

# higher education \& training 

Department:
Higher Education and Training REPUBLIC OF SOUTH AFRICA

# N280(E)(J8)H <br> JUNE EXAMINATION <br> NATIONAL CERTIFICATE COST AND MANAGEMENT ACCOUNTING N6 

(4010196)

8 June 2016 (X-Paper) 09:00-12:00

Nonprogrammable calculators may be used.

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

# DEPARTMENT OF HIGHER EDUCATION AND TRAINING REPUBLIC OF SOUTH AFRICA 

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

## INSTRUCTIONS AND INFORMATION

## INSTRUCTIONS TO INVIGILATORS:

1. Ensure that all candidates use the ANSWER BOOK provided at the end of this question paper.
2. DO NOT attach any other ANSWER BOOK to the one provided.
3. Students will be penalised if the ANSWER BOOK provided at the back of this question paper is placed inside another answer book.
4. If the ANSWER BOOK is not stapled in the correct order, please instruct candidates to open the staple, put the ANSWER BOOK in the correct order and then re-staple it.

## INSTRUCTIONS TO CANDIDATES:

1. Answer ALL questions in the ANSWER BOOK provided at the end of this question paper.
2. Do not use any other ANSWER BOOK to answer this question paper and do NOT attach any other ANSWER BOOK to the one provided.
3. Read ALL the questions carefully.
4. All calculations, where applicable, MUST be shown.
5. Write neatly and legibly.

## QUESTION 1

1.1 The following production control account was extracted from the records of Blue Bean Manufacturers:

PRODUCTION CONTROL

| Balance b/d | 180000 | Finished goods control | 1100000 |
| :--- | ---: | :--- | ---: |
| Materials control | 380000 | Balance c/d | 100000 |
| Labour control | 440000 |  |  |
| Manufacturing overhead <br> control | 200000 |  |  |
|  | 1200000 |  | 1200000 |

1.1.1 Briefly explain the debit entry for materials control of R380 000.
1.1.2 Does the debit entry for manufacturing overhead control refer to actual or applied manufacturing overheads?
1.1.3 Briefly explain the credit entry for finished goods control of R1 100000.
1.1.4 Briefly explain the credit entry of R100 000. Explain what this amount refers to.
1.1.5 Calculate the sales if the mark-up is $20 \%$ on cost.
1.2 Brits Contractors is currently building ten new classrooms for Carolina College. The contract commenced in July 2013 and the contract price was R3 000000.

During 2014, Carolina College decided to add one more classroom to the original contract. Both parties agreed that this would cost R300 000.
1.2.1 There are two parties in a contract. What is the role of Brits Contractors in this contract?
1.2.2 What is Carolina College in this contract?
1.2 .3

Assuming that both parties agreed to use the completed contract method, calculate how much Carolina College must pay Brits Contractors when the contract is completed.
1.2.4 Should Carolina College pay the entire amount (calculated in QUESTION 1.2.3 above) immediately to Brits Contractors when the contract is completed?
1.2.5 Give a reason for your answer in QUESTION 1.2.4.
1.3 The following information was extracted from the records of Godfrey Traders:

| Breakeven value | R6 000 |
| :--- | ---: |
| Marginal income per unit | R50 |
| Variable cost per unit | R 30 |

1.3.1 Calculate the selling price per unit.
1.3.2 Calculate the breakeven units.
1.3.3 Calculate the total fixed costs.
1.3.4 Would the business make a profit or a loss if its sales amounted to R7 000?
1.4 Mafikeng Manufacturers produces leather lounge suites. The following standard information was extracted from their records:

30 labour hours are needed to make ONE lounge suite. The standard price of labour is R70 per hour.

At the end of the period, Mafikeng Manufacturers ACTUALLY produced 100 lounge suites using 3100 labour hours. The business paid R7 500 in wages at the end of this period.
1.4.1 How many labour hours was the business supposed to use to make 100 lounge suites? Show all your workings.
1.4.2 Has the business used more or less labour hours than it planned to use for the 100 lounge suites? State by how much. Show all your workings.
1.4.3 How much was the business supposed to pay in wages to make 100 lounge suites? Show all your workings.
1.5 The following production budget appeared in the books of De Aar Producers for May and June 2016:

|  | MAY | JUNE |
| :--- | ---: | ---: |
| Sales Requirements | 1200 | 1600 |
| Add: Desired closing stock | 800 | 1000 |
| Total stock requirements | 2000 | 2600 |
| Less: Opening stock | 600 | 800 |
| Number of units to be produced | 1400 | 1800 |

1.5.1 Why does the business need to consider the sales requirements in the production budget?
1.5.2 This business has a desired closing stock at the end of each month. Why do you think it is important for a business to have closing stock?
1.5.3 If the business uses 2 kg of raw materials to make its finished goods, how much raw materials (in kg ) will be needed for May 2016 ?
1.5.4 If the raw materials cost $R 5,50$ per kg , how much will the business pay for raw materials in May 2016 ?
[50]

## QUESTION 2

Mzanzi Manufacturers uses a job costing system. The company manufactures student desks for schools for which it uses two raw materials, namely, wood and steel.

During the year the business was busy with two jobs; KZN09 and NW02.
Job NW02 commenced during January 2016, while Job KZN09 was completed and invoiced at cost plus 70\% to the client on 31 January 2016.

Balances: 1 January 2016:

| Production control | 8000 |
| :--- | ---: |
| Raw material control | 6000 |
| Materials ledger: Wood | 4000 |
|  | Steel |

Costs incurred during the month:

- Materials issued:

|  | JOB KZN09 | JOB NW02 |
| :--- | ---: | ---: |
| Wood | R 3 200 | R 2 800 |
| Steel | R1500 | R1 000 |

- Labour R26 400
- Additional information:
- Raw materials purchased during January amounted to R5 600.
- According to the clock cards 440 labour hours were clocked during January 2016.
- A summary of the labour hours worked for January 2016 further revealed that the following labour hours were clocked per job:

| Job KZN09 | 300 |
| :--- | ---: |
| Job NW02 | 140 |

- Overheads are applied at $80 \%$ of labour cost.
- Selling and administration costs amounted to R50 000. This cost is split in the ratio 3: 1 between jobs KZN09 and NW02 respectively.
- Actual overheads amounted to R22 000.
2.1 Record the above transactions in the following accounts in the general ledger of Mzanzi Manufacturers. Balance the accounts at the end of the month:
(a) Raw material control
(b) Manufacturing overhead control
$(2 \times 5)$
2.2 Show the accounts for both the jobs in the cost ledger.
2.3. Prepare the job cost statement for Job KZN09.
2.4 Give one example of a business that uses process costing instead of job costing.
[30]


## QUESTION 3

The following information was extracted from the records of Midlands Building Contractors for the year ending 30 September 2015.

| Contract price | R 1000000 |
| :--- | ---: |
| Wages paid | R70 000 |
| Material issued | R100 000 |
| Material returned to supplier | R20 000 |
| Material on hand 30/09/2015 | R5 000 |
| Machinery value 30/09/2014 | R230 000 |
| Machinery value 30/09/2015 | R190 000 |
| Cash received | R550 000 |
| Direct overheads | R36 000 |
| Extras | R500 000 |
| Work certified 30/09/2015 | R600 000 |
| Cost of uncertified work | R65 000 |
| Total expected costs | R670 000 |
| Provision for latent defects | $25 \%$ of profits |

3.1 Prepare the contract account in the general ledger for the above contract.
3.2 Calculate the percentage of completion using the following formula (round off your answer to the next whole):
$\frac{\text { Certified work for the year }}{\text { Total contract price }}$
3.3 Calculate the total estimated profit on the contract.
3.4 Calculate the profit for the year, using the following formula (round off your answer to the next whole):
\% completed $\times$ total estimated profit $\times$ cash received
1 certified work
3.5 Calculate the adjusted profit for the year, assuming that the retention money must be treated as a provision for latent defects.

## QUESTION 4

South West Manufacturers makes dining room tables.
The business uses 1.25 metres of wood to make ONE dining room table. The standard price of the wood is R90 per metre.

4 labour hours are required to make ONE dining room table. The standard rate for labour is R70 per hour. The business estimated that 220 labour hours will be used.
Budgeted overheads were as follows:

- Fixed overheads: R15 000
- Variable overheads: R18 000

According to its records, the business ACTUALLY produced 55 dining room tables using 73 metres of wood at the end of the year. South West Manufacturers purchased 75 metres of wood for R7 012,50.

Additional ACTUAL details were as follows:

- 230 labour hours were used at a total cost of R16 560
- Fixed overheads: R16 000
- Variable overheads: R20 000

Calculate the following variances showing clearly the formula used. State whether each variance is favourable or unfavourable. Where applicable, use TWO decimals:

### 4.1 Material price

4.2 Material quantity

### 4.3 Labour rate

4.4 Labour efficiency
4.5 Variable overhead rate variance
$(5 \times 6)$
[30]

## QUESTION 5

5.1 The following information was extracted from the records of Mopani South East Manufacturers:

## General ledger of Mopani South East Manufacturers

Materials Control

| Bank | 200000 | Production Control | R120000 |
| :--- | ---: | :--- | :--- |
|  |  |  |  |

Labour Control

|  |  | Production Control | R150 000 |
| :--- | :--- | :--- | :--- |
|  |  |  |  |

Manufacturing Overheads Control


Selling and Administrative Costs


## Additional information:

- $30 \%$ of the manufacturing overheads are considered to be fixed in nature.
- $60 \%$ of the selling and administrative costs are considered to be variable in nature.
- 50000 units were produced and sold at a unit price of R10,00.

REQUIRED:
Draft the income statement using the direct costing method.
5.2 Goldfields Honey produces organic honey. The following information was extracted from their records for the period ending 31 August 2015:

| Sales per month | 5000 units at R20 per bottle |
| :--- | ---: |
| Direct material cost per unit | R 6 |
| Direct labour cost per unit | R 4 |
| Variable selling costs per unit | R 2 |
| Factory overheads (all fixed) | R 18000 |
| Fixed selling and administrative costs | R 22000 |

Calculate the following:
5.2.1 Marginal income per unit
5.2.2 Breakeven quantity
5.2.3 Breakeven value
5.2.4 The total cost if zero bottles of honey is produced. Show all your workings.
5.2.5 Should Goldfields Honey sell more, less or equal to the breakeven quantity calculated in QUESTION 5.2.2 above, in order to make a profit?

## QUESTION 6

The following information is available for Umgungundlovu Enterprises:
Actual and expected sales at R20 per unit (excluding discounts) are as follows:

|  | Actual | Budgeted |  |
| :--- | :--- | :--- | :--- |
|  | April | May | June |
|  | (units) | (units) | (units) |
| Cash sales | 5000 | 7000 | 4000 |
| Credit sales | 8000 | 6000 | 9000 |

- A discount of $10 \%$ is given to customers on cash sales.
- Customers who purchase on credit usually pay the total amount one month after the sale.

The production records for finished goods reveal the following:

|  | Actual (R) |  | Budgeted (R) |  |
| :--- | ---: | ---: | ---: | ---: |
|  | March | April | May | June |
| Production costs: |  |  |  |  |
| Direct material | 40000 | 36000 | 34000 | 35000 |
| Direct labour | 26000 | 24000 | 22000 | 23000 |
| Overheads | 18000 | 17000 | 15000 | 16000 |

- $50 \%$ of the direct material purchased is bought on credit and the balance is purchased by cheque. Creditors are usually paid two months after the purchase.
- Employees involved in the production of finished goods are paid monthly.
- Payment of overhead costs and selling and administrative costs are delayed by one month.

Selling and administrative costs are as follows:

| April (Actual) | R 10500 |
| :--- | :--- |
| May (expected) | R 12000 |
| June (expected) | R 11500 |

- Umgungundlovu Enterprises was successful in its application for a long-term loan of R100 000. The loan will be granted in June 2016.
- On 30 April 2016 the bank account in the general ledger reflected a debit balance of R30 000.


## REQUIRED:

Prepare the cash budget for Umgungundlovu Enterprises for May and June 2016.

