

higher education & training

Department:
Higher Education and Training
REPUBLIC OF SOUTH AFRICA

N260(E)(N10)H
NOVEMBER EXAMINATION

NATIONAL CERTIFICATE

COST AND MANAGEMENT ACCOUNTING N6

(4010196)

10 November 2014 (X-Paper)
09:00–12:00

Nonprogrammable calculators may be used.

This question paper consists of 11 pages and an answer book of 13 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 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 this ANSWER BOOK is placed inside another ANSWER BOOK.
4. If the ANSWER BOOK provided 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 the ANSWER BOOK.

INSTRUCTIONS TO CANDIDATES

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

- 1.1 Study the Production Control account below and answer the questions that follow:

PRODUCTION CONTROL			
Balance b/d	10 000	Finished goods	145 000
Materials control	38 000	Balance c/d	18 000
Labour control	46 000		
Manufacturing overheads control	69 000		
	163 000		163 000

- 1.1.1 Briefly explain the balance b/d of R10 000 on the debit side. (1)
- 1.1.2 What does the balance in QUESTION 1.1.1 consist of? (1)
- 1.1.3 Does the material control amount of R38 000 on the debit side consist of indirect materials? (1)
- 1.1.4 Give a reason for your answer to QUESTION 1.1.3. (1)
- 1.1.5 The manufacturing overheads are recovered (applied) at a percentage of the labour cost. Calculate the overhead rate. (3)
- 1.1.6 Briefly explain the balance c/d of R18 000 on the credit side. (1)
- 1.1.7 Will the business sell the finished goods for R145 000? Give a reason for your answer. (2)

- 1.2 The following information was extracted from the records of Buba Contractors:

Percentage of completion	45%
Total estimated costs	R1 000 000
Certified work	R675 000
Cash received	R600 000
Contract price	R1 500 000

- 1.2.1 What does the 45% mean with regards to the contract? (1)
- 1.2.2 The contract price is R1 500 000.
Why did the business only receive R600 000? (1)
- 1.2.3 What does the certified work of R675 000 mean? (2)
- 1.2.4 Who determines the amount of the certified work? (1)
- 1.2.5 There is a difference between the certified work and the cash received.
What is this difference called? (1)

- 1.2.6 Why is there a difference between the certified work and the cash received? (1)
- 1.2.7 What amount will the certified work be when the contract is completed? (1)
- 1.2.8 Calculate the profit for the year. (2)

- 1.3 The following information was extracted from the records of Tongati Producers:

Break-even value	R60 000
Selling price per unit	R100
Variable cost per unit	R35

- 1.3.1 Calculate the break-even units. (3)
- 1.3.2 Calculate the marginal income per unit. (2)
- 1.3.3 Calculate the total fixed cost. (3)
- 1.3.4 Briefly explain what the break-even value of R60 000 means to this business. (2)

- 1.4 The following standard information was extracted from Coco Furniture:

20 metres of wood is needed to make ONE bedroom suite. The standard price of wood is R800 per metre.

At the end of the year, 28 000 metres of wood did the business plan to use to produce 1 500 bedroom suites. The business paid R22 500 000 for the wood.

- 1.4.1 How many metres of wood did the business plan to use to produce 1 500 bedroom suites? (2)
- 1.4.2 Has the business used more or less wood than it planned to use for the 1 500 bedroom suites? State by how much more or less. (2)
- 1.4.3 Is the variance calculated in QUESTION 1.4.2 favourable or unfavourable for the business? (1)
- 1.4.4 How much did the business plan to pay for the wood it purchased to produce the 1 500 bedroom suites? (2)
- 1.4.5 Did the business pay more or less than it planned to pay for the wood that it purchased? State by how much more or less. (2)
- 1.4.6 Give ONE possible reason for this variance. (1)

- 1.5 Study the following production budget of Apple Manufacturers and answer the questions.

Sales requirements (units)	60 000
Less: Opening stock (units)	(14 000)
Add: Desired stock (units)	10 000
?	56 000

- 1.5.1 Why does the business need to consider the sales requirements in the production budget? (2)
- 1.5.2 Why does the business minus the opening stock in this budget? (2)
- 1.5.3 Why does the business add the desired closing stock in this budget? (2)
- 1.5.4 What does the 56 000 represent? (2)
- 1.5.5 Name ONE other budget in which this 56 000 will be used. (1)
- 1.5.6 Name ONE disadvantage of budgeting. (1)

[50]

QUESTION 2

NK Manufacturers makes designer cribs for babies. They are currently busy with two jobs, BABY WORLD and LITTLE ANGELS.

The following information was extracted from the business on 31 May 2014, the end of the financial year. The business uses a job-costing system and was not busy with any other jobs.

DETAILS	JOB	
	BABY WORLD	LITTLE ANGELS
Direct materials (31/05/2013)	R 5 000	R8 000
Direct labour (31/05/2013)	R9 000	R13 000
Manufacturing overheads (31/05/2013)	?	?
Direct materials (31/05/2014)	R12 000	R15 000
Direct labour (31/05/2014)	R17 000	R21 000
Manufacturing overheads (31/05/2014)	?	?
Selling and administration costs	R4 000	R6 000
Mark-up	45%	60%
Number of units produced	10 000	12 000

ADDITIONAL INFORMATION

- Overheads are recovered at a rate of R30 per direct labour hour.
- Direct labour is paid at a rate of R50 per hour
- Only the LITTLE ANGELS job was completed at the end of the year.

REQUIRED:

- 2.1 Calculate the manufacturing overheads for each job on 31 May 2013. (4)
- 2.2 Calculate the manufacturing overheads for each job on 31 May 2014. (4)
- 2.3 Complete the account for EACH job in the Cost Ledger of NK Manufacturers on 31 May 2014. Where applicable, show all your workings in brackets next to each entry in these accounts. (14)
- 2.4 Calculate the cost per unit for the Baby World job. (4)
- 2.5 Calculate the mark-up and the selling price for the completed job only. (4)
- [30]

QUESTION 3

- 3.1 Semicircle Contractors uses the percentage of completion method to determine profits. The following information was extracted from their records on 31 March 2014:

CONTRACT: QUAY	
Contract price	R5 000 000
Extras	R500 000
Total expected costs for the contract	R4 000 000
Certified work	R3 000 000
Cash received	R2 800 000
Percentage of completion	60%
Provision for latent defects	Retention money

- 3.1.1 Calculate the total estimated profit on the contract. (3)
- 3.1.2 Calculate the profit for the year using the following formula (Round off your answer to the nearest Rand):
- $$\% \text{ completed} \times \frac{\text{estimated profit}}{1} \times \frac{\text{certified work}}{\text{contract price}} \quad (6)$$
- 3.1.3 Calculate the provision for latent defects. (3)
- 3.1.4 Calculate the adjusted profit after taking the provision for latent defects into account. (3)

- 3.2 The following information was extracted from the records of Newcastle Contractors at the end of its financial year 31 May 2014 regarding Contract PL757:

Contract price	R800 000
Total costs to date	R250 000
Future estimated costs	R200 000
Certified work	R500 000
Cash received	R400 000
Uncertified work	R100 000

Calculate the percentage of completion on this contract using the following formula:

$$\frac{\text{Costs to date}}{\text{Total estimated costs}} \times 100$$

(4)

- 3.3 The following information was extracted from the records of Mosaic Contractors on 31 October 2014:

CONTRACT: BESTER	
Contract price	R7 000 000
Direct materials	R1 000 000
Certified work	R4 500 000
Cash received	R4 200 000
Direct labour	R1 300 000
Manufacturing overheads	R1 100 000
Machinery (31/10/2013)	R1 000 000
Uncertified work	R800 000
Depreciation on machinery	R150 000
Provision for latent defects	20% of profits

Prepare the contract account in the General Ledger for the above contract.

(11)
[30]

QUESTION 4

Classic Cushions makes cushion covers for scatter cushions.

The business uses $\frac{1}{4}$ metre of material to make ONE cushion cover. The standard price of the material is R80 per metre.

Half a labour hour is required to make ONE cushion cover. The standard rate for labour is R35 per hour. The business estimated that 10 000 labour hours will be used.

Budgeted overheads were as follows:

Fixed overheads: R20 000
Variable overheads: R15 000

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At the end of the year, it was determined that the business ACTUALLY produced 25 000 cushion covers using 6 300 metres of material. The business purchased 7 000 metres of material for R574 000.

Additional ACTUAL details were as follows:

11 000 labour hours were used at a total cost of R396 000.

Fixed overheads: R21 000

Variable overheads: R18 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

(5 × 6) [30]

QUESTION 5

5.1 The following information was extracted from the records of Betterman Boxes at the end of the financial year on 30 June 2014:

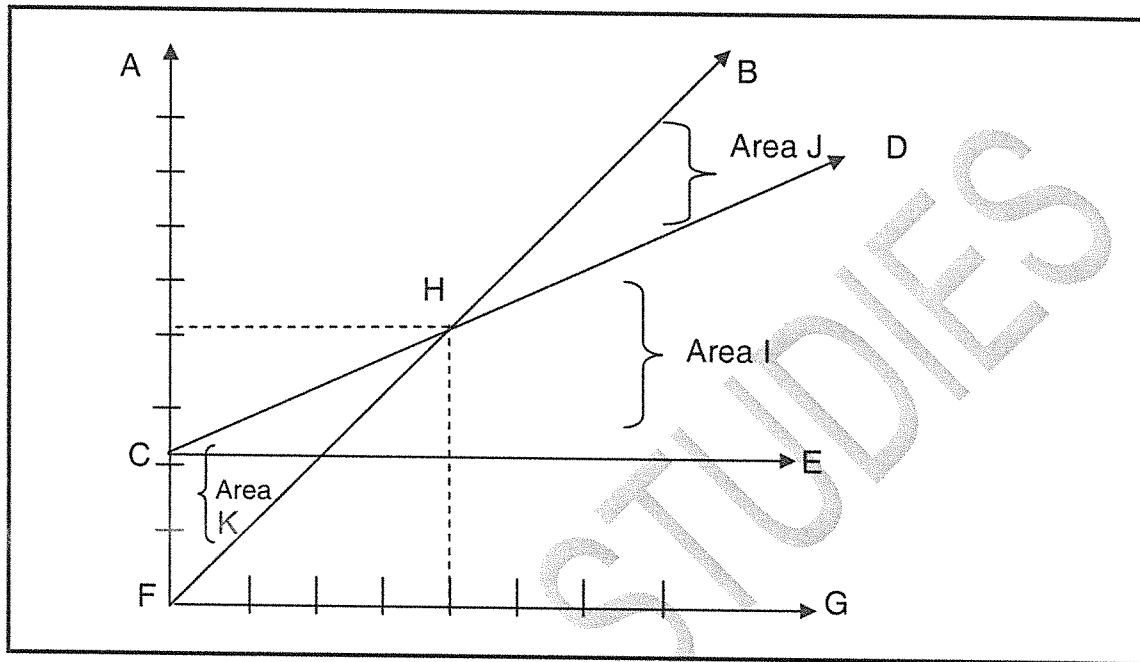
Sales per unit	R75
Variable cost per unit	R50
Total fixed cost	500 000
Break-even units	20 000

5.1.1 Calculate the break-even value (Rands.) (3)

5.1.2 Prove that this business actually does break even at 20 000 units. (5)

5.1.3 Recalculate the break-even units if the fixed costs increase to R600 000. (4)

- 5.2 Study the following break-even graph that was extracted from the records of Pedi Producers on 31 May 2013 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 Briefly explain what point H means.
- 5.2.7 Area I
- 5.2.8 Area J
- 5.2.9 Area K

(9 × 2) (18)
[30]

QUESTION 6

- 6.1 Thekweni Ltd wants to buy a new machine to use in their production process. They have the following two options and need your help in deciding which machine to choose:

	MACHINE PR191	MACHINE QR191
Cost	R980 000	R1 200 000
Expected rate of return	12%	12%
Cash inflow per year:		
~Year 1	200 000	400 000
~Year 2	600 000	400 000
~Year 3	400 000	400 000
~Year 4	300 000	400 000
~Year 5	500 000	400 000

Present value of R1 after N years

Year	10%	12%	15%
1	0,909	0,893	0,870
2	0,826	0,797	0,756
3	0,751	0,712	0,658
4	0,683	0,636	0,572
5	0,621	0,567	0,497

Present value of R1 received annually for N years

Year	10%	12%	15%
1	0,909	0,893	0,870
2	1,736	1,690	1,626
3	2,487	2,402	2,283
4	3,170	3,037	2,855
5	3,791	3,605	3,352

- 6.1.1 Calculate the net present value of Machine PR191. (7)
- 6.1.2 Calculate the net present value of Machine QR191. (6)
- 6.1.3 Advise the business which machine they should buy. Give a reason why the business should buy that specific machine. (2)

- 6.2 The following information was extracted from the records of Pepso Traders on 31 March 2014:

	ACTUAL			BUDGETED	
	Jan	Feb	Mar	Apr	May
Total sales	100 000	120 000	130 000	140 000	150 000
Purchases	20 000	25 000	25 000	30 000	33 000
Depreciation	10 000	10 000	10 000	10 000	10 000

Additional information:

- 80% of all sales are on credit.
- 10% discount is granted on all cash sales.
- 5% discount is allowed on credit sales that are paid within 30 days.
- Cash in respect of credit sales is collected as follows:

45% within 30 days
 30% within 60 days
 15% within 90 days
 10% bad debts

- 6.2.1 Calculate the receipts from debtors for May 2014 ONLY. Show ALL your workings.

(5)

- 6.2.2 Calculate the cash sales received for the first quarter of 2014. Show ALL your workings.

(10)
[30]

TOTAL: 200