ISCTE IUL
Instituto Universitário de Lisboa
Lisbon University Institute

MANAGEMENT ACCOUNTING I

School Year 2014/2015
Management – 1st Year

Final test **8 June 2015**
Time: 120 minutes

Regarding the resolution, all explaining calculations of the values presented must be presented

Part I (5 marks)

Estimated time for solving: 25 minutes

Jota company produces, under the regime of joint production, two main products, one by-product, and scrap in a production process with the following characteristics:

- The material MP is converted in Section 1, giving rise to the intermediate product 1.
- The intermediate product 1 is converted in Section 2, giving simultaneously rise to the intermediate product 2, to the main product A and to the by-product S.
- The by-product S needs an additional conversion in Section 3 in order to be marketed.
- The intermediate product 2 is converted in Section 4, giving rise to the main product B.

Regarding the month associated with the beginning of the activity of the company, the following data are known:

1 – 100 000 € of material MP were consumed

2 – Conversion costs

Section	Value
Section 1	213 000 €
Section 2	310 000 €
Section 3	6 000 €
Section 4	90 000 €

3 – Production and sales

	Product A	Product B	By-product S
Production	10 000 un.	16 000 un.	4 000 un.
Sales	6 000 un.	16 000 un.	3 000 un.
Selling price	30 €/ un.	50 €/ un.	5 €/ un.

4 – Non-manufacturing expenses

Non-manufacturing expenses	Value
Fixed selling (distribution)	100 000 €
Variable selling (distribution) - Product A	3 €/unit
Variable selling (distribution) - Product B	5€/unit
Variable selling (distribution) - by-product S	0.25 €/unit
Fixed administrative	185 000 €

Regarding the month under analysis, it is required:

1. The unit MCFP of by-product S (Appendix 1).
2. The unit MCFP of the main products. Use the net realizable value method (Appendix 2).

Part II (6 marks)

Estimated time for solving: 40 minutes

Gifts company markets advertising gifts imported from China and packed in a Packing section which has a packing capacity of 200 000 units per month.

Regarding May year N, the company prepared the following Profit and Loss Statement (values in euros):

Sales	540 000
MCPS +NPMC	382 000
Gross Profit	158 000
Selling (Distribution) expenses	
Variable	36 000
Fixed	70 000
Administrative (fixed) expenses	10 000
Operatioanl Profit	42 000

Regarding May, the following data are also known:

- Monthly production: 190 000 Units packed.
- Monthly sales: 180.000 Units packed.
- Imported gifts (raw materials): 200 000 units at 1 € each.
- Costs of the Packing Section:
  - Variable:76 000 €
  - Fixed: 130 000 €
- There were no opening stocks of gifts (imported or packed).

It is required:

1. Identify the costing system used by the company, explaining all calculations (Appendix 3);
2. Using the notion of manufacturing fixed costs incorporated in profits, justify the difference of profits between the Variable Costing System (VCS) and the Rational Costing System (RCS) (Appendix 4);
3. Ascertain the breakeven point and the company's safety margin, explaining the meaning of both (Appendix 5);
4. Using the CVP (cost volume profit) equation of Profits, calculate the profit that the company would obtain, if the highest production capacity would be used (Appendix 6);

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Part III (7 marks)

Estimated time for solving: 40 minutes

Productive company produces and markets the products A and B, using a production process with the following characteristics:

- The raw material M1 is converted in the section S1, giving rise to the product A;
- The raw material M2 is converted in the section S2, giving rise to the intermediate product B1;
- Then, this intermediate product is packed (Packing section), giving rise to the product B.

The following uniform cost centres (sections) are defined:

- S1 – Work unit: Mh
- S2 – Work unit: Lh
- S3 – Work unit: Lh
- S4 – Allocation unit: to the other manufacturing sections, according to the respective direct costs; Costing unit: day
- Packing – Allocation unit: to the quantities produced of the product B; Costing unit: day
- Raw Materials Warehouse (RMW), whose total costs amount to 10 000 € in April year N, which are allocated to the quantities bought of the materials M1 and M2.

Regarding April of the year N, the following data are known:

a) Costs (in €) and activity of the sections:

	S1	S2	S3	S4	Packing
Activity	4 000 Mh	5 000 Lh	1 200 Lh	-	-
Direct costs	60 000	77 250	24 000	36 000	18 750

- The activity of section S3 was the following: 400 Lh for S1, 500 Lh for S2 and 300 Lh for the Packing section.

b) Stocks variation

Raw materials

	M1	M2
Opening stocks	800 tons at 20 €/ton	200 tons at 60 €/ton
Purchases	? ton at 25 €/ton	1 100 tons at 50 €/ton
Consumptions	1 500 tons	? tons
Closing stocks	200 tons	300 tons

Products

	Product A	Intermediate Product B1	Product B
Opening stocks	500 tons at 70 €/ton	250 tons at 160 €/ton.	100 tons at 190 €/ton
Production	1 500 tons	1 000 tons	1 100 tons
Sales	1 700 tons at 100 €/ton	-	? at 250 €/ton
Consumptions	-	1 100 tons	-
Closing stocks	?	150 tons	0
Opening stocks PiP	1 400 €	-	2 705 €
Closing stocks PiP	-	-	11 000 €

Knowing that the company uses the absorption costing system and FIFO as valuation criterion, **IT IS REQUIRED**:

1. Ascertain the unit cost of the Work Units or the Allocation Units of the main sections (Appendix 7);
2. Ascertain the unit cost of the finished production (Appendix 8);

Part IV (2 marks - Appendix 12)

Estimated time for solving: 15 minutes

Comment the following sentence:

"Current characteristics of business environment came to put new challenges to management accounting, particularly with regard to the prevalence and how to deal with indirect costs"