1202 – Management Accounting

Semester 1

2017/2018

REGULAR EXAM

January 13, 2018

Lenght: 120 minutes

NAME: _____

NUMBER:_____ CLASS: _____

- The questions must be answered in the set of sheets attached to the test. You are required to keep the answer sheets stapled.
- You can use the back of each sheet for rough draft.
- Support your answers with calculations.

CASE 1

Fresh Fruits, Ltd is a UK-based company that dedicates its activity to buying and selling fruits. After buying fruits from farmers, fruits are stored in refrigerating chambers until they are packed to be sold to supermarkets. The company uses the homogeneous cost pool method to calculate the costs it supports in these operations.

It is available the following information regarding December/2017:

- Costs per cost centre

Description	Refrigerating Chambers	Calibration & Packing	Cooling Tower	Power Station	General Manuf. Overheads
Activity	8.000 m3	530 Mh	?	?	(*)
1. Direct Costs	4.400 €	9.060 €	7.525 €	2.350 €	4.600 €
2. Reallocation of costs					
Cooling Tower	60 Mh	105 Mh	---	75 Mh	---
Power Station	19.600 Kwh	9.350 Kwh	21.500 Kwh	---	5.150 Kwh

(*) Its costs should be allocated in equal parts to the refrigerating chambers and calibration & packing.

- Opening Stocks
  - Fruits (direct materials): 40 tonnes at 440 € / tonne
  - Packed Fruits (finished products): 53 tonnes at 550 €/tonne

- Purchases and Consumptions
  - Purchase of fruits to farmers: 340 tonnes at 450 € / tonne
  - Consumption of fruits: 350 tonnes
  - Consumption of pack material: 0,05 € per Kg of fruits packed (note: 1 tonne = 1.000 kg)

- Production and Sales
  - Production: 350 tonnes of packed fruits
  - Sales: 350 tonnes of packed fruits at 800 €/tonne

- Non-manufacturing costs
  - Distribution
    - Fixed: 1.875 €
    - Variable: 0,4% of sales
  - Administrative: 6.200 € (fixed costs)
  - Financial expenses: 1.320 € (fixed costs)

- Inventory valuation method: Last in, first out (LIFO)

- Cost Accumulation System: Total Full Costing

REQUIRED:

1. Prepare the map with the costs of each cost centre using the simultaneous equation method **[3,5 marks]**

Description	**Refrigerating Chambers**	**Calibration & Packing**	**Cooling Tower**	**Power Station**	**General Manuf. Overheads**
Activity					
1. Direct Costs					
2. Reallocation of costs					
Cooling Tower					
Power Station					
General M. Overh.					
Total 2.					
3. Total Costs					
4. Unitary Costs					

2. Calculate the COGM (total and per tonne) of packed fruits **[2 marks]**

3. Present the Profit and Loss Account by Function for December/2017. **[2 marks]**
(**note:** consider a COGM per unit = 600 €/tonne if you haven't solved question 2)

4. Assume now that direct costs of cost centres are comprised of the following manufacturing variable and fixed costs:

Description	Refrigerating Chambers	Calibration & Packing	Cooling Tower	Power Station	General Manuf. Overheads
Direct costs					
• Variable	4.000 €	8.060 €	5.025 €	1.300 €	----
• Fixed	400 €	1.000 €	2.500 €	1.050 €	4.600 €

4.1. Considering that Fresh Fruits adopts Full Costing based on Practical Capacity (FCPC) and that each cost centre is operating below its practical capacity by 20%, estimate the impact on COGM, COGM per unit and Profit Before Taxes of this situation (explain your answer without recalculating cost centre's unitary costs). **[2,5 marks]**

4.2. Calculate the breakeven point in volume and euros. **[2 marks]**

CASE 2

FunTime, Ltd. manufactures video game machines. FunTime prepares monthly performance reports based on variable standard costs. Standard costs for video game machines are as follows:

Description	Standard Cost per Unit		
	Quantity	Cost	Total
1. Direct Materials			
• Housing unit	1 unit	20€	20€
• Printed circuit boards	2 boards	15€	30€
• Reading heads	4 heads	10€	40€
2. Direct labour	4,5 hours	8,(8)€	40€
3. Variable overhead*		2€	9€
4. Total standard cost per unit			139€

*Applied on the basis of DLH.

The following table comprises information on the reconciliation between actual and predicted profit for December 2017:

Reconciliation Report – December 2017	
Budgeted profit	?
Sales price variance	(a)
Sales margin volume variance	12.200 Favourable
Direct materials volume (usage) variance	(b)
Direct materials price variance	-13.900 Adverse
Direct labour volume (efficiency) variance	(c)
Direct labour price (wage rate) variance	-6.348,(8)€ Adverse
Variable overhead volume (efficiency) variance	(d)
Variable overhead price (expenditure) variance	(e)
Actual Profit	(f)

Other information:

- In December 2017, both actual production and sales reached 2.200 units. The budgeted and actual unit sales price in December were the same, at 200€;
- The usage report presented below has been prepared:

Description	Usage Report for December 2017	
	Actual Quantity	Actual Cost
1. Direct Materials		
• Housing unit	2.200 units	44.000€
• Printed circuit boards	4.700 boards	75.200€
• Reading heads	?	101.200€
2. Direct labour	9.800 hours	93.460€
3. Variable overhead		18.800€

REQUIRED:

1. Prepare the Static and Flexible Budgeted Profit and Loss Account for December 2017; **[2,5 marks]**

2. Fill in the missing information (variables (a), (b), (c), (d), (e) and (f)) in the Reconciliation Report prepared for December 2017; **[4 marks]**

(a) _____ (b) _____

(b) _____ (d) _____

(e) _____ (e) _____

(f) _____

Calculation:

3. Comment the following statement: “The controllability principle demands that the evaluation of sales manager’s performance is based exclusively on sales price variance” **(Maximum: 10 lines)**. **[1,5 marks]**

1 _____

2 _____

3 _____

4 _____

5 _____

6 _____

7 _____

8 _____

9 _____

10 _____