ISCTE Business School
Instituto Universitário de Lisboa

MANAGEMENT ACCOUNTING II

Mid Test
School Year 2014/2015
Management 2nd Year

21 November 2014 **Time: 80 minutes**

Undergraduation_____/Class_____
Name_____/
No. _____

Attention!

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

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

Part I

(Based on this test sheet answer the questions 1 to 8 inclusive)

KATE company produces and markets the product K, from the conversion in section S2 of the intermediate product K1,which results from the conversion of the material M1 in section S1.

Regarding the budget for the year N, prepared using the absorption costing system and per semesters, the following data are known:

1. **Sales programme**

	MU	Unit Selling price	Term Receipts	1st Semester	2nd Semester
Product K	Unit	120€	60 days	15 000	9 000
Intermediate product K1	Ton	50€	p.p.	3 000	5 000

It is expected that the sales are uniform in each semester.

2. Objectives of costs and consumptions per unit produced.

	MU	Unit Cost	Intermediate product K1	Product K
Direct Materials				
M1	Unit.	6 €	2.5	---
Intermediate product K1	Ton	?	---	1.5
Conversion Costs				
S1	Mh	5 €	5	---
S2	Lh	7.5 €	---	2

3. Policy of products stocks

- Finished products: it is required that at the end of each month the stocks are equal to the sales of the following month; it is expected that regarding January of N+1 the sales will register an increase of 10% regarding the sales of January of N;
- Intermediate products: it is required that at the end of the year the stocks are 20% of the consumptions and sales forecasted for the year;
- The production of K is uniform in each semester and the production of K1is uniform over the course of the year.

4. Policy of materials stocks

- It is required that at the end of the year (31/12/N) the stocks correspond to 1/3 of the opening stocks;
- The purchases are uniform over the course of the year. Term payments of the purchases is 30 days.

5. Opening stocks

- Material M: 7 500 Tons
- Product K: 1 000 Units
- Intermediate product K1: 5 950 Tons

6. Expenses with employees

- Salaries: 50 000 € per month;
- Social expenses on salaries:
  - Holiday pay paid in July and Christmas pay paid in November ; the value of each pay corresponds to one month of salaries;
  - Expenses on salaries of the employer to the Social Security (TSU): 23.75%;
  - Other expenses with employes: 33 750 € - 60% in the 1st semester and 40% in the 2nd semester.

The expenses of the employer to the Social Security (TSU) are paid in the following month.

:

7. Other data

- The opening balance sheet shows 60 000 € in short term investments. Interests are paid quarterly (in the end of each quarter) at the annual rate of 1.5%;
- On 1 October of N-2 the company took out a loan in medium and long term for the sum of 900 000 € to pay in 10 equal six-monthly payments. Interests are paid at the annual rate of 7%.

Part II

(Based on this paper sheet answer the questions 9 to 16 inclusive)

GRAVE company produces and markets the product G. The company's production process is as follows:

- The raw material M is introduced into the section A, where the intermediate product G1 is obtained. At a second stage, the intermediate product moves to the section B and the finished product G is obtained. This one moves to the Finished Products Warehouse (FPW), whose costs are totally allocated to the production of G.

Budget data for the year N

1) Production and sales

	Intermediate product G1	**Product G**
Production	40 000 tons	15 000 tons
Sales	-	12 000 tons at 750 €/ton

It is expected that the sales of the Product G are distributed as follows: 60% in the 1st semester and 40% in the 2nd semester.

2) Consumptions and costs of materials and intermediate product

	Quantity	**Unit Cost**
Material M	120 000 tons	25 €
Intermediate product G1	37 500 tons	?

3) Sections costs and activity

Description	**A**	**B**	**C**	**FPW**
1. Direct Costs				
Variable	840 000	325 000	180 000	
Fixed	1 440 000	720 000	60 000	35 000
Subtotal (1)	2 280 000	1 045 000	240 000	35 000
2.Reallocations				
C	6 000 Lh	4 000 Lh	-	2 000 Lh
Activity	80 000 Mh	22 500 Mh	12 000 Lh	-
WU/AU	30 €	50 €	20 €	5 €

Accounting data of October of N

1) Production and sales

	Intermediate product G1	**Product G**
Production	3 000 tons	1000 tons
Sales	-	900 tons at 800 €/ton
Consumptions	2 600 tons	-

2) Purchases and consumptions of the Raw Material M

	Quantities	**Unit cost**
Purchases	9 000 tons	22 €
Consumptions	8 250 tons	-

3) Sections costs and activity

Description	**A**	**B**	**C**	**FPW**
1.Direct costs (€)	171 750	68 800	22 800	500
2. Reallocations				
C	600 Lh	400 Lh	-	200 Lh
Activity	5 250 Mh	1 600 Mh	1 200 Lh	-

Solution

Name _____ **Class** _____

Part I

Questions 1 to 8 inclusive

<table>
<tr><th>Questions</th><th>Solution</th></tr>
<tr><td>1. The forecasted production of K for the 1st semester is:
a) 15 500 Units
b) 10 250 Units
c) 15 000 Units
d) None of the previous ones</td><td><table>
<tr><th></th><th>1st S</th><th>2nd S</th><th>TOTAL</th></tr>
<tr><td>Opening stock</td><td>1 000</td><td>1 500</td><td>1 000</td></tr>
<tr><td>Production</td><td>15 500</td><td>10 250</td><td>25 750</td></tr>
<tr><td>Sales</td><td>15 000</td><td>9 000</td><td>24 000</td></tr>
<tr><td>Closing stock</td><td>1 500</td><td>2 750</td><td>2 750</td></tr>
</table></td></tr>
<tr><td>2.Assuming that the annual forecasted production of K1 is 50 000 tons, the Closing Stocks of the material M1 forecasted for the 2nd semester are:

a) 5 000 Tons
b) 7 500 Tons
c) 2 500 Tons
d) None of the previous ones</td><td>(1) 50 000 x 2.5
(2) 7 500/3
<table>
<tr><th></th><th>1st S</th><th>2nd S</th><th>TOTAL</th></tr>
<tr><td>Open. stock</td><td>7 500</td><td>5 000</td><td>7 500</td></tr>
<tr><td>Purchases</td><td>60 000</td><td>60 000</td><td>120 000</td></tr>
<tr><td>Consumptions</td><td>62 500</td><td>62 500</td><td>125 000 (1)</td></tr>
<tr><td>Closing stock</td><td>5 000</td><td>2 500</td><td>2 500 (2)</td></tr>
</table></td></tr>
<tr><td>3. The value of the customers in the Forecasted Balance Sheet is:

a) 360 000 €
b) 180 000 €
c) 540 000 €
d) None of the previous ones</td><td>Sales of K in the 2nd Semester =
9 000 x 120 =1 080 000 €

1 080 000/6 x 2= 360 000 €</td></tr>
<tr><td>4. The value to register in the forecasted Balance Sheet regarding the stocks of the product K is:

a) 206 250 €
b) 187 500 €
c) 110 000 €
d) None of the previous ones</td><td>Closing stocks: 15 000 x 1.1/6 = 2 750 Units

Value of the closing stocks = 2 750 x 75 = 206 250 €

Unit MCFP of K1 = 2.5 x 6 + 5 x 5 = 15 + 25 = 40 €/ton
Unit MCFP of K = 1.5 x 40 + 2 x 7.5 = 75 €/Unit</td></tr>
</table>

5. The total expenses with employees in the second semester are: a) 420 250 € b) 363 500 € **c) 413 500 €** d) None of the previous ones	50 000 € x 8 months = 400 000 € 400 000 + 33 750*0,4 = **413 500 €**
6. The payments regarding the expenses on salaries of the employer to the Social Security in the 2nd semester are: **a) 95 000 €** b) 83 125 € c) 71 250 € d) None of the previous ones	50 000 x 0.2375 x 8 months = 95 000 €
7. In the Financial Budget the amount of the interests receivable in the 1st semester are: **a) 450 €** b) 225 € c) 900 € d) None of the previous ones	(60 000 x 0.015)/12 x 3 x 2 = **450 €**
8. The value of the refund of capital and of the interests associated with the ML Term loan to include in the Financial Budget in the 1st semester is: a) 140 400 € b) 121 500 € **c) 115 200 €** d) None of the previous ones	Capital refund: 900 000/10 = 90 000 € Interests in the 1st semester= (900 000 – 180 000) x 0.07 /12 x 6 = 25 200€ Capital refund + interests = 90 000 + 25 200 = **115 200 €**

Part II
Questions 9 to 16 inclusive

Questions	Solution
9. The variance of the section A is: a) -26 250 € (Fav) **b) +26 250 € (Unf)** c) +14 250 €/ (Unf) d) None of the previous ones	Actual *WU of A = (171 750+600 Lh x 20 €)/5 250 Mh = 35 €/Mh Variance of A = 5 250 Mh (35 – 30) = **26 250 € (Unf)**
10. The monthly expenses of FPW amount to: **a) 4 500 €** b) 4 300 € c) 500 € d) None of the previous ones	Monthly expenses : 500 + 200 Lh x 20 = **4 500 €**
11.The consumptions value of the material M to include on the Table of the Production Costs is : a) 181 500 € **b) 206 250 €** c) 225 000 € d) None of the previous ones	Consumptions: 8 250 tons Consumptions value = 8 250 x 25 = **206 250 €**
12. The monthly unit MCFP of the product G is: **a) 436 €/Ton** b) 427.8 €/Ton c) 431 €/Ton d) None of the previous ones	The standard unit MCFP of G1 = 80 000Mh/ 40 000 tons x 30 € + 120 000/40 000 tons x 25 = 135 €/ton The actual* unit MCFP of G = (2 600 tons x 135 + 1 600 Mh x 50 + 1 000 tons x 5)/1 000 tons = (351 000 +80 000 + 5 000)/1 000 =**436 €/ton**

Questions	Solution
13. The productivity variance of the material M is: a) +18 750 € (Unf) b) -16 500€ (Fav) **c) -18 750€ (Fav)** d) None of the previous ones	Productivity variance = 3 000 Units x 25 x (8 250/3 000 – 3) = 3 000 x 25 x (2.75 - 3) = **-18 750 € (Fav)**
14. The flexible budget (Flexible standard expenses – FSE) of the section A is: **a) 183 000 €** b) 175 125 € c) 183 750 € d) None of the previous ones	FSE = 5 250 Mh x (840 000 + 120 000/80 000) Mh +1 440 000/12 = 5 250 Mh x 12 + 120 000 = 63 000 + 120 000= 183 000 €
15.The activity variance of the section A is: a) + 32 400 € (Unf) **b) + 25 500 € (Unf)** c) – 47 500 € (Fav) d) None of the previous ones	Activity variance = 1 440 000 / 80 000 Mh X (80 000 Mh / 12 – 5 250 Mh) = **25 500 (Unf)** Or Activity variance = FSE – Allocated Expenses = 183 000 – 5 250 Mh x 30 = **25 500 € (Unf)**
16. The prices variance associated with the sales of the product G is: **a) + 45 000 € (Fav)** b) + 50 000 € (Unf) c) + 40 000 € (Fav) d) None of the previous ones	Prices variance: actual sales q x (actual price – standard price) = = 900 (800 - 750) = + 45 000 € (Fav)

Questions 17 to 20
Mark each correct answer with a circle on the respective paragraph.
(each wrong answer discounts 0.25 marks)

Questions
17. **The use of the standard (budgeted) costing system assumes:** a) To anticipate the calculation of the actual unit costs to value the materials consumptions of the month, the work units or the allocation units of the sections and the products produced; **b) That the better or worse performance regarding what was forecasted in a specific area (or department) of a company has no influence on the other areas;** c) That the valuation of the services and transfers of materials and products is presented at actual costs; d) None of the previous ones.
18. The production programme of an intermediate product takes into account: **a) The quantities which are expected to sell and consume of the same product, with an increase of the respective stocks variation;** b) The stocks policy of that product and the quantity of the same that is expected to sell; c) The stocks policy of that product and the quantity that is expected to consume to obtain the finished product; d) None of the previous ones.
19. The non-accounting variances: a) Affect the profit ascertainment of a company's period; b) **Are the result of the comparison between the monthly profit and loss statement using the basic (traditional) costing system and the monthly forecasted profit and loss statement;** c) Are always composed of volume and prices/costs variances; d) None of the previous ones.
20. The variance of Variable Selling (Distribution) costs is due to: a) Only the difference between the actual unit variable selling (distribution) cost and the respective objective; **b) Differences not only between the actual unit variable selling (distribution) cost and ther respective objective, but also differences between the actual quantities sold and those which were considered as an objective;** c) Only differences between the actual quantities sold and those which were considered as an objective; d) None of the previous ones.