



PAMIBIA UNIVERSITY
OF SCIENCE AND TECHNOLOGY

FACULTY OF COMMERCE, HUMAN SCIENCES AND EDUCATION

DEPARTMENT OF ECONOMICS, ACCOUNTING AND FINANCE

QUALIFICATION: BACHELOR OF ACCOUNTING	
QUALIFICATION CODE: 07BOAC	LEVEL: 6
COURSE CODE: CMA611S	COURSE NAME: COST & MANAGEMENT ACCOUNTING 201
SESSION: JULY 2023	PAPER: THEORY AND CALCULATIONS
DURATION: 3 HOURS	MARKS: 100

SECOND OPPORTUNITY EXAMINATION QUESTION PAPER	
EXAMINERS	Ms Kangala, H. and Sheehama, K.G.H.
MODERATOR	Tjondu, K.

INSTRUCTIONS

- Answer ALL the questions in blue or black ink only. **NO PENCIL.**
- Start each question on a new page, number the answers correctly and clearly.
- Write clearly, and neatly showing all your workings/assumptions.
- Work with at least four (4) decimal places in all your calculations and only round off final answers to two (2) decimal places.
- Questions relating to this examination may be raised in the initial 30 minutes after the start of the examination. Thereafter, candidates must use their initiative to deal with any perceived errors or ambiguities and any assumptions made by the candidate should be clearly stated.

PERMISSIBLE MATERIALS

- Silent, non-programmable calculators

THIS QUESTION PAPER CONSISTS OF 4 PAGES (excluding this front page)

QUESTION 1**(16 Marks)**

The following information is available from the books of Jones Ltd.

Actual Manufacturing cost per unit:	N\$
Fixed	N\$4.00
Variable (Material – N\$2; Labour – N\$3; Overheads – N\$1)	N\$6.00
Actual Selling and administrative cost:	
Total fixed selling and administrative cost	N\$8,000
Variable per unit	N\$2.00
Actual Selling price per unit	
	N\$15.00
Company Budgeted Figures:	
Pre-determined overhead absorption rate per unit	N\$5.00
Normal monthly production	9,000 units

In March 2023, Jones Ltd produced and sold 9,000 units, while in April 2023, Jones manufactured 8,500 units and sold 8,000 of them.

Required:

1. Compile separate Statements of Profit or Loss for the month of April 2023 in accordance with:
 - a) The absorption costing method (8 Marks)
 - b) The variable costing method (8 Marks)

QUESTION 2**(19 Marks)**

Flowers Ltd sells two products, Roses and Tulips, with contribution margin ratios of 40% and 30% respectively. Roses are sold at N\$50 per unit, while Tulips sell at N\$25 per unit. The company's fixed costs amount to \$72,000 a month. Monthly sales average 30,000 units of Roses and 45,000 units of Tulips.

Required:

- a) Calculate the weighted average contribution (4 Marks)
- b) Calculate the break-even sales value (N\$) of the individual products (5 Marks)
- c) Flowers Ltd is considering spending an additional \$9,678.40 a month on advertising, giving more emphasis on the sale of Roses and less emphasis on the sale of Tulips. If its analysis is correct, sales of Roses will increase to 39,600 units a month, but sales of Tulips will fall to 32,400 units a month.
 - i. Recalculate the break-even in sales volume, at this new product mix. (4 Marks)
 - ii. Should the proposal to spend the additional \$9,678.40 a month be accepted?

Show all your calculations. (6 Marks)

QUESTION 3**(30 Marks)**

Nicola's Pets produces cat food for the retail market. The production process involves two stages, mixing and baking. Manufacturing cost comprises materials, which are added at the start of the process, and conversion costs (labour and overheads), which are incurred evenly throughout production. The following details relate to the mixing process for the month of March 2023:

	Degree of completion	N\$
Opening WIP (39 000 kgs)		
		67
- Material	60%	350
		12
- Conversion cost	40%	045
Materials input and costs incurred		
		837
- Materials (630 000 kgs)		900
		396
- Conversion costs		240
Output 646 500 kgs		
Closing WIP (22 500 kgs)		
- Materials	60%	
- Labour	40%	

Required:

- Briefly outline the circumstances where process costing may be suitable as a method of valuing production (2 marks).
- Assume that Nicola's Pets uses the weighted average method of valuing inventory. Prepare a quantity schedule or physical units, equivalent units and equivalent unit cost for the materials and the conversion costs (14 marks).
- Assume that Nicola's Pets uses FIFO method of valuing inventory. Prepare a quantity schedule or physical units, equivalent units and equivalent unit cost for the materials and the conversion costs (14 marks).

QUESTION 4**(15 Marks)**

Navy XYZ produces 2 products Navy Green and Navy Blue that are produced from one process. The following costs are incurred in the process:

Direct materials: 3,500 kg valued at N\$45,000.

Direct labour – N\$25,000

Overheads – N\$20,500

The process produces 1,000 units of product Navy Green and 2,000 units of product Navy Blue. Upon analysis, the production manager expects 500kgs to come out of the process as waste, which are sold at N\$25 per kg.

Sales information for the 2 products are as follows:

Product Navy Green – 800 kgs at a market value of N\$70 per kg

Product Navy Blue – 1,600 kgs at a market value of N\$50 per kg

Before selling products, Navy XYZ incurs further processing costs as follows:

Product Navy Green – N\$6,580

Product Navy Blue – N\$12,420

The company allocates Joint costs based on the net realizable value method and the net sales of waste and by-products are used to reduce joint costs.

Required:

- a) Allocate joint cost to the products of Navy XYZ. (5 marks)
- b) Draw up the income statement to determine the gross profit of the 2 products. (10 marks)

Question 5**20 Marks**

Morrie Limited makes three types of bed sheets – the Linen, Silk, and Satin. A traditional product costing system is used at present, although an activity-based costing (ABC) system is being considered. Details of the three products for a typical period are:

	Hours per unit		Materials	Production
	Labour hours	Machine hours	Cost per unit (N\$)	Units
Linen	2.5	2	20	3,000
Silk	1.5	2	15	4,000
Satin	1	1	25	6,000

Direct labour costs N\$5 per hour and production overheads are absorbed on a machine hour basis. The overhead absorption rate for the period is N\$30 per machine hour.

Actual production overheads amount to \$900,000 and further analysis shows that the total production overheads costs can be divided as follows:

	%
Set-up costs	30
Machine running cost	25
Materials handling	20
Inspection cost	25
Total production overhead	<u>100</u>

The following total activity volumes are associated with each product line for the period as a whole:

	Number of set ups	Number of movements of materials	Number of inspections
Linen	60	84	200
Silk	120	24	650
Satin	420	12	150

Required:

- Calculate the cost per unit for each product using traditional methods, absorbing overheads based on machine hours. (3 marks)
- Calculate the cost per unit for each product using Activity based costing (work to two decimal places). (15 marks)
- Discuss 2 differences between traditional absorption costing and Activity Based Costing (ABC). (2 marks)

End of question paper.

