## ПATIBIA UTIVERSITY OF SCIEMCE AMD TECHMOLOGY

## FACULTY OF COMMERCE, HUMAN SCIENCES AND EDUCATION

CENTER FOR ENTERPRISE DEVELOPMENT (CED)

| QUALIFICATION: DIPLOMA IN BUSINESS PROCESS MANAGEMENT |  |
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| QUALIFICATION CODE: 06DBPM | LEVEL: 6 |
| COURSE CODE: BAC521C | COURSE NAME: BUSINESS ACCOUNTING 1B |
| SESSION: JUNE 2022 | PAPER: THEORY AND CALCULATIONS |
| DURATION: 3 HOURS | MARKS: 100 |


| SECOND OPPORTUNITY EXAMINATION QUESTION PAPER |  |
| :--- | :--- |
| EXAMINERS | L. Odada |
| MODERATOR | H. Kangala |

## INSTRUCTIONS

1. This question paper is made up of four (4) questions.
2. Answer ALL the questions and in blue or black ink. NO pencil
3. Start each question on a new page in your answer booklet and show all workings.
4. Work with four (4) decimal places in all your calculations and only round off only final answers to two (2) decimal places unless otherwise stated.
5. Questions relating to this examination may be raised in the initial 30 minutes after the start of the paper. Thereafter, candidates must use their initiative to deal with any perceived error or ambiguities \& any assumption made by the candidate should be clearly stated.

PERMISSIBLE MATERIALS

1. Silent, non-programmable calculators

THIS QUESTION PAPER CONSISTS OF 5 PAGES (including this front page)

## QUESTION 1

Monica Ltd is preparing its overhead budgets for a forthcoming period. The company has three production departments $A, B$ and $C$, and two service departments $X$ and $Y$. The following figures have been produced:

| Departments | A | B | C | X | Y |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Overhead cost | 400000 | 420000 | 450000 | 400000 | 420000 |
| Machine hours | 15000 | 12000 | 13000 |  |  |

Overhead is absorbed on a machine hour basis.
It has been estimated that service department usage is as follows:

| Departments | A | B | C | $X$ | $Y$ |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Department X | $20 \%$ | $30 \%$ | $10 \%$ |  | $40 \%$ |
| Department $Y$ | $30 \%$ | $30 \%$ | $20 \%$ | $20 \%$ |  |


| REQUIREMENT |  | MARKS |
| :--- | :--- | :---: |
| a) | Prepare a schedule of the overhead costs to be charged to departments A, B and C, <br> using the reciprocal/repeated distribution method to apportion the service department <br> costs to the production departments (work to the nearest N\$). Stop allocation when the <br> overheads to be allocated are below N\$100. | $\mathbf{1 2}$ |
| b) | Calculate the overhead absorption rates for the period for departments A, B and C (work <br> to decimal places). | $\mathbf{6}$ |
| c) | Other than the repeated distribution method, identify the two other methods of <br> reapportionment that could be used for the reapportionment of service department costs <br> across production departments | $\mathbf{2}$ |
| d) | Explain why hourly rates are generally accepted to be the most appropriate method of <br> overhead absorption, and comment upon other methods of absorption that may be used. | $\mathbf{5}$ |
| TOTAL | $\mathbf{2 5}$ |  |

## QUESTION 2

The following information relates to Wheat Ltd., a manufacturing business that is considering the introduction of a piece-work incentive scheme in one of its departments, which has 6 employees.

## Current Payroll

Basic working week
Over-time premium
Normal grade A pay rate
Normal grade B pay rate

38 hours
$20 \%$ of normal pay grade.
$N \$ 22$ per hour.
$N \$ 18$ per hour.

| Employee | Normal hours <br> worked | Normal pay <br> grade | Normal units <br> produced |
| :---: | :---: | :---: | :---: |
| 1 | 41 | A | 170 |
| 2 | 44 | A | 170 |
| 3 | 40 | B | 150 |
| 4 | 38 | B | 150 |
| 5 | 38 | B | 160 |
| 6 | 45 | A | 180 |

## Piecework Incentive Scheme Proposal

Under the proposed incentive scheme, the standard time allowance would be 20 minutes per unit. The piecework rate would be based on grade A labour rates, with a standard piecework incentive of $6 \%$ when output exceeds standard. All employees would receive the same piecework rate.

| REQUIREMENT |  | MARKS |
| :--- | :--- | :---: |
| a) | Outline the purpose of an incentive scheme. | $\mathbf{3}$ |
| b) | Calculate the normal pay due to each employee based on the current payroll terms. | $\mathbf{1 0}$ |
| c) | Calculate the standard piecework rate on the basis of the proposed incentive <br> scheme. | 6 |
| d) | Calculate the normal pay due to each employee under the terms of the proposed <br> incentive scheme. | $\mathbf{6}$ |
| TOTAL |  | $\mathbf{2 5}$ |

## QUESTION 3

The following are the operating details of Bunny Ltd for the year ended 31 December 2021. The company uses job order costing system and the following related to one of its major client undertakings for the year:

1. Direct material:

On hand at 1 January 2021: $\quad 40000 \mathrm{~kg}$ at $\mathrm{N} \$ 2.50$ per kg
Purchases:
On hand at 31 December 2021:
180000 kg at $\mathrm{N} \$ 2.70$ per kg
20000 kg
2. Direct labour:

80000 direct labour hours at $N \$ 4$ per hour
3. Manufacturing overheads:

Recovered at N\$6 per direct labour hour
4. Work in Progress:

On hand at 1 January 2021:
On hand at 31 December 2021:
N\$100 000
N\$ 80000
5. Finished goods:

On hand at 1 January 2021: 4000 units at $\mathrm{N} \$ 90$ per unit
Manufactured during the year:
20000 units
On hand at 31 December 2021:
?
6. Sales:

18400 units at $\mathrm{N} \$ 200$ per unit
7. Marketing and administrative expenses
$N \$ 980000$
8. Actual manufacturing overheads

N\$464 000
9. Inventory valuation method in use:

FIFO
10. Manufacturing overheads over or under applied must be charged to cost to sales

| REQUIREMENT | MARKS |
| :--- | :---: |
| Prepare journal entries to record the above transactions relating to Banny Ltd.'s major client <br> for the year ended 31 December 2021 | $\mathbf{2 5}$ |
| TOTAL | $\mathbf{2 5}$ |

Windhoek Glass Manufacturers (WGM) is a company based in Windhoek that manufactures and sell 'green glass'. The term 'green glass' was coined in when the company adopted technology a few years back that enables the company to produce glass that has the ability to amplify the natural light that comes into a room thereby leading to zero usage of electric lights during the day. As a result of this innovative idea, the 'green glass' has managed to get great popularity in the market. The only challenge that WGM faces is that the customers ordering this product are not standard customers. They come with different specifications which means each customer's order is different. WGM therefore has implemented a successful job costing system. WGM has recently got an order from a new customer that requires these 'green glass' panels for a new community library in Windhoek. WGM's accountant has given this job order an identifiable number as Job A263. The accountant has also provided the following information:

## Direct Materials:

WGM uses the weighted average cost system to price its issues of materials to production.

## Beginning inventory at 1st April:

20 size Large glass panels @ N\$400 each
80 type Big chrome fittings @ N\$20 each

## Purchases:

1st April: 50 size Large glass panels @ N\$377.60 each
15th April: 90 type Big chrome fittings @ N\$21.70 each

Issues to production (Job A263):
17th April: 15 size Large glass panels
19th April: 90 type Big chrome fittings

## Direct Labour:

Assembly: 42 hours @ $\mathbf{N} \$ 180$ per hour
Finishing: 16 hours @ $\$ \$ 160$ per hour

The customer indicated that the construction of the community library is already lagging behind. As a result, this order was supposed to be finished by the $20^{\text {th }}$ of April. This lead to the company's assembly department to work six of the assembly hours as overtime. Overtime at WGM is paid at a time and a half.

## Overheads:

WGM absorbs manufacturing overheads on the basis of labour hours.

|  | Assembly | Finishing | Total |
| :--- | :---: | :---: | :---: |
| Production overheads | N\$3 361 050 | N\$4 212 150 | N\$7573 200 |
| Direct labour hours | 64000 | 102000 | 166000 |
| Machine hours | 500 | 100 | 500 |

## Pricing policy:

WGM adds a $25 \%$ margin to arrive at the selling price.

| REQUIREMENT |  | MARKS |
| :--- | :--- | :---: |
| a) | Calculate the total cost of Job A263. | 20 |
| b) | Determine the price charged by WGM to the customer. | 2 |
| c) | Briefly explain the situations that favours job costing. | 3 |
| TOTAL | $\mathbf{2 5}$ |  |

