

# higher education \& training 

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

NATIONAL CERTIFICATE FINANCIAL MANAGEMENT: FARMING N4<br>(4090484)<br>26 May 2021 (X-paper) 09:00-12:00<br>Calculators may be used.

This question paper consists of 9 pages and 2 ANSWER SHEETS.

# DEPARTMENT OF HIGHER EDUCATION AND TRAINING REPUBLIC OF SOUTH AFRICA <br> NATIONAL CERTIFICATE <br> FINANCIAL MANAGEMENT: FARMING N4 TIME: 3 HOURS <br> MARKS: 200 

## INSTRUCTIONS AND INFORMATION

1. Answer all the questions.
2. Read all the questions carefully.
3. Number the answers according to the numbering system used in this question paper.
4. Answer QUESTIONS 3.1.1-3.1.12 and 4.1 on the ANSWER SHEETS (attached). Write your EXAMINATION NUMBER in the space provided, detach the answer sheets from the QUESTION PAPER and hand them in with the ANSWER BOOK.
5. Graphs must be large, neat and clear and may be done in pencil.
6. Use only a black or blue pen.
7. Write neatly and legibly.

## QUESTION 1: THE FARM MANAGEMENT INFORMATION SYSTEM

1.1 State TWO aspects that are important when drawing up an inventory. ( $2 \times 2$ )
1.2 Your friend needs to initiate a farm management information system for his farm.

State SEVEN steps that he should follow when starting a farm management information system.
$(7 \times 2)$
1.3 State THREE important requirements that a farm management information system must comply with to function successfully.
1.4 You were awarded a farm by the Department of Agriculture as you are seen as a farmer with potential. The following information regarding a tractor on the farm is provided:

| Cost price | R100 000 |
| :--- | :--- |
| Expected total useful life | 30 years |
| Expected salvage value at end of useful life | R7 000 |
| Period already in use | 13 years |
| Method of calculating depreciation | Straight-line |

Calculate the following showing all formulae and units:
1.4.1 The total amount that should be depreciated
1.4.2 The annual depreciation of the tractor
1.4.3 The accumulated depreciation during the 13 years of use
1.4.4 The initial value of the asset in the first inventory
1.4.5 The amount that should be depreciated for the next 17 years of its
1.5 Manpower records are used to keep track of all matters relating to personnel.

Name FIVE details that can be recorded in relation to manpower.
1.6 Discuss the following with regard to the straight-line method of depreciation:
1.6.1 ONE advantage
$(2 \times 1)$
1.6.2 TWO disadvantages
$(2 \times 2)$
1.7 What is the meaning of scientific farm management?

## QUESTION 2: ECONOMIC PRINCIPLES OF PRODUCTION

2.1 Indicate whether the following statements are TRUE or FALSE by writing only 'True' or 'False' next to the question number (2.1.1-2.1.6) in the ANSWER BOOK.
2.1.1 The marginal production will continue to increase as more and more units of an input are applied.
2.1.2 In an input/output ratio, the optimum input application level is the level at which maximum profit is achieved.
2.1.3 The maximum profit per hectare is only achieved when the production is at maximum potential.
2.1.4 Total cost is the sum of the total variable cost and the total fixed cost.
2.1.5 The production function is the relationship between various quantities or amounts of a specific output and input, while other inputs and conditions keep on changing.
2.1.6 The greater the number of hectares ploughed with a tractor, the lower the variable cost of the tractor per hectare.

$$
\begin{equation*}
(6 \times 1) \tag{6}
\end{equation*}
$$

2.2 Discuss the following products/product relationships in agriculture:
2.2.1 Joint products
2.2.2 Supplementary products
2.2.3 Complementary products
2.2.4 Antagonistic products

$$
\begin{equation*}
(4 \times 3) \tag{12}
\end{equation*}
$$

2.3 Study the graph below that represents three phases of the production of a product and answer the questions:

2.3.1 In Phase 1, between which points (A to D) does the total product (TP) increase at an increasing rate?
2.3.2 In Phase 1, between which points (A to D) does the total product (TP) increase at a decreasing rate?
2.3.3 Is the production in Phase 1 irrational or rational? Give a reason for your answer.
2.3.4 At what point (A-D) will maximum production be achieved?
2.3.5 Is the production in Phase 2 irrational or rational? Substantiate your answer.
2.3.6 Is the production in Phase 3 irrational or rational? Substantiate your answer.
2.4 An input/input ratio deals with various combinations of inputs $X_{1}$ and $X_{2}$ that will produce the same output or realise the same production while other inputs remain constant.


Name the type of combination that is described in each of the following cases:
2.4.1 This substitution implies that, as the quantity of $X_{1}$, decreases, more and more units of $X_{2}$ are required to replace one unit of input of $X_{1}$.

Draw and label a graph representing this substitution ratio.
2.4.2 This substitution is where an input $X_{1}$ can always be substituted in the same ratio with another input $\mathrm{X}_{2}$ in order to generate the same production.


Draw and label a graph representing this substitution ratio.
2.4.3 This substitution uses inputs in the production process according to a fixed ratio and no substitution takes place.

Draw and label a graph representing this substitution ratio.
2.4.4 This substitution implies that, as the quantity of $X_{1}$ increases, fewer and fewer units of $X_{2}$ must be used to replace one unit of input $X_{1}$.

Draw and label a graph representing this substitution ratio.

$$
\begin{equation*}
(4 \times 4) \tag{16}
\end{equation*}
$$

2.5 State the Law of Diminishing Marginal Returns in your own words.

## QUESTION 3: THE FARMING BALANCE SHEET

3.1 The following information is applicable to the Langlaagte Farming Enterprise as at 28 February 2017.


| DESCRIPTION | VALUE (R) |
| :--- | ---: |
| Debtors | 15000 |
| Marketable stock | 30000 |
| Shares at local cooperative | 100000 |
| Vehicles | 200000 |
| Equipment and implements | 150000 |
| Livestock | 100000 |
| Land and buildings | 550000 |
| Value of rented land | 40000 |
| Eskom account in arrears | 20500 |
| Stud animals for breeding | 100000 |
| Telkom paid in advance | 2500 |
| Creditors | 17000 |
| Bank overdraft | 8000 |
| Balance on instalment sale | 70000 |
| Mortgage bond | 300000 |
| Charge loan | 100000 |
| Weedkiller in store | 2000 |
| Cattle feed purchase but not used | 10000 |
| Positive bank balance at Standard Bank | 35500 |

Complete the balance sheet on the ANSWER SHEET (attached) by filling in the following (QUESTIONS 3.1.1-3.1.12):
3.1.1 Current assets

### 3.1.2 Investments and other

3.1.3 Movable assets
3.1.4 Fixed assets

### 3.1.5 Total assets

3.1.6 Current liabilities
3.1.7 Medium-term liabilities
3.1.8 Long-term liabilities
3.1.9 Total liabilities/debt
3.1.10 Net worth
3.1.11 Total liabilities and equity
3.1.12 Total capital applied
3.1.13 Using the figures from the balance sheet, calculate the Total Foreign
Capital Applied.
3.2 Indicate whether the following statements are TRUE or FALSE by writing only 'True' or 'False' next to the question number (3.2.1-3.2.5) in the ANSWER BOOK.
3.2.1 The situation where the debts exceed the value of the assets of the enterprise, is known as insolvency.
3.2.2 The assets of a farming enterprise are not always equal to the liabilities.
3.2.3 Livestock remedies are assets that will be used up in the production process within one year.
3.2.4 Capital structure refers to the combination of the interest in the assets of the enterprise.
3.2.5 Liabilities are systematically arranged in order of decreasing or increasing liquidity.

$$
\begin{equation*}
(5 \times 1) \tag{5}
\end{equation*}
$$

3.3 State TWO purposes of drawing up a balance sheet for the farming enterprise.

$$
\begin{equation*}
(2 \times 2) \tag{4}
\end{equation*}
$$

3.4 Briefly explain the following terms: Asset structure, financing structure and financial structure.

$$
(3 \times 2)
$$

3.5 Calculate your net current assets by using the balance sheet you completed in QUESTION 3.1 on the ANSWER SHEET (attached). Show all the calculations. State whether you are in a sound or poor situation and substantiate the answer.

## QUESTION 4: THE FARMING INCOME STATEMENT

4.1 The following financial information and production details are provided for a financial year of the Happy Hog farm.

| FINANCIAL INFORMATION | VALUE (R) |
| :--- | ---: |
| Breeding sow bought from neighbour on credit | 5000 |
| Pigs sold to butcher - cash not received | 50000 |
| Pigs sold at auction | 250000 |
| Suckling pigs donated to school for agricultural project | 6000 |
| Pigs died as a result of heat wave | 4000 |
| Four pigs slaughtered for household use | 4000 |
| Pigs slaughtered as ration for workers | 12000 |
| Value of pigs at beginning of year | 550000 |
| Value of pigs at end of year | 650000 |
| Value of stud boars at beginning of year | 120000 |
| Value of stud boars at end of year | 140000 |
| Feed purchased for the year | 50000 |
| Feed stock at beginning of year | 25000 |
| Feed at end of year | 20000 |
| Potatoes sold | 550000 |
| Potatoes given to labourers as rations | 12000 |
| Fertiliser bought for potatoes | 7600 |
| Wages paid to permanent labourers | 86000 |
| Wages for seasonal workers | 12000 |
| Interest on loans | 5400 |
| Depreciation on equipment | 23000 |
| Sundry farming expenses | 29000 |
| Land rental for the hired land | 20000 |

Make use of the financial information given above to calculate the Happy Hog farm's profit by completing the Farming Income Statement on the ANSWER SHEET (attached).
4.2 Give the correct term for each of the following descriptions related to cost:
4.2.1 The net farm income of a farming enterprise minus the remuneration
paid to the providers of foreign capital
4.2.2 The monetary value of the farm production over an accounting period, which usually covers a financial year

### 4.2.3 The fee charged by a lender for the use of borrowed money, usually expressed as an annual percentage of the principal amount <br> 

### 4.2.4 The gross production value of the enterprise minus production, marketing and administration costs

$$
\begin{equation*}
(4 \times 1) \tag{4}
\end{equation*}
$$

4.3 Discuss the difference between a source document, a supporting document
and an internal document.
4.4 Discuss the difference between an order cheque, a bearer cheque and a stale
cheque.
4.5 Explain the term asset.

TOTAL:

QUESTIONS 3.1.1-3.1.12
BALANCE SHEET OF LANGLAAGTE FARMING ENTERPRISE AS AT 28 FEBRUARY 2017

| LIABILITIES |  |  | ASSETS |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
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QUESTION 4.1
THE FARMING INCOME STATEMENT OF HAPPY HOG FARM FOR A FINANCIAL YEAR

|  | AMOUNT (R) |
| :--- | :---: |
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