

REGULAR EXAM

May 30, 2019

Length: 120 minutes + 30 minutes (extra-time)

ID STUDENT 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.

PART I (8 marks)

LESS&MORE, Co. is a French manufacturing company that produces a single manufactured product. At the beginning of January 2019 the company decided to change its cost accumulation system (costing system) from the one it adopted to calculate COGM. Profit and loss accounts of April 2018 and April 2019 are presented below:

P&L	April 2018	April 2019
Sales	24.000€	27.000€
Cost of sales + Under (or over)-recovery of overheads	(16.000€)	(17.750€)
Non-manufacturing costs	(5.000€)	(5.500€)
Profit before taxes	3.000€	3.750€

The company has also available the following information:

	April 2018	April 2019
Actual production (units)	1.000	1.000
Practical capacity of production (units)	800	800
Unit variable manufacturing cost	10€	10€
Manufacturing fixed costs	10.000€	10.000€
Non-manufacturing fixed costs	1.000€	1.000€
Unit non-manufacturing variable costs	5€	5€

The Company is using **LIFO** as method of valuation the stocks.

REQUIRED:

1. Calculate sales volume in April 2018 and April 2019. [1 mark]
2. Identify the costing system used in each year (assume sales volume were in April 2018 = 800 units and in April 2019 = 900 units). [2,5 marks]
3. Compute BEP** (breakeven in €) in April 2018. [1,5 mark]
4. Calculate operating leverage in April 2019. Use operating leverage to estimate Profit Before Taxes if sales volume in April is lower in 15%. [1,5 marks]
5. Which cost accumulation (costing system) system should the company adopt for supporting short-term decisions? Explain your answer. (maximum: 10 lines) [1,5 marks]

PART II (7 marks)

Alpha, Ltd. is a manufacturing company that was created on 1st January, year N+1 to produce and sell product X. The following information has been obtained from its annual budget of year N+1:

Description	Year N+1	Collection Period / Payment Terms
1. Receipts		
Sales Revenues + VAT	258.300	60 days
2. Payments		
Purchases + VAT	113.652	30 days
Conversion Costs	24.150	15 days
Non-manufacturing costs	28.600	In the month
VAT	28.980	60 days
Total Payments	195.382	
3. Cash Balance	+62.918	

Balance Sheet on 1st January, Year N+1

ASSETS		EQUITY + LIABILITIES	
Equipment	360.000€	EQUITY	400.000€
Cash	40.000€	LIABILITIES	0€
TOTAL ASSETS	400.000€	TOTAL EQUITY + LIABILITIES	400.000€

Other available information pertaining to year N+1:

- Sales, purchases and the remaining activity of the company is regular throughout the year;
- Annual depreciations = 36.000€ (20% of these depreciations are manufacturing);
- Production of finished goods is regular throughout the year. Finished goods at the end of the year should represent 1 month of production;
- Closing stocks of direct materials = 44.400€;
- The company aims to get a bank loan of 100.000€ on 1st May, year N+1, which should be paid in the two following years: 1st May, year N+2 and 1st May, year N+3. The loan bears annual interests at an annual interest rate of 5%;

- It is planned the purchase of an additional production line on 30rd September, year N+1 (cost of the equipment = 200.000€). Payment should occur during the following month;
- The difference between VAT charged to customers and VAT paid to suppliers should be calculated in the end of each month and paid to State according to the payment terms of 2 months;
- The company adopts Total Full Costing.

REQUIRED:

1. Prepare the Financial Budget for year N+1; **[1 mark]**
2. Present the Profit and Loss Account of year N+1; **[3 marks]**
3. Prepare the Balance Sheet on December 31, year N+1; **[3 marks]**

PART III (5 marks)

The Company **SanInvest** is dedicated to the manufacture of Product F, having made the following forecasts for year N:

Sales	300 tonnes X 1.000€	300.000€
Direct Materials Used	600 tonnes X 250€	150.000€
Conversion Costs	4.500 MH X 10€	45.000€
Total Contribution Margin		105.000€
Fixed Costs		40.000€
Profit Before Taxes (PBT)		65.000€

However, forecasts did not materialize, as sales increased to 400 tonnes and profit before taxes unexpectedly declined to 34.000€.

REQUIRED:

1. Compute the sales contribution margin volume variance. Show calculations and explain the variance meaning. **[1 mark]**
2. Knowing that the actual value of the consumption of the materials was 234.000 € and that its actual unit cost was 260 € per tonne, what is the usage (volume) variance of the materials? Support your answer with calculations. **[1 mark]**
3. Knowing the price variance of the conversion costs is zero and that the efficiency (volume) variance is favorable in 8.000€, calculate the number of machine hours actually consumed. **[1 mark]**
4. Point out one possible cause that explains the favorable efficiency (volume) variance in conversion costs. **[1 mark]**
5. Knowing that the actual Fixed Costs were 40.000€, what is the variance that had more influence (in terms of absolute value – not percentage) on the profit before taxes the company actually achieved in year N? Calculate the value of this variance. **[1 mark]**