



higher education & training

Department:
Higher Education and Training
REPUBLIC OF SOUTH AFRICA

N580(E)(J5)H

NATIONAL CERTIFICATE

FINANCIAL MANAGEMENT: FARMING N4

(4090484)

**5 June 2018 (X-Paper)
09:00–12:00**

Nonprogrammable calculators may be used.

This question paper consists of 9 pages.

DEPARTMENT OF HIGHER EDUCATION AND TRAINING
REPUBLIC OF SOUTH AFRICA
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. Do balance sheets and income statements on two sheets facing one another where necessary.
 5. Write neatly and legibly.
-

QUESTION 1: THE FARM MANAGEMENT INFORMATION SYSTEM

1.1 An efficient own record system or farming management information system is the most important source of information in a farming enterprise.

Discuss FIVE reasons why this information is important. (5 × 2) (10)

1.2 For inventory purposes, farming assets are normally divided into five main groups of which stock is one.

Give FOUR sub-groups that fall under stock. (4)

1.3 Assets are valued for the purpose of providing management information for decision making.

Provide the guidelines that you would use to place a value on the following assets for the inventory:

1.3.1 Commercial livestock

1.3.2 Breeding and dairy herds

1.3.3 Finished products

1.3.4 Insured crops on the land

1.3.5 Unused seeds

(5 × 2) (10)

1.4 Answer the following questions about depreciation and depreciating assets:

1.4.1 Briefly discuss TWO basic aims of calculating depreciation and depreciating assets. (2 × 2) (4)

1.4.2 Give TWO disadvantages of using the straight-line method for calculating depreciation. (2 × 2) (4)

1.4.3 The following information on a tractor is available:

DESCRIPTION	UNIT
• Cost price	R190 000,00
• Salvage value	R19 000,00
• Expected life period	10 years or 10 000 hours

Further assume that the tractor has been used for 8 000 hours as at the given date.

Determine the book value according to the use method of calculating depreciation. (9)

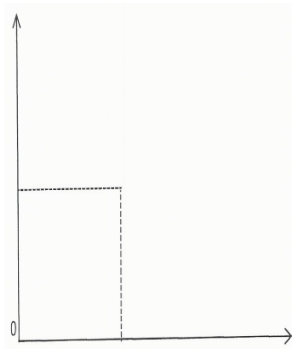
1.5 The inventory should include a complete description of each asset.

Give NINE descriptions of an asset that should appear in the inventory.

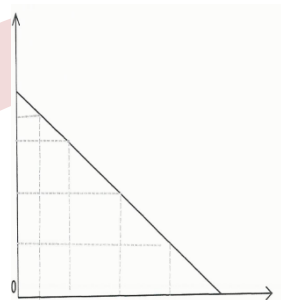
(9)
[50]

QUESTION 2: PRINCIPLES OF PRODUCTION ECONOMICS

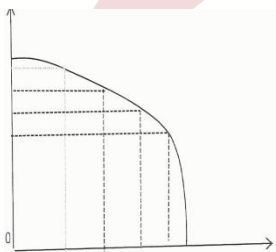
2.1 Study the following graphs of various possible rates of substitution and answer the question that follow.



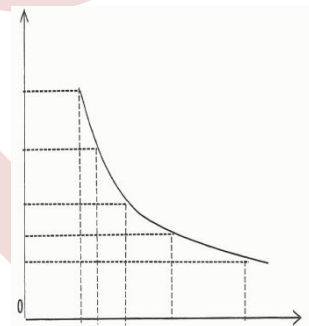
A



B



C



D

Name each type of substitution and explain how its rate of substitution takes place.

(4 × 2) (8)

2.2 What is the meaning of *the least-cost combination of inputs*?

(4)

2.3 The following information regarding wheat production is given:

- The price of nitrogen is R4,00 per kilogram
- The price achieved for wheat is R2,50
- The total fixed cost is R400,00 per hectare

Various levels of Nitrogen (N) were administered. All remaining inputs were constant.

The table below is a part of the production function that indicates the relationship between varying levels of N and changes in wheat production:

INPUT LEVEL	TOTAL WHEAT YIELD
Nitrogen application (kg/ha)	Wheat production (kg/ha)
10	400
20	910
30	1350
40	1710
50	1960
60	2110
70	2235
80	2250

Calculate the following showing ALL the formulae:

- 2.3.1 The marginal return when the input levels of nitrogen is increased from 70 kg/ha to 80 kg/ha (4)
- 2.3.2 The value of total product (return) at an input level of 80 kg nitrogen per hectare (4)
- 2.3.3 The total input price at an application rate of 80 kg nitrogen per hectare (3)
- 2.3.4 The profit (margin) at an input level of 80 kg nitrogen per hectare (3)
- 2.4 Name THREE cost concepts that can be used instead of production function as the basis of production decision. (3)

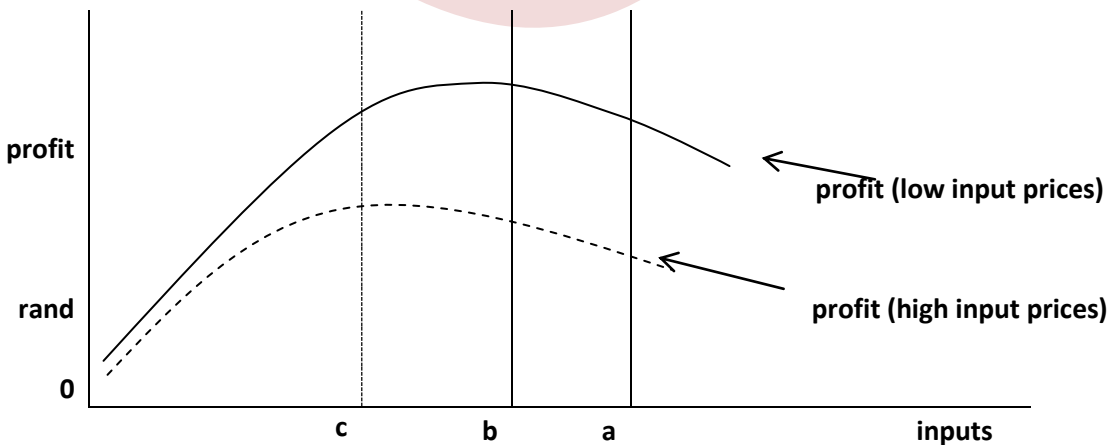
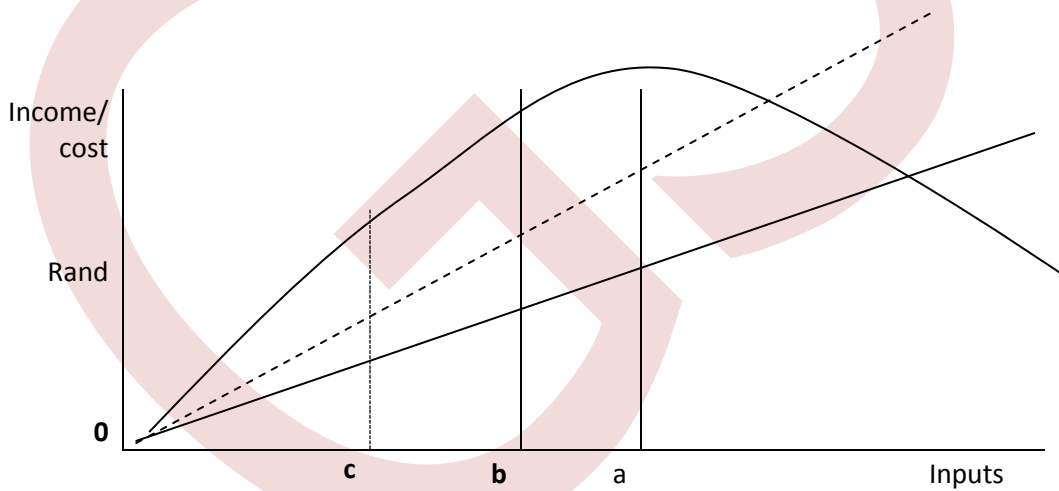
2.5 Output/output relationships deal with the various combinations of products Y_1 and Y_2 which can be produced with a specific, fixed and limited number of inputs.

Name the type of combination that is described in each of the following cases:

- 2.5.1 The production of one product automatically generates a fixed quantity of another product.
- 2.5.2 A change in the production of one product has no effect on the production of the other product.
- 2.5.3 An increase in the production of one product results in an increase in the production of the other.
- 2.5.4 The production of one product not only claims the inputs of the other product but also has an adverse effect on that product.
- 2.5.5 An increase in the production of one product leads to a decrease in the production of the other.

(5 × 2) (10)

2.6 Study the following graphs that represent maximum production versus maximum profit and answer the questions.



- 2.6.1 What does the curve in the first graph represent? (2)
- 2.6.2 The curve in the first graph reaches a maximum at the maximum production level.
Indicate the level of input required to reach maximum production level. (2)
- 2.6.3 What does the solid straight line in the first graph represent? (2)
- 2.6.4 In the second graph, at what input level is maximum profit achieved. (2)
- 2.6.5 What does the dotted line in the first graph represent? (2)
- 2.6.6 Give ONE factor that could cause the value of the product curve to move either upward or downward. (1)
- [50]**

QUESTION 3: THE FARMING BALANCE SHEET

- 3.1 Choose a description from COLUMN B that matches the word/item in COLUMN A. Write only the letter (A–J) next to the question number (3.1.1–3.1.5) in the ANSWER BOOK.

COLUMN A		COLUMN B	
3.1.1	An amount of money that the farmer would retain if he were to sell the farm assets	A	movable assets
		B	investment
3.1.2	Most liquid assets	C	medium-term liabilities
3.1.3	When the debts exceed the value of assets	D	long-term liabilities
		E	net worth
3.1.4	Mutual relationship between the different types of assets and liabilities	F	fixed assets
		G	current assets
3.1.5	Debts that are repayable over a period that can vary from one to ten years	H	solvent
		I	insolvent
		J	financial structure

(5 × 2) (10)

- 3.2 The following information about Mr Adonai's farm as at 28 February 2017 is made available:

DESCRIPTION	VALUE (R)
Favourable bank balance	10 000
Slaughtered lamb ready for sale	15 000
Repayment agreement at Westbank for the truck	20 000
Monetary reserve on fixed deposits at Capitec bank	20 000
Fertiliser stock in store still on account	1 000
Eskom account still in arrears	2 000
Sundry debtors	4 000
Ford truck	25 000
Ewes for breeding	24 000
Money owed by Meat Market to the enterprise for slaughtered lambs	3 000
Telephone account paid in advance	500
Balance of bond at ABSA for land bought	200 000
Input VAT outstanding	20 000
School fees for the owner's children	23 750
Value of extra land rented from neighbour	500 000
Value of own land	750 000

- 3.2.1 Draw up the balance sheet as at 28 February 2017. (35)
- NOTE:** For every incorrect entry, a mark will be deducted.
- 3.2.2 What is the value of the total foreign capital? (2)
- 3.2.3 Is the farm insolvent? Motivate your answer. (3)
- [50]**

QUESTION 4: THE FARMING INCOME STATEMENT

The following financial information and production details about a farmer that farms with sheep and lucerne are provided for a financial year:

	R
Rent paid for part of the lucerne field	20 000
Interest paid on land bank loans	15 000
Repayment on loans (excluding interest)	10 000
Bale of lucerne sold	160 000
Bale of lucerne fed to sheep	30 000
Fuel stock at the beginning of the year	4 000
Fuel stock at the end of the year	2 000
Fuel purchased during the year	12 000
Ewes bought on credit	10 000
Wages of permanent labourers	48 000
Depreciation on improvement and equipment	32 000
Veterinary and medicines	20 000
Sheep sold, money not received yet	130 000
Sale of wool to Mr Malivha's company	30 000
Sheep slaughtered for domestic use	2 500
Sheep slaughtered for the labourers	4 000
Unsold wool stock at the beginning of the year	30 000
Unsold wool stock at the end of the year	10 500
Value of sheep at the end of the year	270 000
Value of sheep at the beginning of the year	250 000
Maintenance of vehicles and implements	35 000
Electricity	50 000
Auxiliary farm expenses	9 000

Calculate the following showing ALL calculations and formulae where applicable:

- | | | |
|-----|---|-------------|
| 4.1 | The gross production value for the sheep branch | (18) |
| 4.2 | The gross production value for the lucerne branch | (4) |
| 4.3 | The gross production value for the farm as a whole | (3) |
| 4.4 | The cost of labour for the year | (4) |
| 4.5 | The cost of fuel for the year | (5) |
| 4.6 | The total production, marketing and administration costs for the year | (10) |
| 4.7 | The net farm income | (3) |
| 4.8 | The farm profit | (3) |
| | | [50] |

TOTAL: 200