higher education & training

Department:
Higher Education and Training
REPUBLIC OF SOUTH AFRICA

MARKING GUIDELINE

NATIONAL CERTIFICATE

FINANCIAL MANAGEMENT: FARMING N4

21 October 2020

This marking guideline consists of 8 pages.

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QUESTION 1: THE FARM MANAGEMENT INFORMATION SYSTEM

1.1 1.1.1 True
1.1.2 False
1.1.3 False
1.1.4 True
1.1.5 False

(5 × 1) (5)

1.2
- To recover the capital invested in an asset✓ over its useful life so that it can be replaced✓
- To determine the annual book value of an asset✓ for balance sheet purpose✓

(4)

1.3 1.3.1 Rate of depreciation = $\frac{2}{\text{Expected useful life}}$

$= \frac{2}{20}$✓

= 0,1 or 10% /year✓✓ (3)

1.3.2 First year depreciation
D = BV × R✓
= 130 000 × 0,1✓
= R✓13 000✓ (4)

1.3.3 D = BV × R
= 117 000 × 0,1
= R11 700 (2nd year)

D = BV × R✓
= 105 300✓ × 0,1✓
= R✓10 530 (3rd year) ✓ (5)

1.3.4 $BV = CP \times (1 - r)^{y}$✓
$= 130\,000 \times (1-0,1)^{5}$✓
$= 130\,000 \times (0,9)^{5}$✓
= 130 000 × 0,59✓
= R✓76 700✓ (5)

1.4
- Land
- Fixed improvements
- Orchards, vineyards, and sugar-cane plantation
- Vehicles, machinery and implements
- Stocks

(5)

1.5
- It must be simple and easy to operate✓✓
- It must be used to manage the farm✓✓
- The farmer must have the knowledge to process the information correctly, interpret it logically, and make meaningful decisions.✓✓ (3 × 2) (6)

1.6
- The purchase or construction date
- The cost price or initial value
- The expected life
- The expected replacement value (if applicable)
- The expected salvage value
- The method and rate of depreciation
- The annual capital recovery
- The annual decrease in the inventory value of asset
- The book value of each asset at the end of each financial year

(Or any other reasonable answer) (9)

1.7
- Opening balance sheet
- Income and capital reconciliation statement
- Closing balance sheet
- Flow-of-funds statement (4)

[50]

QUESTION 2: PRODUCTION OF ECONOMIC PRINCIPLES

2.1
- Average product means the ratio of products produced compared to units required to produce the products.✓✓
- Marginal product can be defined as calculating the influence on another variable when an input or various inputs are changed.✓✓ (4)

2.2 2.2.1 Average production = $\frac{\text{Total product (TP)}}{\text{Input level}}$✓

$= \frac{775}{25}$✓

= R31✓ kg maize/kg nitrogen✓

2.2.2 Marginal production = $\frac{\Delta \text{ total product}}{\Delta \text{ input level}}$✓

$= \frac{775 - 750}{25 - 20}$✓

$= \frac{25}{5}$

= R5✓ kg maize/kg nitrogen✓

2.2.3 Total variable cost = Input × Input price✓
= 25 kg/ha × R50/kg✓
= R1 250✓/ha✓

2.2.4 Total cost = TVC + TFC✓
= R1 250/ha + R1 200/ha✓
= R2 450✓/ha✓

2.2.5 Average variable cost = $\frac{\text{TVC}}{\text{Production}}$✓

$= \frac{\text{R1 250/ha}}{\text{775 kg/ha}}$✓

= R1,6✓ per kg maize✓

2.2.6 Marginal cost = $\frac{\Delta \text{ Total cost}}{\Delta \text{ Production}}$✓

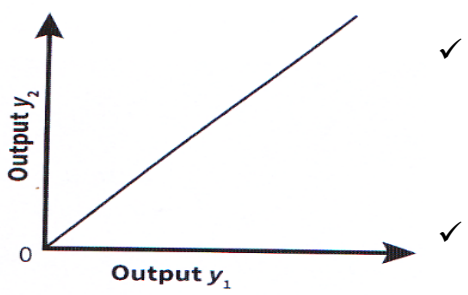
$= \frac{\text{R2 450/ha – R2 200/ha}}{\text{775 kg/ha – 750 kg/ha}}$✓

= R10✓/kg ✓

(6 × 4) (24)

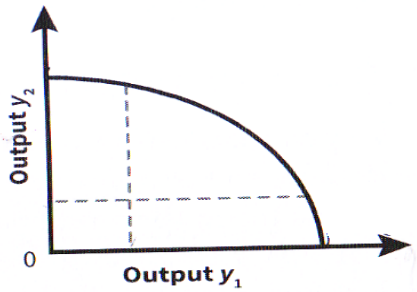
2.3
- Fixed rate of substitution
- Constant rate of substitution
- Increasing rate of substitution
- Decreasing rate of substitution (4)

2.4 2.4.1 ✓



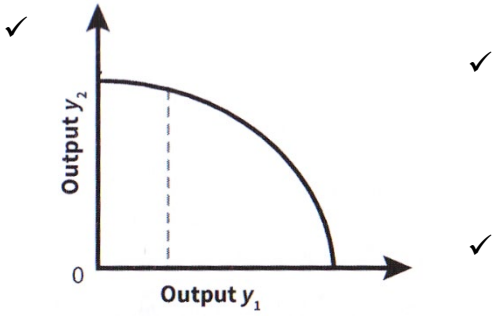
✓ ✓

2.4.2 ✓

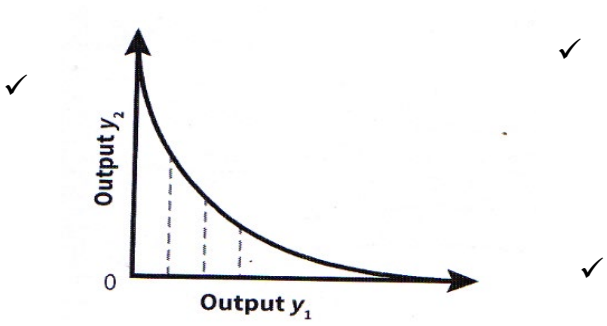


✓ ✓

2.4.3



2.4.4



(4 × 3) (12)

2.5 As more variable units of input are added✓ in combination with other constant inputs,✓ the marginal product will eventually start to decline/decrease.✓ (3)

2.6 2.6.1 Returns to scale = $\frac{\%\ change\ in\ cost\ ✓}{\%\ change\ in\ production\ value ✓}$ (2)

2.6.2 Phase 2 or rational phase✓ (1)

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QUESTION 3: THE FARMING BALANCE SHEET

3.1

AGENBACH FARMING ENTERPRISES
BALANCE SHEET AS ON 30 APRIL 2019

Liabilities				Assets			
Current liabilities				Current assets			✓
Overdraft at ABSA Bank	25 000		✓	Cash in farm office	125		✓
Outstanding telephone account	3 200		✓	Electricity paid in advance	1 500		✓
Outstanding balance Cape Agri	15 000	43 200	✓✓	Stock of production supplies	7 000		✓
				Debtors	300		✓
				Pigs ready for slaughter	500 000		✓
				Diesel 200l @ R15/ℓ✓	3 000	511 925	✓✓
Medium-term Liabilities			✓				
Balance instalment sale at ABSA bank✓	20 500		✓	Investments & other			✓
Balance rental agreement Wesbank	90 000	110 500	✓✓	Fixed deposit at Bankrupt		10 000	✓
Long-term liabilities				Movable assets			✓
Balance of mortgage at Landbank		25 000	✓✓	Equipment	46 000		✓
				Landini tractor	110 000	156 000	✓✓
Total debts/liabilities✓		178 700	✓				
Net worth		2 085 225	✓	Fixed assets			
				Land	900 000		✓
				Fences	16 000		✓
				Buildings on farm	550 000		✓
				Dams	120 000	1 586 000	✓✓
Total labilities OR Total liabilities & equity✓		2 263 925	✓	Total assets ✓		2 263 925	✓
				Value of leased land		50 000	✓
				Total capital employed		2 313 925	✓✓
							(44)

3.2 Solvent✓ because value of assets exceed the extent of the debt✓✓ (3)

3.3 Total foreign capital = Debt + value of leased land
= 88 700 + 50 000✓
= R138 700✓✓ (3)
[50]

QUESTION 4: THE FARM INCOME STATEMENT

4.1 The gross production value of the sheep branch

	Amount (R)
Sheep at beginning of year	-500 000✓
Sheep at end of year	540 000✓
Wool stock at beginning of year	-60 000✓
Wool stock at end of year	21 000✓
Sheep slaughtered for worker rations	8 000✓
Sheep slaughtered for household use	5 000✓
Wool sold to clothing company	60 000✓
Sheep sold, but money still outstanding	260 000✓
Ewes bought on credit	-20 000✓
TOTAL	**314 000**✓

(10)

4.2 The gross production value for the lucerne branch

	Amount (R)
Lucerne fed to sheep	60 000✓
Lucerne sold to neighbour	40 000✓
Lucerne donated to drought relief in Northern Cape	20 000✓
TOTAL	120 000✓

(4)

4.3 The gross production value for the farm as a whole
= GPV sheep + GPV lucerne✓
= 314 000 + 120 000✓
= R434 000✓ (3)

4.4 The cost of labour for the year

	Amount (R)
Sheep slaughtered for worker rations	8 000✓
Wages paid to permanent workers	96 000✓
TOTAL	**104 000**✓

(3)

4.5 The cost of fuel for the year

	Amount (R)
Fuel purchased throughout the year	24 000✓
Fuel stock at end of year	-4 000✓
Fuel stock at beginning of year	8 000✓
TOTAL	**28 000**✓

(4)

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4.6 The total production, marketing and administration costs

	Amount (R)
Other farming expenses	18 000✓
Electricity paid	100 000✓
Maintenance of movable assets	70 000✓
Veterinary costs, including medicines	40 000✓
Depreciation on movable assets	64 000✓
Cost of labour	104 000✓
Cost of fuel	28 000✓
TOTAL	**424 000**✓

(8)

4.7 The net farm income
= Total GPV – Production, marketing & administration costs✓
= 434 000✓ – 424 000✓
= R10 000✓ (4)

4.8 The farm profit
= NFI – Remuneration to foreign capital (Interest & land rental)✓
= 10 000✓ – (30 000 + 40 000✓)
= 10 000 – 70 000✓
= -R60 000✓ (5)

4.9 The farm made a loss.✓ The value after paying suppliers of foreign capital was minus✓ R60 000.✓ (3)

4.10 4.10.1 Gross production value is the monetary value of the farm production over an accounting period.✓✓

4.10.2 Net farm income is the gross production value minus production, marketing and administration costs.✓✓

4.10.3 Farm profit is the net farm income of a farming enterprise minus the remuneration paid to the providers of foreign capital.✓✓

(3 × 2) (6)

[50]

TOTAL: 200

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