higher education \& training
Department:
Higher Education and Training REPUBLIC OF SOUTH AFRICA

## MARKING GUIDELINE

NATIONAL CERTIFICATE
FINANCIAL MANAGEMENT: FARMING N4

5 JUNE 2018

This marking guideline consists of 7 pages.

## QUESTION 1: THE FARM MANAGEMENT INFORMATION SYSTEM

1.1 - Serves as a basis for scientific decision making

- Facilitates the submission of accurate returns
- Handles figures systematically and thus helps with systematic thought and actions
- Focuses on financial results, thus controls spending by the family
- Enables farmer to think in terms of numbers or measurable quantities

$$
\begin{equation*}
(5 \times 2) \tag{10}
\end{equation*}
$$

1.2 - Livestock

- Finished products
- Semi-finished products
- Production supplies
1.3 1.3.1 $\quad$ Net sales value (market value less market costs)
1.3.2 $\quad$ Net sales value (market value less market costs)
1.3.3 Net sales value
1.3.4 Insurance value
1.3.5 The lowest of either the purchase price or the market price

$$
\begin{equation*}
(5 \times 2) \tag{10}
\end{equation*}
$$

1.4 1.4.1 - To recover the capital that was invested in an asset over its useful life

- To determine the annual book value of an asset for balance sheet purpose
$(2 \times 2)$
1.4.2 - The realisation values of most assets do not decrease by the same amount every year
- The asset is not necessarily used to the same extent each year.
$(2 \times 2)$
1.4.3 The use method

$$
\begin{aligned}
D & =\frac{(C P-S)}{H U} \times H \\
& =\frac{(R 190000,00-R 19000,00)}{10000} \times 8000 \\
& =R 136800,00
\end{aligned}
$$

Book value $=$ Initial cost - accumulated depreciation

$$
\begin{align*}
& =\text { R190 000,00 - R136 800,00 } \\
& =\text { R53 200,00 } \tag{9}
\end{align*}
$$

1.5 - The purchase or construction date

- The cost price or initial value
- The expected useful life
- The expected replacement value
- The expected salvage value
- The method and rate of depreciation
- The annual capital recovery
- The annual decrease in the inventory value of the asset
- The book value of each asset at the end of each financial year


## QUESTION 2: PRINCIPLES OF PRODUCTION ECONOMICS

2.1 A Fixed rate of substitution - uses inputs according to a fixed ratio and no substitution takes place (both inputs are increased or decreased by the same quantities)

B Constant rate of substitution - one input ( $\mathrm{X}_{1}$ ) can always be substituted with another input ( $\mathrm{X}_{2}$ ) in the same ratio.

C Increasing rate of substitution - as the quantity of $X_{1}$ increases, fewer and fewer units of $X_{2}$ is needed to replace one input unit of X 1

D Decreasing rate of substitution - as the quantity of $X_{1}$ decreases, more and more units of $X_{2}$ is needed to replace one input unit of $X_{1}$
2.2 The least-cost combination of inputs is the point where the physical rate of substitution of the two inputs is equal to the inverted price ratio of the inputs.
2.3 2.3.1 Marginal return (product) $=\frac{\Delta \text { Total product } \checkmark}{\Delta \text { Input level }}$

$$
\begin{align*}
& =\frac{2250-2235}{80-70} \\
& =1,5 \mathrm{~kg} \text { wheat } / \mathrm{kg} \text { nitrogen } \checkmark \checkmark \tag{4}
\end{align*}
$$

2.3.2 Value of total product $=$ Total product $(Y) \times$ Price $\left(P_{y}\right) \checkmark$

$$
\begin{align*}
& =2250 \mathrm{~kg} \times \mathrm{R0} 0,5 / \mathrm{kg} \checkmark \\
& =\mathrm{R} 1125,00 \checkmark \checkmark \tag{4}
\end{align*}
$$

2.3.3 Total input price $=$ Unit input $(X) \times$ Price $\left(P_{x}\right)$

$$
\begin{align*}
& =80 \mathrm{~kg} \times \mathrm{R} 2,00 / \mathrm{kg} \checkmark \\
& =\mathrm{R} 160,00 \checkmark \checkmark \tag{3}
\end{align*}
$$

$$
\text { 2.3.4 The profit (margin) } \begin{align*}
& =\text { Value of total product }- \text { Total input price } \\
& =\text { R1 } 125,00-\text { R160,00 } \checkmark \\
& =\text { R965,00 } \tag{3}
\end{align*}
$$

2.4 - Variable cost

- Fixed cost
- Total cost
2.5 2.5.1 Joint products
2.5.2 Supplementary products
2.5.3 Complementary products
2.5.4 Antagonistic products
2.5.5 Competitive products
2.6 2.6.1 Total income (value of product)
2.6.2 Number of inputs required is indicated by (a)
2.6.3 Input costs (low prices)
2.6.4 Input level (b)
2.6.5 Input costs (high prices)
2.6.6 - Change in product prices
- Change in yield
(Any ONE)
[50]


## QUESTION 3: THE FARMING BALANCE SHEET

3.1 3.1.1 E
3.1.2 G
3.1.3 I
3.1.4 J
3.1.5 C

| 3.2 3.2.1 | THE FARM BALANCE SHEET |  |  |
| :---: | :---: | :---: | :---: |
| LIABILITIES |  | ASSETS |  |
| Current liabilities <br> Fertiliser stock in store still on account 100 Eskom account still in arrears | 3000 | Current assets <br> Favourable bank balance $10000$ <br> Slaughtered lamb ready for sale <br> Money owed by Meat Market to the enterprise for slaughtered lambs <br> Telephone account paid in advance | 52500 |
| Medium-term liabilities <br> Repayment agreement at Wesbank for the truck | 20000 | Investment and other <br> Monetary reserves on fixed deposit at Capitec bank | 20000 |
| Long-term liabilities Balance of bond at FNB for land bought | 200000 | Movable assets  <br> Ford truck 25000 <br> Ewes for breeding 24000 | 49000 |
| Total debt | 223000 | Fixed assets <br> Value of own land | 750000 |
| Net worth | 648500 |  |  |
| Total liabilities | 871500 | Total assets | 871500 |
|  |  | Value of rented land | 500000 |
|  |  | Total capital employed | 1371500 |

3.2.2 Foreign capital = Debt of the enterprise + Value of leased land

$$
\begin{align*}
& =\text { R223 000,00 + R500 000,00 } \\
& =\text { R723 000,00 } \tag{2}
\end{align*}
$$

3.2.3 No, because the debts does not exceed the value of assets

## QUESTION 4: THE FARMING INCOME STATEMENT

### 4.1 Sale

- Sheep sold, money not received yet 130000
- Ewes bought on credit 10000
- Sale of wool to Mr Adonai's company 30000
- Insurance paid out for lost sheep

Consumption

- Sheep slaughtered for the labourers
- Sheep slaughtered for domestic use

Stock adjustment

- Value of sheep at the end of the year
- Value of sheep at the beginning of the year
- Unsold wool stock at the end of the year
- Unsold wool stock at the beginning of the year

TOTAL: GPV sheep

- Bales of lucerne sold 160000
- Bales of lucerne fed to sheep

TOTAL:
4.3 GPV(sheep) + GPV (lucerne) $178000+190000$ $=368000$
4.4 - Wages of permanent labourers 48000

- Sheep slaughtered for the labourers $\underline{\underline{4000}}$

TOTAL:
$\begin{array}{lrr}4.5 & 4000 \\ & \text { - Fuel stock at the beginning of the year } & -2000 \\ & \text { Fuel stock at the end of the year } & 12000\end{array}$

- Fuel stock at the end of the year
- Fuel purchased during the year
4.6 - Fuel costs 14000
- Veterinary and medicines
- Depreciation on improvements \& equipment
- Maintenance of vehicles \& implements
- Labour costs
- Costs of other farm expenses
- Bale of lucerne fed to sheep
- Electricity

TOTAL:

1000

4000
2500

270000
-250 000
10500
-30 000

30000
190000

52000

12000
14000 20000

$$
32000
$$

$$
35000
$$ 52000 9000 30000

171000

6500

500
178000
(4)
(5)
$\underline{50000}$
$\underline{242000}$

$$
\text { 4.7 } \quad \begin{align*}
\text { NFI } & =\text { Total GPV }- \text { Production, marketing and admin costs } \\
& =\text { R368 000,00 - R242 000,00 } \\
& =\text { R126 000,00 } \tag{3}
\end{align*}
$$

$4.8 \quad \begin{aligned} \text { FP } & =\text { NFI }- \text { Foreign capital } \\ & =\text { R126 000,00 }-(\text { R20 000,00 }+ \text { R15 000,00 }) \\ & =\text { R91 000,00 }\end{aligned}$

