# ПАTIBIA UПIVERSITY <br> OF SCIEПCE AПD TECHПOLOGY <br> FACULTY OF COMMERCE, HUMAN SCIENCES AND EDUCATION 

DEPARTMENT OF ECONOMICS, ACCOUNTING AND FINANCE

| QUALIFICATION: BACHELOR OF ACCOUNTING |  |
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| QUALIFICATION CODE: O7BOAC | LEVEL: 5 |
| COURSE CODE: CMA512S | COURSE NAME: COST \& MANAGEMENT ACCOUNTING 102 |
| SESSION: NOVEMBER 2023 | PAPER: THEORY AND CALCULATIONS |
| DURATION: 3 HOURS | MARKS: 100 |


| FIRST OPPORTUNITY EXAMINATION QUESTION PAPER |  |
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| MODERATOR | Helmut Namwandi |

## INSTRUCTIONS

1. This question paper consists of FOUR (4) questions
2. 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


## QUESTION 1

For questions 1.1-1.15, just write the answer only (the correct letter chosen) in your answer book and not on the question paper. Do not copy the question again
1.1 If actual output is lower than budgeted output, which of the following costs would you expect to be lower than the original budget?
a) Total fixed costs
b) Total variable costs
c) Fixed costs per unit
d) Variable costs per unit
e) None of the above
1.2 Management accounting has the following functions:
a) Providing information to external parties
b) Estimating costs of products and services
c) Providing information for internal use
d) a and c
e) b and c
1.3 In the code of ethics followed by management accountants, integrity is:
a) Being honest, standing for what is right
b) Being just and unbiased
c) Being courteous and decent
d) Not revealing or disclosing privileged or private information
e) Accepting the consequences of actions and decisions
1.4 In the code of ethics followed by management accountants, confidentiality is:
a) Being honest, standing for what is right
b) Being just and unbiased
c) Being courteous and decent
d) Not revealing or disclosing privileged or private information
e) Accepting the consequences of actions and decisions
1.5 In the code of ethics followed by management accountants, accountability is:
a) Being honest, standing for what is right
b) Being just and unbiased
c) Being courteous and decent
d) Not revealing or disclosing privileged or private information
e) Accepting the consequences of actions and decisions
1.6 Fixed cost per unit:
a) Increases as activity volume decreases
b) Remains constant with volume of activity
c) Increases as activity volume increases
d) Decreases as activity volume increases
e) band c
1.7 A cost that will change in the future due to a decision being made is known as:
a) An opportunity cost
b) A sunk cost
c) A changing cost
d) An incremental cost
e) A relevant cost
1.8 Conversion costs include:
a) Direct labour
b) Direct material
c) Direct material and manufacturing overheads
d) Direct labour and direct materials
e) Direct labour and manufacturing overheads
1.9 Cost unaffected by a choice between alternatives and have been included in the past is:
a) $A$ sunk cost
b) A period cost
c) A product cost
d) A direct cost
e) An indirect cost
1.10 Variable cost per unit:
a) Increases as activity volume decreases
b) Remains constant with volume of activity
c) Decreases as activity volume increases
d) a and b
e) b and c
1.11 A firm's water and electricity account would normally be classified into the following category:
a) Fixed cost
b) Variable cost
c) Stepped fixed cost
d) Semi-variable/mixed cost
e) None of the above
1.12 The following statement is NOT true:
a) Selling expense is an example of a non-manufacturing cost.
b) Prime cost consists of direct material plus direct labour
c) If production increases, total fixed costs will remain constant but will decrease per unit.
d) If production increases, total fixed costs will remain constant but will increase per unit.
e) None of the above

Questions 1.13 and 1.14 are based on the following information:
Bushbuck Ltd supplied the following figures regarding the number of units produced during the past six months together with the corresponding production cost:

| Production units | Production cost (N\$) |
| :---: | :---: |
| 2000 | 64500 |
| 1000 | 60000 |
| 3000 | 68000 |
| 2000 | 65000 |
| 4000 | 72000 |
| 5000 | 75000 |

1.13 According to the high-low method of separating fixed and variable costs, the variable cost rate is:
a) $N \$ 1.75$
b) $N \$ 4.75$
c) $N \$ 2.75$
d) $N \$ 3.75$
e) None of the above
1.14 According to the high-low method of separating fixed and variable costs, the fixed cost is:
a) $N \$ 56250$
b) $\mathrm{N} \$ 42250$
c) $N \$ 37500$
d) $N \$ 47500$
e) None of the above
1.15 A company absorbs overheads on machine hours which were budgeted to be 11250 with overheads of N\$258 750. Actual results were 10980 hours with overheads of N\$254 692.

Overheads were:
a) Over-absorbed by $\mathrm{N} \$ 2152$
b) Over-absorbed by $\mathrm{N} \$ 4058$
c) Under-absorbed by $\mathrm{N} \$ 4058$
d) Under-absorbed by N\$2 152
e) None of the above

## QUESTION 2

[25 MARKS]
Plastic Packaging Limited manufactures and sells plastic containers used in the pharmaceutical industry in Namibia. The factory where production takes place is comprised of two production departments (Cutting and Shaping), and two service departments -(Service 1 and Service 2). The information provided below has been extracted from the company's budget for the next financial year, which ends on 31 March 2024:

| Other Production Overheads | N\$ |
| :--- | ---: |
| Factory rent | 5250000 |
| Factory building insurance | 700000 |
| Plant and machinery insurance | 390000 |
| Plant and machinery depreciation | 585000 |
| Canteen subsidy | 1500000 |


| Allocated overhead cost | N\$ |
| :--- | ---: |
| Cutting Department | 140000 |
| Shaping Department | 160000 |
| Service 1 | 35000 |
| Service 2 | 28000 |

The following information is also provided:

|  | Production Departments |  | Service Departments |  |
| :--- | ---: | ---: | ---: | ---: |
|  | Cutting | Shaping | Service 1 | Service 2 |
| Floor area $\left(\mathrm{m}^{2}\right)$ | 18000 | 12000 | 3000 | 2000 |
| Value of Plant and Machinery (N\$) | 3000000 | 500000 | 250000 | 150000 |
| Number of requisitions | 1000 | 500 |  |  |
| Maintenance hours | 2700 | 2000 | 300 |  |
| Number of employees | 34 | 60 | 4 | 2 |
| Machine hours | 12000 | 2200 |  |  |
| Labour hours | 9000 | 15000 |  |  |

## Additional information:

- Secondary allocation should be done on the following bases:
$>$ Service 1 - number of requisitions
$>$ Service 2 -maintenance hours
- Calculation of the Predetermined/Absorption rate should be done on the following bases:
$>$ Cutting department - machine hours
> Shaping department - labour hours

| REQUIRED: (Hint: work with whole numbers for allocation and re-apportionment) |  | MARKS |
| :---: | :--- | :---: |
| a) | Perform the primary overhead apportionment showing the allocation of each <br> overhead item. Indicate the basis of apportionment for each overhead. | $\mathbf{1 5}$ |
| b) | Using the step method, re-apportion the service department costs and calculate <br> the overhead absorption rate for each production department to two decimal <br> places. | $\mathbf{1 0}$ |

## QUESTION 3

[25 MARKS]
The timesheet of employee Stevens shows that he worked 44 hours during a 40 -hour workweek. The normal overtime remuneration ( $11 / 2 \times$ normal wage) is paid. His normal wage is $N \$ 6$ per hour. Medical aid and pension fund contributions ( $3 \%$ and $5 \%$ of normal wages respectively) are paid on an equal basis by employer and employee. PAYE ( $12 \%$ of taxable income) is the only other deduction being made.

| REQUIRED: (Hint: work with whole numbers for all your calculations) |  | MARKS |
| ---: | :--- | :---: |
| a) | Calculate the net earnings of employee Stevens for the week | $\mathbf{8}$ |
| Assuming that a year consists of 52 working weeks, that Stevens gets 3 weeks of holiday leave per <br> year, and that the enterprise is closed for eight (8) public holidays during the year. Normal idle time <br> is budgeted as $71 / 2 \%$ and a holiday bonus equal to 3 weeks' wages is paid. |  |  |
| b) | Determine the total annual labour cost to the nearest dollar | 6 |
| c) | Calculate the annual productive labour hours to the nearest whole number | $\mathbf{7}$ |
| d) | Define the Labour Recovery Rate and determine the labour tariff per hour for <br> employee Stevens to the nearest dollar | 4 |

## QUESTION 4

The Patio is a manufacturer of garden furniture that has consistently used weighted average costing (AVCO) in valuing inventory. The management of the Patio is now interested in knowing the effect of using FIFO in valuing inventory instead of using AVCO. The following transactions for the Patio were recorded for the period:

| 2 August | Opening inventory | 100 units | @N\$50.00 per unit |
| :--- | :--- | :--- | :--- |
| 5 August | Received | 120 units | @N\$57.50 per unit |
| 6 August | Issued/sales | 200 units |  |
| 7 August | Received | 180 units | $@ N \$ 60.00$ per unit |
| 8 August | Issued/sales | 150 units |  |
| 9 August | Return to supplier units purchased on 7 August | 20 units |  |


| REQUIRED: |  | MARKS |
| ---: | :--- | :---: |
| a) | Prepare an inventory ledger card of the Patio for the month of August using <br> four columns showing the date, receiving, issuing, and balancing columns. Each <br> column contains quantity, unit price and the total amount | 14 |
| b) | Calculate the gross profit of the Patio. Assume that the selling price is N\$300 <br> per unit. | 6 |

