



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: 07BGAC	LEVEL: 5
COURSE CODE: CMA512S	COURSE NAME: COST & MANAGEMENT ACCOUNTING 102
SESSION: NOVEMBER 2025	PAPER: THEORY AND CALCULATIONS
DURATION: 3 HOURS	MARKS: 100

FIRST OPPORTUNITY EXAMINATION QUESTION PAPER	
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INSTRUCTIONS
<ol style="list-style-type: none">1. This question paper consists of FIVE (5) questions2. Answer ALL questions in blue or black ink only. NO PENCIL.3. Start each question on a new page, and number the answers correctly and clearly.4. Write clearly and neatly, showing all your formulas and workings.5. 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 EXAMINATION QUESTION PAPER CONSISTS OF 4 PAGES (Excluding this cover page)

QUESTION 1**[10 MARKS]**

Match the terms and concepts to the appropriate defining details, formula, or example in the table below. Provide your answers by only giving the number and the corresponding letter. E.g., 1. b

Terms and Concepts	Defining details, formula, or example
1. Mixed costs	a) Quantitative and qualitative information used by management for planning, decision making and control.
2. Variable cost	b) It is a cost that decreases per unit as activity increases and increases per unit as activity decreases.
3. Sunk costs	c) Production overhead cost plus direct labour cost.
4. Incremental costs	d) The potential benefit is giving up when one alternative is selected over another.
5. Financial Accounting	e) It is a cost that remains constant per unit when activity changes within the relevant range.
6. Management Accounting	f) It is a cost that contains both fixed and variable costs.
7. Fixed cost	g) Direct materials costs plus direct labour costs plus other direct costs.
8. Opportunity cost	h) A cost incurred in the past that future decisions cannot change.
9. Conversion costs	i) A process of identifying, recording, classifying, and reporting historical financial information for internal and external users.
10. Prime costs	j) A cost that differs between 2 alternatives

QUESTION 2**[25 MARKS]**

Mamabolo Porcelain (Pty) Ltd, a well-known manufacturer of crockery in KwaZulu-Natal, is considering launching a new line of mugs. The mugs will be hand-painted in an African theme. The company incurred N\$3 850 on market research in the previous year, which indicated that the mugs would be particularly popular with tourists visiting Namibia.

The company will employ a trained artist to paint the mugs, who will be paid a fixed wage of N\$30 per hour. The artist will be able to paint one mug every hour. The company will also employ a new machine operator at a wage of N\$40 an hour, who will work approximately 190 hours during the month. The company will recruit a new supervisor for the manufacturing of mugs, and his monthly salary will amount to N\$ 17,000.

The mugs will be manufactured from porcelain which can be purchased at a cost of N\$60 per mug. Indirect materials required will amount to N\$15 per mug. The company has paint on hand, which was purchased six months ago for N\$ 2,800, that can be used for the mugs and should be treated as direct materials. The mugs will be baked in the same oven as the other crockery, the oven is currently not used to full capacity. The oven has a book value of N\$240 000. Electricity related to mug manufacturing will be N\$ 4,300 per month.

The company has budgeted for the production and sale of 380 mugs for the month. A sales representative will sell the mugs for a commission of N\$10 per mug. Marketing and distribution costs will amount to N\$7 400 per month.

Requirements:

- (a) Explain what a cost object is and identify the cost object for Mamabolo. (2)
- (b) Identify items that are irrelevant (sunk costs) to the decision-making process of Mamabolo, and explain why each is irrelevant. (3)
- (c) Calculate the total prime cost of the new mugs per month. (4)
- (d) Calculate total manufacturing overheads cost of the new mugs per month. (3)
- (e) Compute total non-manufacturing cost of the new mugs per month. (2)
- (f) Calculate the total costs of the new mugs per month. (2)
- (g) Using your calculations in (f) above, calculate the required **sales price per mug** if a gross profit of 25% **on selling price** is required. (2)
- (h) Using your calculations in (f) above, calculate the required **sales price per mug** if a mark-up of 25% **on cost price** is required. (2)

QUESTION 2 (Continued)

- (i) The existing factory maintenance and repairs is N\$195 000 if 115 000 indirect labour hours are worked, and N\$242 250 if 160 000 indirect labour hours are worked.

Requirements:

- 1. Calculate the fixed element of the maintenance and repairs cost for the factory. (2)
- 2. Determine the projected maintenance and repairs cost at a level of 145 000 indirect labour hours. (3)

QUESTION 3**[15 MARKS]**

Fashionista, a self-employed worker started a business of selling Fashion T-shirts by investing N\$200 000 of his savings into the business. He imports the fashion T-shirts from Brazil.

On July 2025, there was a theft of the Fashion T-shirts housed at Fashionista's warehouse. He is unsure of the number of Fashion T-shirts that were stolen. However, with his limited knowledge of accounting this has been an epic fail. Fashionista has asked you to assist in this regard, as you are studying towards your Bachelor of Accounting degree. The following information, as set out below has been provided to you:

- The inventory recovered from the theft amounted to N\$14 400.
- The inventory balance of Fashion T-shirts on hand on 31 July 2025 were 100 at N\$75 each.
- 8 August 2025: 400 Fashion T-shirts were purchased @ N\$220.00 per T - Shirt. The supplier gave a discount of 5% on this price due to early payment.

Date of receipt	Units purchased (T-Shirts)	Cost	Date of dispatch	Units sold (T- Shirts)	Selling Price
7 August 2025	200	N\$43 200 (in total)	12/8/2025	500	N\$250
8 August 2025	400		15/8/2025	50 (see notes 1 below)	
13 August 2025	450	N\$200 (per unit)			

NB: Notes 1: Fashionista returned Fashion T-shirts on 15 August 2025 to the supplier. These Fashion T-shirts relate to the purchase made on 8 August 2025.

Requirements:

Prepare a detailed stores ledger card and calculate the value of remaining closing inventory on 15 August 2025 after the theft took place, using the First-in-first-out (FIFO) inventory valuation method. (15 Marks)

QUESTION 4**[17 MARKS]**

The following information regarding Tekla LTD

Maximum lead time	6 weeks
Minimum lead time	2 weeks
Maximum usage	8 000 units per month
Minimum usage	4000 units per month
Purchase price per unit	N\$50
Average annual storage cost per unit	N\$2.20
Cost to place an order	N\$120
Prime interest rate	11.50%
Production weeks per annum	48

Requirements: Assume 4 weeks are equivalent to 1 month		MARKS
a)	Re-order level	3
b)	Minimum stock level	3
c)	Economic Order Quantity (EOQ)	3
d)	Order cost per annum	3
e)	Explain 5 (five) the financial benefits that can be derived from a JIT system.	5

QUESTION 5

[33 MARKS]

Nam-Luxury cc has been decided to create four cost centres: Residential and Catering deal directly with customers, while Housekeeping and Maintenance are internal service cost centres. The following overhead details have been estimated for the next period:

	Residential N\$	Catering N\$	Housekeeping N\$	Maintenance N\$	Total N\$
Rent and rates					3 700
Contents insurance					1 400
Heating and lighting					1 800
Depreciation on equipment, etc.					3 700
Total					22 400

	Residential	Catering	Housekeeping	Maintenance	Total
Floor area (m ²)	2 750	1 350	600	300	5 000
Value of equipment, etc.	N\$350 000	N\$250 000	N\$75 000	N\$75 000	N\$750 000
Number of employees	20	20	15	5	60
Indirect material costs	N\$1 400	N\$2 300	N\$2 700	N\$900	N\$7 300
Indirect labour costs	N\$1 600	N\$1 300	N\$1 100	N\$500	N\$4 500

The following information is also available:

In the period it is estimated that there will be 2 800 guest-nights and 16 000 meals will be served. Maintenance works are allocated as follows: 20% for Housekeeping, 30% for Catering, and 50% for Residential. Housekeeping works 70% for Residential and 30% for Catering.

Requirements:

- Prepare an overhead statement showing clearly allocations and apportionments to each cost centre. (25)
- Calculate appropriate overhead absorption rates for Residential and Catering. (2)
- Calculate the under- or over-absorption of overheads if actual results were as follows:
Residential: 3 050 guest-nights with overheads of N\$13 200
Catering: 15 250 meals with overheads of N\$9 800 (4)

END OF EXAMINATION QUESTION PAPER