NAMIBIA UNIVERSITY
OF SCIENCE AND TECHNOLOGY

FACULTY OF COMMERCE, HUMAN SCIENCES AND EDUCATION

DEPARTMENT OF ECONOMICS, ACCOUNTING AND FINANCE

QUALIFICATION: BACHELOR OF ACCOUNTING	
QUALIFICATION CODE: 07BGAC	**LEVEL:** 6
COURSE CODE: CMA611S	**COURSE NAME:** COST & MANAGEMENT ACCOUNTING 201
SESSION: JULY 2024	**PAPER:** THEORY AND CALCULATIONS
DURATION: 3 HOURS	**MARKS:** 100

SECOND OPPORTUNITY EXAMINATION QUESTION PAPER	
EXAMINERS	Namwandi, H., Mbangula P., and Sheehama, K.G.H.
MODERATOR	Kangala, H.

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 **[25 Marks]**

North-region Corporation makes a single product called OMBIKE/KASHIPEMBE which is sold for N$300. It is based upon the organization's current normal operating capacity of 3 000 units per period. Currently, the organization can sell all that it produces, and it has no inventory of any kind (raw materials, work-in-progress or finished goods) on hand.

At this level of production, the costs per unit are:

	N$
Direct material	150 000
Direct labour (5 hours per unit)	75 000
Manufacturing overheads	270 000
Production/Manufacturing cost	495 000
Administration and selling	135 000
Total costs	550 000

Manufacturing overheads have been shown to have the following cost-volume relationship:

Direct labour hours per period	5 000	6 250	7 500
Manufacturing overheads	N$375 000	N$393 750	N$412 500

The administration and selling cost comprises a sales commission, which is calculated at 5% of the selling price and is incurred for each unit sold. The balance of the administration and selling costs is fixed in nature. All fixed production overhead costs are budgeted on the basis of 20 000 direct labour hours per year.

Actual fixed production overheads of N$300 000 for the period were in line with the budget for that period.

The industry in which North-region Corporation operates is becoming extremely competitive. North-region Corporation is considering changing its method of inventory valuation from absorption costing to direct costing. It is expected that all other variable costs per unit and other fixed costs will remain unchanged or the foreseeable future. The managing director has asked you to undertake various financial analyses as shown in the requirements below, to assess the impact of the proposed changes. In all cases, you are informed that the Corporation had **actual production of 2 800 units and had sold 2 500 units.** The business did not have any inventory at the beginning of the period.

You are required to:

a) Calculate the predetermined overhead rate (POR) or overheads absorption rate. (2 marks)
b) Calculate the contribution margin per unit. (5 marks)
c) Compute total fixed costs (2 marks)
d) Prepare a statement of profit or loss for the period using Absorption costing system. (9 marks)
e) Determine the net income/net profit using direct costing system without preparing statement of profit or loss. (3 maks)
f) Explain the reasons for any difference in the reported profit under the two costing systems.

QUESTION 2 **[25 Marks]**

PART A **(18 marks)**

Geoffrey Ltd manufactures a product in two departments. The following information is available in respect of Department 1 for April 2024:

	Amount (N$)	Units
Opening inventory (WIP) 1 April 2024		10 000
Stage of completion:		
Direct material	23 000	40%
Direct labour and factory overheads	17 600	60%
Units started into production		50 000
Completed and transferred to Department 2		40 000
Closing inventory (WIP) 30 April 2024		20 000
Stage of completion:		
Direct material		80%
Direct labour and factory overheads		70%
Costs incurred during the week:		
Direct material	98 800	
Direct labour and factory overheads	38 400	

You are required to:

a) Briefly outline the circumstances where process costing may be suitable as a method of valuing production and provide examples. (4 marks)

b) Assume that Geoffrey Ltd uses the FIFO method of valuing inventory. Prepare a quantity schedule for physical units, equivalent units and equivalent unit costs for the materials and the conversion costs. (14 marks)

PART B **(7 marks)**

Shawana Ltd manufactures three joint products in the same production process. Joint costs are apportioned on the basis of the number of units manufactured for each product. All three products can be sold either at the split-off point or after further processing. Total joint costs for the past month amounted to N$60 000. The following details are presented to you:

Product			After further production processing	
	Units produced and sold	Selling price	Additional costs	Selling price
	N$	N$	N$	N$
Alpha	1 000	8.00	5 000	18
Beta	2 500	12.00	12 500	16
Gamma	2 500	10.00	12 500	17

REQUIRED:

Calculate the total net income of Shawana Ltd after processing further. (7 Marks)

QUESTION 3 **[25 marks]**

Rob Ltd manufactures a single product. During the past five years the company has experienced a steady growth in sales. However, increased competition has led the directors to believe that an aggressive advertising campaign will be necessary to maintain the company's present growth.

To prepare for next year's advertising campaign the company's accountant has prepared and presented the following data for the current year (2023):

Cost schedule:

Variable costs:
Direct materials N$3,25 per unit
Direct labour N$ 8,00 per unit
Variable overheads N$2,50 per unit

Fixed costs:
Manufacturing N$25 000
Selling N$40 000
Administrative N$70 000

Selling price per unit N$25,00
Sales (2023) 20 000 units

The company has set the sales target for 2024 at a level of 22 000 units.

Required:

a) Calculate the company's net profit for 2023. (5 marks)
b) Calculate the company's break-even point in sales value for 2023. (6 marks)
c) The directors believe that an additional selling expense of N$11 250 for advertising in 2024, with all other costs remaining unchanged, will be necessary to attain the sales target. Calculate the net profit for 2024 if the additional amount is spent on advertising. (5 marks)
d) How many more units must be sold in 2024 in order to break even if the additional N$11 250 is spent on advertising? (3 marks)
e) Outline six assumptions for using CVP analysis. (6 marks)

Question 4 **[25 Marks]**

Poller Ltd manufactures two products, namely A and B. The company operates an absorption costing system according to which all production overheads are gathered in a single cost centre and allocated to products using direct labour cost as an allocation basis. An ABC system has been introduced recently.

Budgeted information for the following financial year is as follows:

	Product A N$	Product B N$	Total N$
Direct material cost per unit	90	10	
Direct labour cost	100 000	900 000	1 000 000
Production overheads:			
Machine set-up costs			100 000
Design costs			300 000
Other overheads			1 100 000
Total overheads			1 500 000
Number of units manufactured	1 000	9 000	10 000
Number of machine set-ups	50	50	100
Number of design hours	2 000	8 000	10 000

Other overheads are allocated to individual products based on direct labour costs.

Required:

a) Calculate the unit cost of each product using the absorption costing system. (6 marks)
b) Calculate the unit cost of each product using the ABC system. (11 marks)
c) Discuss the difference in cost that is calculated in the results of (a) and (b). (4 marks)
d) Explain the circumstances under which an activity-based costing system would produce similar product costs to those produced using a traditional absorption costing system. (4 marks)

End of question paper.