

# higher education \& training 

Department:
Higher Education and Training REPUBLIC OF SOUTH AFRICA

# N270(E)(N23)H <br> NOVEMBER EXAMINATION 

NATIONAL CERTIFICATE

## COST AND MANAGEMENT ACCOUNTING N6

## (4010196)

## 23 November 2016 (X-Paper)

09:00-12:00
Nonprogrammable calculators may be used.

This question paper consists of 11 pages and an answer book of 12 pages.

# DEPARTMENT OF HIGHER EDUCATION AND TRAINING REPUBLIC OF SOUTH AFRICA 

NATIONAL CERTIFICATE
COST AND MANAGEMENT ACCOUNTING N6
TIME: 3 HOURS
MARKS: 200

## INSTRUCTIONS TO INVIGILATORS

1. Ensure that ALL candidates use the ANSWER BOOK attached to this question paper.
2. Do NOT attach any other ANSWER BOOK to the one attached to this question paper.
3. Students will be penalised if the ANSWER BOOK attached at the back of this question paper is placed inside another ANSWER BOOK.
4. If the ANSWER BOOK attached at the end of this question paper is NOT stapled in the correct order, please instruct the candidates to remove the staple, put the ANSWER BOOK in the correct order and then restaple the ANSWER BOOK.

## INSTRUCTIONS TO CANDIDATES

1. Answer ALL the questions neatly in the ANSWER BOOK attached at the end of this question paper.
2. Read ALL the questions carefully.
3. Number the answers according to the numbering system used in this question paper.
4. Do NOT use any other ANSWER BOOK to answer this question paper and do NOT attach any other ANSWER BOOK to the one attached at the end of this question paper.
5. ALL calculations, where applicable, must be shown.
6. Write neatly and legibly.

## QUESTION 1

1.1 Study the following materials control account and answer the questions:

MATERIALS CONTROL

| Balance b/d | 50000 | Production Control | 100000 |
| :--- | ---: | :--- | ---: |
| Bank | 200000 | Manufacturing Overhead Control | 30000 |
|  |  | Balance c/d | 120000 |
|  | 250000 |  | 250000 |
| Balance b/d | 120000 |  |  |

1.1.1 Briefly explain the debit entry of R200 000. (Explain the transaction.)
1.1.2 Why is the R200 000 debited?
1.1.3 Briefly explain the credit entry of R100 000. (Explain the
transaction.)
1.1.4 Why is the R100 000 credited?
1.1.5 Briefly explain the credit entry of R30 000. (Explain the transaction.)
1.1.6 Why is the R30 000 credited?
1.1.7 What does the balance c/d of R120 000 mean?
1.2 The following information was extracted from the records of Fusion Paint Manufacturers:

Total cost R300000
Net income
R140 000
Marginal income
R260 000
Calculate the following:
1.2.1 Total fixed costs
1.2.2 Variable costs
1.2.3 Total sales
1.3 State the formula to calculate marginal income.
1.4 Choose a description from COLUMN B that matches the word(s) in COLUMN A. Write only the letter (A-K) next to the question number (1.4.1-1.4.10) in the ANSWER BOOK.

1.5 The following standard information was extracted from Siyabonga Furnishers:

10 metres of wood is needed to make ONE bedroom suite.
The standard price of wood is R500 per metre.
30 labour hours are required to make ONE bedroom suite.
The standard price of labour is R110 per hour.
At the end of the month, Siyabonga Furnishers actually produced 60 bedroom suites using 2000 hours of labour. The business paid R230 000 for direct labour.
1.5.1 How many labour hours were used by the business to make 60 bedroom suites? Show ALL your workings.
1.5.2 Has the business used more or less labour hours than it planned to use to manufacture 60 bedroom suites? State by how much. Show ALL your workings.
1.5.3 Is the variance calculated in QUESTION 1.5.2 favourable or unfavourable for the business?
1.5.4 How much was paid for the labour it used to make 60 bedroom suites? Show ALL your workings.
1.5.5 Did the business pay more or less than it planned to pay for the labour that it used? State by how much. Show ALL your workings.
1.6 Mahindra Manufacturers want to buy a new delivery vehicle. After careful investigation three vehicles were identified. Details of the vehicles are as follows:

| VEHICLE | COST | NET PRESENT VALUE |
| :---: | :---: | ---: |
| A | R450000 | R18 000 |
| B | R800 000 | R10 000 |
| C | R200 000 | R5 000 |

The expected rate of return for ALL vehicles is $15 \%$.
1.6.1 Which vehicle should the business buy?
1.6.2 Give a reason for your answer in QUESTION 1.6.1.
1.6.3 Calculate the total of the cash inflows for Vehicle A. Show ALL your workings.
1.6.4 Calculate the total of the cash inflows for Vehicle B. Show ALL your workings.

## QUESTION 2

Bulldog Manufacturers use a job-costing system. They are currently busy with two jobs, namely BM1 and BM2. The following information was extracted from their records on 31 August 2015:

| Details | Job BM1 | Job BM2 |
| :--- | ---: | ---: |
| Material (01/08/15) | 150000 | 40000 |
| Labour (01/08/15) | 180000 | 29000 |
| Applied Overheads (01/08/15) | 270000 | 43500 |

Costs incurred during August 2015:

| Details | Job BM1 | Job BM2 |
| :--- | ---: | ---: |
| Material | 32000 | 88500 |
| Labour | 44000 | 45900 |
| Number of units produced | 60000 | 40000 |

Additional information:

- Overheads are allocated at $150 \%$ of direct labour costs.
- Both jobs were complete at the end of August 2015.
- Selling and administration costs amounted to R150 000, which is allocated amongst the jobs (BM1 and BM2) in the ratio 5:3 respectively.
- The selling price per unit for each job is as follows:
- Job BM1: R20,00
- Job BM2: R12,50
2.1 Prepare a job card for job BM1 only. Clearly label each item (amount) in the job card. Show clearly the profit and the selling price.
2.2 Prepare the account for job BM2 only in the cost ledger.
2.3. Calculate the cost per unit for each job.
2.4 Complete the production control account in the general ledger.


## QUESTION 3

HoneyBun Construction is currently busy with a three-year contract, namely Murray565. The following extract was taken from their records on 31 May 2015, the end of its financial year:

CONTRACT: MURRAY565

| Direct materials | 700000 |
| :--- | ---: |
| Direct labour | 200000 |
| Manufacturing overheads | 300000 |
| Subcontractors' fees | 100000 |

Additional information:

- The contract commenced on 1 December 2013.
- The contract price is R8 000000 , agreed upon at the commencement of the contract.
- During 2014, extras to the value of R400 000 was agreed upon by both contracting parties.
- The total costs for the entire contract is estimated at R6500 000.
- Certified work on 31 May 2015 amounted to R1 500000.
- Uncertified work on 31 May 2015 amounted to R45 000.
- The cash received on the contract amounted to R1 450000.


## REQUIRED:

3.1 Complete the contract account for Contract Murray565. The retention money must be treated as a provision for latent defects. Show clearly the profit or loss on the contract.
3.2 Calculate the percentage of completion of the contract using the formula: (Round off your answer to the nearest whole)

Costs incurred to date $\times \underline{100}$
Total estimated costs 1
3.3 Calculate the total estimated profit.
3.4 Calculate the profit for the year, using the following formula: (Round off your answer to the nearest whole)
$\%$ completed $\times \frac{\text { total estimated profit }}{1} \times \frac{\text { cash received }}{\text { certified work }}$
3.5 Calculate the adjusted profit for the year, assuming that $25 \%$ of the profit must be treated as a provision for latent defects.
3.6 Is the Murray565 contract complete or incomplete?

## QUESTION 4

Pillow Talk makes silk bedsheets and pillow cases, which are sold as a set.
The business uses 3 metres of silk material for ONE bed linen set. The standard price of the silk material is R50 per metre.

4 labour hours are required to make ONE bed linen set. The standard rate for labour is R42 per hour. The business estimated that 1500 labour hours will be used.

Budgeted overheads were as follows:

- Fixed overheads: R30 000
- Variable overheads: R45 000

At the end of the year, it was determined that the business actually produced 400 silk bedding sets using 1300 metres of silk material. Pillow Talk purchased 1500 metres of silk material for R78 750.

Additional actual details were as follows:

- 1700 labour hours were used at a total cost of R76 500
- Fixed overheads: R33 000
- Variable overheads: R43 000

Calculate the following variances showing clearly the formula used. State whether each variance is favourable or unfavourable:
4.1 Material price
4.2 Material quantity
4.3 Labour rate
4.4 Labour efficiency
4.5 Variable overhead rate variance

## QUESTION 5

5.1 The following information appears in the records of Kurma Curtains:

| Direct materials | R45,50 per unit |
| :--- | ---: |
| Direct labour | R44,80 per unit |
| Fixed manufacturing overheads | R45 000 |
| Variable manufacturing overheads | R22 200 |
| Selling costs (10\% fixed) | R10500 |
| Administrative costs (75\% variable) | R21 000 |
| Selling price per unit | R600,00 |
| Units produced and sold | 250 |

## REQUIRED:

Draft the income statement according to the direct method.
5.2 Study the following information break-even graph for Discworld Distributors and answer the questions:


## REQUIRED:

Label the following:

### 5.2.1 Line AF

5.2.2 Line FG
5.2.3 Line CE
5.2.4 Line CD
5.2.5 Line FB

### 5.2.6 Area I

5.2.7 Briefly describe what happens to Area I as the number of units produced increases.

### 5.2.8 Area J

### 5.2.9 Area K

## QUESTION 6

6.1 The following information was extracted from the records of Flavius (Pty) Ltd:

Total sales per month are as follows:

| January | R56 000 | Actual |
| :--- | :--- | :--- |
| February | R60 000 | Actual |
| March | R80 000 | Budgeted |
| April | R75000 | Budgeted |
| May | R70 000 | Budgeted |

Additional information:

- $80 \%$ of sales are on credit
- Debtors receive a $2 \%$ discount for ALL payments made within 30 days
- Credit sales are collected as follows:
- $40 \%$ in the month of the sale
- $50 \% 30$ days after the sale
- $5 \% 60$ days after the sale
- $5 \%$ is written off as irrecoverable


## REQUIRED:

Calculate the Receipts from Debtors for Flavius (Pty) Ltd for March, April and May 2015.
6.2 The following budgeted information appeared in the records of Carmen Cement:

| Material | R120 000 |
| :--- | ---: |
| Labour | R130 000 |
| Variable overheads | R100 000 |
| Fixed overheads | R170 000 |
| Budgeted production units | 40000 |

Additional information:

- Fixed costs will remain the same up to 60000 units. Thereafter, it will increase to R200 000.
- The expected selling price is R90 per unit.


## REQUIRED:

Calculate the missing figures in the table below if 50000 units and 70000 units respectively are produced and sold:

|  | 50000 UNITS | 70000 UNITS |
| :--- | :--- | :--- |
| Material | $\ldots$ | $\ldots$ |
| Labour | $\ldots$ | $\ldots$ |
| Variable overheads | $\ldots$ | $\ldots$ |
| Fixed overheads | $\ldots$ | $\ldots$ |

