

# higher education \& training 

Department:<br>Higher Education and Training REPUBLIC OF SOUTH AFRICA

# NATIONAL CERTIFICATE <br> COST AND MANAGEMENT ACCOUNTING N6 

(4010196)

## 2 June 2021 (X-paper)

09:00-12:00
A nonprogrammable calculator may be used.

This question paper consists of 11 pages and an answer book of 10 pages.

# DEPARTMENT OF HIGHER EDUCATION AND TRAINING REPUBLIC OF SOUTH AFRICA <br> NATIONAL CERTIFICATE <br> COST AND MANAGEMENT ACCOUNTING N6 <br> TIME: 3 HOURS <br> MARKS: 200 

## INSTRUCTIONS AND INFORMATION

1. Answer all the questions in the ANSWER BOOK provided.
2. Read all the questions carefully.
3. Write your examination number and centre number on every page of the ANSWER BOOK (attached).
4. Use only a black or blue pen.
5. Write neatly and legibly.

## SECTION A

## QUESTION 1

1.1 The following information was extracted from the books of Kingdom manufacturers:


PRODUCTION CONTROL

| Balance | 110000 |  | Applied overheads | $?$ |
| :--- | ---: | :--- | :--- | :--- |
| Material control | 45000 |  | Balance | $?$ |
| Labour control | 75000 |  |  |  |
| Finished goods | 135000 |  |  |  |
|  |  |  |  |  |

### 1.1.1 State any mistake in the above ledger account. Do NOT rewrite the ledger account. <br> $(2 \times 2)$

1.1.2 Calculate applied overheads if it is applied at $80 \%$ of direct labour.
1.1.3 How much is the balance carried down?
1.1.4 What does the figure of finished goods mean?
1.2 Tribal General Dealer has provided you with the following information regarding their credit terms available for their customers:

Sales figures are estimated as follows:

|  | AMOUNT |
| :--- | :---: |
| July | 195000 |
| August | 170000 |
| September | 200000 |
| October | $?$ |
| November | $?$ |
| December | $?$ |

## ADDITIONAL INFORMATION

- $75 \%$ of all sales are on credit. It is expected that sales will increase by $15 \%$ per month.
- The company allows $5 \%$ discount on cash sales.
- Debtors normally pay their account as follows:
$50 \%$ in the month of sale
$35 \%$ after 30 days
$10 \%$ after 60 days
The remaining is irrecoverable.


## REQUIRED:

1.2.1 Calculate estimated sales from October to December.
1.2.2 How much will be collected in October from the credit sales of August?
1.2.3 Calculate the bad debts amount from July to December.
1.3 The following information was extracted from the records of Debra Producers:

Total material variance:
$=$ Material issue price variance + Material quantity variance
$=6600(\mathrm{UNF})+1500$ (UNF)
$=8100$ (UNF)

## ADDITIONAL INFORMATION

- According to standard information it takes $10,5 \mathrm{~kg}$ at $\mathrm{R} 15,00$ per kg per unit.
- 2200 kg of material were purchased and used at R18 per kg.
- 200 units were produced during the period.
1.3.1 Recalculate the total material variance using an alternate formula and state whether the variance is 'Favourable' or 'Unfavourable'.
1.3.2 How many kg of material were supposed to be used to produce 200 units.
1.3.3 How many kg of material did the business overuse or underuse to
make 200 units?
1.4 The following records are obtained from the books of Phindulo Producers for the year ended 31 March 2018.


## CONTRACT ACCOUNT

| Wages | 900000 |  | Contract price | $?$ |
| :--- | ---: | :--- | :--- | :---: |
| Material issued | 1200000 |  | Extras | 50000 |
| Overheads | 250000 |  |  |  |
| Provision for latent defects | 0 |  |  |  |
| Profit and loss | 700000 |  |  |  |
|  | 3050000 |  |  | 3050000 |

## ADDITIONAL INFORMATION

- Provision for defects is estimated at $5 \%$ of profits.
- Certified work and cash received during the period amounted to R3 050000.


## REQUIRED:

1.4.1 Calculate the contract price.
1.4.2 State if the amount indicated for profit and loss is correct or not. Give a reason for the answer.
1.4.3 How much was held back by the contractee?
1.4.4 Give TWO disadvantages of cost plus contract. $(2 \times 2)$
1.5 Boys Ltd, manufacturers of boys jeans, has provided you with the following information for their financial year ended 31 May 2018:

| DESCRIPTION | AMOUNT |
| :--- | ---: |
| Total cost | R35 000 |
| Net income | R15 500 |
| Marginal income | R19 000 |
| Estimated units sold | 800 |
| Sales | R60 000 |

Calculate the following and round to the nearest rand:
1.5.1 Fixed cost
1.5.2 Breakeven quantity
1.5.3 Breakeven value

## SECTION B

## QUESTION 2

Benedict and Sons are manufacturers of kids' school bags, using two types of material.
The following information is an extract from their records:

STANDARD INFORMATION
The company uses $2,5 \mathrm{~kg}$ of material A @ a standard rate of R50,00 per kg and $3,5 \mathrm{~kg}$ of material B @ R20,00 per kg.

5 labour hours are required to produce ONE unit. The standard rate for labour is R32,00 per hour.

The actual records of the business reflects the following:
150 school bags were made.
Material: 465 kg of material A @ R61,50 per kg
735 kg of material B @ R18,50 per kg
Wages: 1250 hours @ R45 000


## REQUIRED:

Calculate the following variances and state whether each variance is 'Favourable' or 'Unfavourable':
2.1 Price of material for material A
2.2 Quantity of material for material $A$ and $B$
2.3 Labour rate
2.4 Labour efficiency
.
2.5 Recalculate the labour rate variance if the total hours clocked were 1500
hours.
2.6 Give TWO reasons for the variance in QUESTION 2.5.

## QUESTION 3

3.1 Trendy Fashions Ltd manufactures THREE different products. The information below is an extract from their records for June 2018:

|  | PRODUCT A | PRODUCT B |
| :--- | ---: | ---: |
| Material | 9 kg @ R15 per kg | 12 kg @ R8 per kg |
| Labour | 2 hours @ R14 per hour | 3 hours @ R6 per hour |
| Overheads | 1 hour @ R10 per hour | 2 hours @ R7,50 per hour |
| Production | 10000 units | 12000 units |
| Opening stock | 25000 | 18000 |
| Closing stock | 15000 | 12000 |

Draw up the following budgets:
3.1.1 Material budget
3.1.2 Labour budget
3.2 The following information is provided regarding Kronjie Producers:

| Budgeted units | 105000 |
| :--- | ---: |
| Material | R350000 |
| Labour | R400000 |
| Variable overheads | R600 000 |
| Fixed overheads | R450 000 |

## ADDITIONAL INFORMATION

- Fixed cost will remain the same up to 150000 units and thereafter it will increase by $15 \%$.
- The expected selling price per unit is $\mathrm{R} 25,00$.


Complete the following table by filling in the missing figure where each question mark is indicated. Round off to the second decimal.
\(\left.$$
\begin{array}{|l|c|c|c|}\hline & \begin{array}{c}\text { UNIT } \\
\text { PRICE }\end{array}
$$ \& \mathbf{1 3 0} \mathbf{0 0 0} <br>

UNITS\end{array}\right]\)| $180 \mathbf{0 0 0}$ |
| :---: |
| UNITS |$|$

## QUESTION 4

Answer the questions with regard to the graph. $\$$

4.1 Calculate the following and show all the calculations:
4.1.1 Selling price per unit
4.1.2 Total cost per unit
4.1.3 Variable cost per unit
4.1.4 Marginal income per unit
4.1.5 Safety margin in units
4.1.6 Safety margin in Rand

$$
\begin{equation*}
(6 \times 2) \tag{12}
\end{equation*}
$$

4.2 Answer the following regarding the graph in QUESTION 4:
4.2.1 $\quad$ Name line AD.
4.2.2 Name line DE.
4.2.3 Explain the meaning of point $G$.
4.2.4 Name area J.
4.2.5 $\quad$ Name area I.
4.2.6 Name area H.
4.2.7 $\quad$ Name area K.
4.3 Tiffany Wood Suppliers provided you with the following incorrectly prepared income statement by their newly appointed bookkeeper:

| INCOME STATEMENT |  |
| :--- | ---: |
| Variable manufacturing overheads | 24000 |
| Plus: Fixed manufacturing overheads | 6500 |
| Marginal cost | $\mathbf{3 0 5 0 0}$ |
| Less: Variable manufacturing overheads | $(25000)$ |
| Direct materials | $(10000)$ |
| Fixed selling and administrative cost | $(5000)$ |
| Direct labour | $(15000)$ |
| Gross loss | $\mathbf{( 2 4 5 0 0 )}$ |
| Add: Sales | 300000 |
| Net profit | $\mathbf{2 7 5 5 0 0}$ |

## REQUIRED:

Correctly prepare the income statement according to the direct costing method.

## QUESTION 5

Answer the questions with regard to the following:


| DETAILS | CONTRACT TXT |
| :---: | :---: |
| Contract price | R45 000000 |
| Materials issued | R1 800000 |
| Wages paid | R1 200000 |
| Overheads | R3 500000 |
| Material returned to suppliers | R65 000 |
| Material transferred to contract TBT from contract TXT | R750 000 |
| Depreciation | R350 000 |
| Certified work | R15 000000 |
| Uncertified work | R1 200000 |
| Cash received | R35 000000 |
| Total expected cost for the contract | R28 000000 |
| Extras | R5 500000 |
| Provision for latent defects | 10\% of profits |

## REQUIRED:

5.1 Prepare the contract account for contract TXT
5.2 Calculate the \% of completion of the contract using the cost-basis formula.
5.3 Calculate the total estimated profit.

5.4 Calculate the profit for the year, using the following formula:

$$
\text { \% Completed } \times \frac{\text { Total estimated profit }}{1} \times \frac{\text { Cash received }}{\text { Certified work }}
$$

5.5 Calculate the adjusted profit for the year, taking the provision for latent defects into consideration.

## QUESTION 6

Charmed Ltd manufactures tables using two types of materials, wood and steel.
The company is currently busy with the production of two jobs, namely Job Eco and Job Edu.

BALANCES ON 1 JANUARY 2017

| Manufacturing account | $\mathbf{1 3 0 0 0 0}$ |
| :--- | ---: |
| Raw material control account | 85000 |
| Applied overheads account | 125000 |
| Cost ledger: |  |
| Job Eco | 62000 |
| Job Edu | 68000 |
| Material ledger: |  |
| Wood | 55500 |
| Steel | 12500 |

TRANSACTIONS DURING THE YEAR

| Labour |  |  | R95 000 |
| :--- | ---: | ---: | ---: |
| Overheads |  |  | R101000 |
|  |  |  |  |
| Materials issued: | Job Eco | Job Edu |  |
| Wood | 25000 | 6500 |  |
| Steel | 5500 | 2250 |  |
|  |  |  |  |

## ADDITIONAL INFORMATION

- Selling and administration cost amounting to R55 000 were allocated equally to Job Eco and Job Edu.
- 5000 hours were clocked and worked during the period.
- Job Eco was completed and invoiced at $65 \%$ on cost price.
- Summary of labour hours are as follows:

Job Eco 2500 hours
Job Edu 2500 hours


- Overheads are applied at $85 \%$ of direct material costs.


## REQUIRED:

6.1 Complete the accounts for the following jobs in the cost ledger:
6.1.1 Job Eco
6.1.2 Job Edu
$(5 \times 2)$
6.2 Enter the transactions in the following general ledger accounts:
6.2.1 Material control account
6.2.2 Production control account
6.2.3 Manufacturing overheads control account
6.2.4 Applied overheads control account
6.3 Prepare the job-costing statement for the completed job.

