Welcome to the Management Accounting Midterm,

The exam, which lasts for 90+30 minutes, is composed of **6 parts**, comprising multiple choice questions, short essays and numerical questions.

The exam has a **hybrid format**: all **questions are on Wiseflow**, answers to **multiple choices** and **essays must be on Wiseflow**, while **numerical questions** should be solved **on paper**. **Answer each part in a separate answer sheet**.

Multiple choice questions **include a penalty for wrong answers** (-0.2), but no justification is required. For each question, there is **one and only one correct answer**.

You are required to **show the supporting calculations** to numerical questions, otherwise, they will **not be marked**. In intermediate calculations, if needed, round to **2** decimals.

Unclear answers will not be marked.

The exam is closed-book and only basic or scientific calculators are allowed.

You are expected to comply with Nova SBE's Code of Honour. Unethical behaviour will not be tolerated.

Best of luck!

Management Accounting Teaching Team

Teaching Team Tip: You can freely navigate back and forward, avoid getting stuck into questions:).

Do not write anything



## [2 Points]

Aikea, a furniture manufacturer, which uses FIFO, has shown the following data regarding year N:

	Opening Inventory	Closing Inventory
Of finished goods	300 000 €	?
Of work in progress goods	200 000 €	155 000 €
Total	300 000 €	?

Manufacturing Costs	Selling Costs	G&A Costs	Financial Costs
1 000 000 €	50 000 €	42 500 €	22 000 €

Movements in Finished Goods	Units
Production	95 000
Sales	60 000
Closing Stock	65 000

**1.1)** Knowing that the unit selling price is 15 €, Prepare the P&L Account by Function (according to Management Accounting).

#### **ANSWER ON PAPER**

Answer on Paper Only

### [4 Points]

**Amazen Company** trades several commodities. Until last year, the Company used a traditional costing system with Cost of Sales as the single allocation base to allocate its overheads.

More recently, the Company decided to adopt activity-based costing system (ABC) to better understand the profitability per client. After conducting interviews with the relevant personnel, the steering committee, assisted by consultants, identified three activities cost centers, split the overheads by the activities and computed their cost drivers, as shown below:

Activity	Cost Driver	Cost Driver Rate
Processing an order	Number of orders	20 €
Adjusting urgent orders scheduling	Number of urgent orders	40 €
Providing client support	Number of phone-calls	10 €

Regarding last year, ABC provided the following information about their only two clients:

	Client A	Client B
Sales	50 000 €	20 000 €
Cost of Sales	32 000 €	8 000 €
Number of orders	300	100
% of urgent orders per client	80%	30%
Number of phone calls	290	30

2.1) Compute the profit per client using the activity based costing implemented by Amazen.

#### **ANSWER ON PAPER**

Answer on Paper Only

2.2) Compute the profit per client using the traditional costing system previously used by Amazen.

#### **ANSWER ON PAPER**

Answer on Paper Only

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2.3) Comment the results obtained in the previous questions. Suggest a measure that Amazen can take to improve

profitability, based on information provided by the ABC system. (Note: You can use bullet points)



The **primary** objective of management accounting is:

Α	To provide potential investors with useful information to decision making
В	To provide banks and other creditors with useful information to decision making
С	To provide management with useful information for planning and control operations
D	To assist the shareholders in security valuation
Е	To provide accountants with information about taxable income
F	None of the others



Under Variable Costing, an example of a product cost is:

Α	The insurance on factory equipment
В	Commissions paid to the sales team
С	The property taxes on the factory building
D	None of the others



Traditional costing systems were adequate when...

Α	There was intense global competition
В	Companies manufactured a lot of products
С	Information processing costs were low
D	Overhead costs were very high
Е	Direct costs were the dominant costs in the company
F	None of the others



**Company Beta** started the month with an opening inventory of WIP of 500 € and ended the month with a closing inventory of WIP of 100 €. There were some units in the opening inventory of finished goods, but there are not any on the closing inventory. Which of the following is true?

Α	Company Beta's factory didn't work during the month
В	Monthly sales (of finished goods) were higher than the monthly production, in units
С	The COGS during the month is the same as in the previous month
D	The Manufacturing Cost during the month is the same as the COGM
Е	None of the others



**TastyPasta**, which uses **LIFO**, is a company that produces and sells one type of pasta. The following information was collected regarding October N:

Costs	Variable	Fixed
Manufacturing	6 000 €	9 000 €
Non-Manufacturing	2 500 €	5 500 €

Production	1 500 kg
Practical Capacity	1 800 kg
Sales	1 450 kg
Unit selling price	25 €

Knowing that the company adopts **Full Costing Based on Practical Capacity**, how much is the **operating profit** for the month of October?





NextGen Devices is a Portuguese manufacturer of printers and laptops. Consider the information provided below:

Actual data	Year N
Machine Hours used by Printers	5 567 Mh
Machine Hours used by Laptops	4 926 Mh
Manufacturing overheads	507 000 €
Non-manufacturing overheads	33 000 €

Knowing that in year N NextGen had budgeted manufacturing overheads at 45 € per machine hour, what is the amount of under/over recovery of overheads in year N?

Α	34 815 € Over-recovery of Overheads
В	34 815 € Under-recovery of Overheads
С	67 815 € Over-recovery of Overheads
D	67 815 € Under-recovery of Overheads
Е	None of the others



### [3 Points]

**MANCUNIAN, CO.** manufactures and sells two finished goods (products A and B). Consider the information below regarding October N:

#### **Inventory Movements and Sales**

	Product A	Product B
Sales	275 tonnes	270 tonnes
Selling Price	62 €	75 €
Production	300 tonnes	270 tonnes
Opening stock <sup>1</sup>	85 tonnes	0 tonnes

- 1. Valued at 18 € under Variable Costing and 25 € under Total Full Costing
  - LIFO has been adopted as the inventory valuation method.

#### **Production Information**

Per Tonne	Product A	Product B
Direct Materials	2.4 units	1.8 units
Direct Labor	0.4 Lh	1 Lh

- Cost of Direct Materials: 2.5 €/unit
- There are neither opening stocks nor closing stocks of direct materials
- Cost of Direct Labor: 7.5 €/Lh

#### Manufacturing Overheads:

Description	Amount
Consumption of indirect materials in the factory	690 €
Energy consumption	1 230 €
Depreciations of manufacturing equipment	900 €
Wages of manufacturing personnel	2 050 €
Insurance of the factory building	1 650 €
Total	6 520 €

- The consumption of indirect materials and energy are variable costs while the remaining items are fixed
- Manufacturing overheads are allocated equally between the two products

#### Non-Manufacturing Fixed Overheads:

Description	Commercial Department	Administrative Department
External Supplies and Services	1 420 €	1 277 €
Salaries	2 435 €	2 290 €
Insurance	1 200 €	1 160 €
Depreciation	3 300 €	845 €
Total	8 355 €	5 572 €

#### Variable Non-Manufacturing Costs:

- The company supports sales commissions of 5% on sales revenues of each product.
- **4.1)** Assuming the company uses **Variable Costing**, prepare the Profit and Loss Account by Function using the **Contribution Margin Format** .



Answer on Paper



### [2 Points]

**Guilty Juices** produces cold-pressed juices. To extract the juice, fruits and vegetables are pressed in the Extraction Department to obtain the final product.

For every five units of raw fruits and vegetables (direct material) that enter the process, one unit of juice is produced. However, under efficient conditions, 50% of the production is lost due to pulp, seeds, and other waste.

The following information was collected regarding the month of September:

Manufacturing Costs	Extraction Dept.
Materials	10 000 €
Labor	2 000 €
Overheads	8 000 €
Total	20 000 €
Inputs - Direct Materials (units)	100 000
Outputs – Finished Goods (units)	8 500

- There was no opening or closing stocks of finished goods and work-in-progress
- The scrap value is 0 € for all losses
- 5.1) Compute the value of the Other Operating Costs generated in this period by the Abnormal Losses.

#### **ANSWER ON PAPER**

Answer on Paper

**5.2)** Knowing that the selling price is 2.5 €, calculate the **Cost of Sales** and the **Operating Profit**. *If you didn't answer 5.1, consider Other Operating Costs of 2 000* €.

#### **ANSWER ON PAPER**

Answer on Paper



### [3 Points]

The **CookieMonster Company** is a company that produces chocolate and ginger cookies. The company is divided in the following homogeneous cost pools:

- Mixer (Mh as unit of work), where all the ingredients are mixed
- Oven (Mh as unit of work), where the cookies are baked
- Maintenance (Lh as unit of work), that ensures the maintenance of all production equipment
- Cleaning (Lh as unit of work), that clean the factory

Consider the information below for the month of October:

#### Movement of finished goods

	Chocolate cookies	Ginger cookies
Opening stock	25 ton at 900 €/ton	21 ton at 925 €/ton
Production	100 ton	110 ton
Closing stock	30 ton	25 ton

#### Prime costs:

	Chocolate cookies	Ginger cookies
Chocolate/Ginger	35 ton at 475 €/ton	45 ton at 525 €/ton
Other direct materials	55 000 €	60 000 €
Direct labor	3 500 €	4 000 €

Manufacturing costs directly assigned to each homogeneous cost pool:

	Mixer	Oven	Maintenance	Cleaning
<b>Directly Assigned Costs</b>	21 706 €	12 309 €	?	?

#### Activity of the homogeneous cost pools

Users/ Suppliers	Mixer	Oven	Maintenance	Cleaning
Chocolate cookies	950 Mh	850 Mh		
Ginger cookies	1 230 Mh	950 Mh		
Mixer			180 Lh	400 Lh
Oven			220 Lh	200 Lh
Maintenance				200 Lh

Cleaning	0.100 M/h	4 000 MIL	100 Lh	200 1 h
Total	2 180 Mh	1 800 Mh	500 Lh	800 Lh

#### Non-manufacturing costs:

• Selling costs: 2 500 €

Administrative costs: 5 000 €
Financial costs: 1 500 €

#### Selling price (per ton):

Chocolate cookies: 2 500 €
Ginger cookies: 3 000 €

#### Other information:

- Cookie Monster uses **FIFO** as the method of inventory valuation
- There were no changes in Work-in-progress
- Cookie Monster uses the simultaneous equation method
- The cost per unit of work of Mixer and Oven was 11.75 € and 8.65 €, respectively
- **6.1)** Calculate the **Costs of Goods Manufactured** of **Chocolate Cookies**.

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Answer on Paper

**6.2)** Calculate the **Manufacturing costs directly assigned** to **Cleaning**.

#### **ANSWER ON PAPER**

Answer on Paper