

# higher education & training

Department: Higher Education and Training REPUBLIC OF SOUTH AFRICA

# NATIONAL CERTIFICATE

# FINANCIAL MANAGEMENT: FARMING N4

(4090484)

26 May 2021 (X-paper) 09:00–12:00

Calculators may be used.

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



# NATIONAL CERTIFICATE FINANCIAL MANAGEMENT: FARMING N4 TIME: 3 HOURS 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.  $(2 \times 2)$  (4)
- 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.  $(7 \times 2)$  (14)

- 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		(3)
1.4.2	The annual depreciation of the tractor		(4)
1.4.3	The accumulated depreciation during the 13 years of use		(3)
1.4.4	The initial value of the asset in the first inventory		(2)
1.4.5	The amount that should be depreciated for the next 17 year useful life	ars of its	(3)
Manpowe	er records are used to keep track of all matters relating to pers	sonnel.	
Name FI\	/E details that can be recorded in relation to manpower.		(5)
Discuss tl	he following with regard to the straight-line method of depreci	ation:	
1.6.1	ONE advantage	(2 × 1)	(2)
1.6.2	TWO disadvantages	(2 × 2)	(4)
What is th	ne meaning of scientific farm management?		(3) <b>[50]</b>

1.5

1.6

1.7

(3)

#### **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. ( $6 \times 1$ )

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- 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

(4 × 3) (12)

(6)

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.

(1)

(1)

(3)

(2)

(3)

(3)

2.4.2 This substitution is where an input  $X_1$  can always be substituted in the same ratio with another input  $X_2$  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.

 $(4 \times 4)$  (16)

(3) **[50]** 

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	15 000
Marketable stock	30 000
Shares at local cooperative	100 000
Vehicles	200 000
Equipment and implements	150 000
Livestock	100 000
Land and buildings	550 000
Value of rented land	40 000
Eskom account in arrears	20 500
Stud animals for breeding	100 000
Telkom paid in advance	2 500
Creditors	17 000
Bank overdraft	8 000
Balance on instalment sale	70 000
Mortgage bond	300 000
Charge loan	100 000
Weedkiller in store	2 000
Cattle feed purchase but not used	10 000
Positive bank balance at Standard Bank	35 500

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	(1)	
	3.1.3	Movable assets	(3)	
	3.1.4	Fixed assets	(1)	
	3.1.5	Total assets	(2)	
	3.1.6	Current liabilities	(4)	
	3.1.7	Medium-term liabilities	(1)	
	3.1.8	Long-term liabilities	(3)	
	3.1.9	Total liabilities/debt	(1)	
	3.1.10	Net worth	(1)	
	3.1.11	Total liabilities and equity	(1)	
	3.1.12	Total capital applied	(1)	
	3.1.13	Using the figures from the balance sheet, calculate the Total Foreign Capital Applied.	(3)	
3.2	Indicate 'True' o ANSWEI	whether the following statements are TRUE or FALSE by writing only or 'False' next to the question number (3.2.1–3.2.5) in the R 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. (5 × 1)	(5)	
3.3	State TWO purposes of drawing up a balance sheet for the farming enterprise $(2 \times 2)$			
3.4	Briefly e financial	xplain the following terms: Asset structure, financing structure and structure. $(3 \times 2)$	(6)	

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.

(5) **[50]** 

#### **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	5 000
Pigs sold to butcher – cash not received	50 000
Pigs sold at auction	250 000
Suckling pigs donated to school for agricultural project	6 000
Pigs died as a result of heat wave	4 000
Four pigs slaughtered for household use	4 000
Pigs slaughtered as ration for workers	12 000
Value of pigs at beginning of year	550 000
Value of pigs at end of year	650 000
Value of stud boars at beginning of year	120 000
Value of stud boars at end of year	140 000
Feed purchased for the year	50 000
Feed stock at beginning of year	25 000
Feed at end of year	20 000
Potatoes sold	550 000
Potatoes given to labourers as rations	12 000
Fertiliser bought for potatoes	7 600
Wages paid to permanent labourers	86 000
Wages for seasonal workers	12 000
Interest on loans	5 400
Depreciation on equipment	23 000
Sundry farming expenses	29 000
Land rental for the hired land	20 000

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).

(31)

- 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

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		TOTAL:	[50] 200
4.5	Explain t	he term asset.	(3) [50]
4.4	Discuss cheque.	the difference between an <i>order cheque</i> , a <i>bearer cheque</i> and a <i>stale</i> $3 \times 2$	(6)
4.3	Discuss and an <i>ir</i>	the difference between a source document, a supporting document $(3 \times 2)$	(6)
	4.2.4	The gross production value of the enterprise minus production, marketing and administration costs $(4 \times 1)$	(4)
	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	

-1-

ANSWER SHEET

**EXAMINATION NUMBER:** 

### QUESTIONS 3.1.1-3.1.12

#### BALANCE SHEET OF LANGLAAGTE FARMING ENTERPRISE AS AT 28 FEBRUARY 2017

LIABILITIES		ASSETS	

(27)

ANSWER SHEET EXAMINATION NUM

BER:							

## **QUESTION 4.1**

THE FARMING INCOME STATEMENT OF HAPPY HOG FARM FOR A FINANCIAL YEAR						
	AMOUNT (R)					