPMC	(2)45 000	180 000
Total	135 000	180 000
Dif. fixed manufacturing costs	0	-45 000
Gross Profit	85 000	40 000
Difference in the Gross Profit	0	+45 000

(1) 180 000 x 0.75/30 000 x 20 000 = 90 000 €

(2) 180 000 x 0.25 = 45 000 €

Appendix 3

Q' = FC/m
m = selling price – sales cost = 15 – 5 = 10 €/Unit
sales cost = manuf. sales cost + non-manuf. sales cost = 120 000/30 000 + 20 000/20 000 = 4+1 = 5 €/Unit
FC = 180 000 + 30 000 + 15 000 + 15 000 = 240 000 €
Q' = 240 000/10 = 24 000 Units
MS = (20 000 – 24 000)/24 000 x 100 = -16.7%

Appendix 4

EP = (30 000 – 24 000) x 10 = 60 000 €
or
EP = 30 000 x 15 – 30 000 x 5 – 240 000 € = 60 000 €
Selling price = 10
Q' = 240 000/10 – 5 = 48 Units

Appendix 5

Normall production = 40 000 Units
Current production + new production = 30 000 + 6 000 = 36 000 Units < Normal production (capacity)
Margin of contribution for specific order = 10 – (4 + 2.5) = 3.5 €/Unit, therefore the company should accept this business.