

NATIONAL SENIOR CERTIFICATE

GRADE 12

AGRICULTURAL MANAGEMENT PRACTICES

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NOVEMBER 2009

MEMORANDUM

MARKS: 200

This memorandum consists of 9 pages.

SECTION A

QUESTION 1.1

| 1.1.1 | X✓✓ | В | С | D |
|--------|-----|-----|-----|-----|
| 1.1.2 | Α | В | X√✓ | D |
| 1.1.3 | Α | В | X√✓ | D |
| 1.1.4 | Α | В | X√✓ | D |
| 1.1.5 | Α | X√✓ | С | D |
| 1.1.6 | Α | В | X✓✓ | D |
| 1.1.7 | Α | X√✓ | С | D |
| 1.1.8 | Α | В | X✓✓ | D |
| 1.1.9 | X√✓ | В | С | D |
| 1.1.10 | A | В | С | X√✓ |

(10 x 2) (20)

QUESTION 1.2

| 1.2.1 | B√ |
|--------|------------|
| 1.2.2 | A✓ |
| 1.2.3 | C√ |
| 1.2.4 | D√ |
| 1.2.5 | I ✓ |
| 1.2.6 | H✓ |
| 1.2.7 | J√ |
| 1.2.8 | G√ |
| 1.2.9 | E√ |
| 1.2.10 | F√ |
| | |

(10 x 1) (10)

QUESTION 1.3

1.3.1 Supply ✓✓

1.3.2 Management plan/Production plan ✓✓

1.3.3 Elasticity ✓✓

1.3.4 Profit ✓✓

1.3.5 Permanent ✓✓

1.3.6 Commercial ✓✓

1.3.7 Loss ✓✓

1.3.8 Grading ✓✓

1.3.9 Cash ✓✓

1.3.10 Price ✓ ✓

(10 x 2) (20)

TOTAL SECTION A: 50

SECTION B

QUESTION 2: ANIMAL AND CROP PRODUCTION

2.1 Type of irrigation ✓
Soil cultivation ✓
Fertilisation ✓
Liming ✓
Type of crop ✓
Scheduling of irrigation ✓

(Any 5) (5)

2.2 Pastures

2.2.1 Palatability/type of veld ✓

Nutritive value ✓

Ability to compete. ✓

Volume/amount of grass ✓

Resistance to grazing ✓

Topography ✓

Lowlands/river/waterlogged areas/wetlands ✓

State of plant growth in relation to climax condition ✓

State of erosion ✓

(Any 5) (5)

2.2.2 Keep animals out of pasture until the veld has recovered. ✓

Erecting fences around the affected areas√

Establish more plants by means of sowing/planting more grass. ✓

Make contours to reduce the down flow of water. ✓

Build ridges with stones, rocks or tyres in the dongas that have developed√

Add fertiliser to stimulate growth in the affected areas ✓ (Any 4)

(4) [9]

2.3 Climatic Graph (Klipheuwel)

2.3.1 Week 4√ – cold temperature√, high humidity√, strong wind. √
 Week 7√ – high temperature√, high humidity√
 (2)

2.3.2 Week 4 – raining (wet animals) √, wind (cool animals down) √, low temperature (cool animals down)√ (Any 2)
 Week 7 – raining (wet animals) √, low wind speed (animals less affected) √ higher temperature (animals not so cold) √ (Any 2)

2.3.3 (a) Shelter√, shade trees√/ adapted breeds√/ cooling facilities like ventilation fans√ and mist sprayers√ (Any 1) (1)

(b) Bring the animals indoors to avoid the effect of the wind. ✓
 Erect a windshield to reduce the effect of the wind. ✓
 (Any 1)

(c) Heating facilities√, Housing (shelter) √, effective feeding √, adapted breeds√ (Any 1)(1)

2.6.2

(Any 2)

| | 2.3.4 | Lower temperature√- requires more heating, thus more units√ of electricity is used | (2) [11] |
|--------------|-------------|--|-------------|
| 2.4 I | Farm mana | gement | |
| | 2.4.1 | Control. ✓ | (1) |
| | 2.4.2 | Implement a time-clock system that will control the labourer's arrival and departure. ✓ Attendance register✓ | (2) |
| | 2.4.3 | Control the calibration of the fertiliser spreader. Control loading of the fertiliser spreader to ensure that no wasting took place. Control the number of fertiliser bags used by recording it every time the fertiliser spreader is loaded. Lock the fertiliser shed to prevent theft. (Any 3) | (3) |
| | 2.4.4 | Disciplinary action. ✓ | (1) [7] |
| 2.5 S | Specialised | farming enterprise | |
| | 2.5.1 | Precision farming. ✓ | (1) |
| | 2.5.2 | Reducing cost of producing the product in the area. Reducing risk of contaminating the environment by means of injudicious application of agro-chemicals. More accurate crop yield estimation. Information collected may lead to more accurate production inputs like plant density, fertilisation, and other inputs. | (4) |
| | | | [5] |
| 2.6 I | Farm labou | ır | |
| | 2.6.1 | A – Permanently employed labourers. ✓ B – Seasonal labourers. ✓ C – Contract/occasional labourer. ✓ | (3) |

Contract/occasional labourers are employed to do a specific non-repeatable task√ at a specific time. √ (Any 2) (4)

A seasonal labourer is employed every year √at the same

time/season to a specific task. V

2.6.3 Financial incentives for good work. ✓

Possible partnership deals√

Planning of production processes. ✓

Daily planning. ✓

Supervision. ✓

Effective mechanisation. ✓

Better life circumstances. ✓

Training. ✓

(Any 3) (3) [11]

2.7 Farming system and sustainable food supply

2.7.1 Subsistence farmer. ✓

2.7.2 Fence around the vegetable garden. ✓ Make use of the communal grazing. ✓

(2) [3]

(1)

[50]

QUESTION 3: RECORDING, FINANCIAL STATEMENTS AND ENTREPRENEURSHIP

3.1 **INCOME AND EXPENSES STATEMENT**

| Animal feed | R 15 000 |
|-----------------------|--------------------|
| Wages | R 10 000 |
| Fuel | R 7000 |
| Electricity | R 4 000 |
| Containers | R 870 |
| Interest (medium-term | R 650 |
| capital) | |
| TOTAL EXPENCES | <u>R 37 520</u> √√ |
| | |
| Sold produce | R 36 000 |
| Sold stock (animals) | R 29 600 |
| TOTAL INCOME | <u>R 65 600</u> √√ |
| | |
| | R 65 600 |
| | R 37 520 |
| GROSS MARGIN/ | R 28 080 ✓ ✓ |
| GROSS INCOME | |
| | |

(6)

3.2 SUTHA AGRICULTURAL ENTERPRISES

| Current Assets | | Current Liabilities | |
|----------------------|-----------|------------------------------------|----------|
| Item | Rand | Item | Rand |
| Cash in the bank | R73 000 ✓ | Tractor instalment due next month | R10 000√ |
| Accounts retrievable | R42 000√ | Labour expenses for the next month | R22 000√ |

| Intermediate Assets | | Intermediate Liabilities | |
|---------------------|-----------|----------------------------|-----------|
| Item | Rand | Item | Rand |
| Seed (30 kg) | R62 000√ | Yearly fertiliser contract | R128 000√ |
| Tractors (2) | R230 000√ | | |
| Truck (1) | R184 000√ | | |
| Fence | R89 000√ | | |
| Implements | R120 000√ | | |

(10)

3.3 Financial Analysis 31 March 2008 (Private Farm)

3.3.1 R34 450 + R22 035 + R28 161 = R84 646
$$\checkmark$$
 (1)

3.3.3 R14 000 + R3 000 = R17 000
$$\checkmark\checkmark$$
 (2)

3.3.4 Percentage gross profit on turnover = Gross Profit ✓
Turn over

$$= \frac{R56\ 066}{R84\ 646} \times \frac{100}{1} \checkmark = 66,23\% \checkmark$$
(3)

[9]

3.4 Group of young farmers

3.4.1 Soil preparation:

Rakes ✓

3.4.2 Weed and pest control:

Hoe/Tiller √

3.4.3 Harvesting:

Clippers ✓

3.5 Checklist for business plan:

| | Yes | No |
|-------------------------|-----|-----|
| Name of business | (1) | (0) |
| Description of business | (1) | (0) |
| Partnerships | (1) | (0) |
| Sources of income | (1) | (0) |
| Marketing | (1) | (0) |
| Budget | (1) | (0) |
| Sources of labour | (1) | (0) |
| Operational planning | (1) | (0) |

(8)

3.6 Budgeting (Farm Budget)

3.6.1 A farm budget is a physical, financial plan ✓ for the operation of the farm for some period of time. ✓

(2)

3.6.2 -Total farm budget ✓

-Partial budget√

-Cash-flow budget√

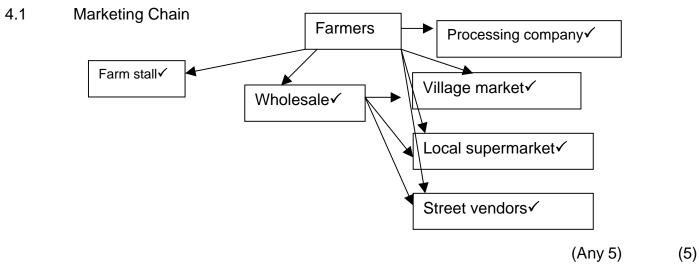
(3) [5]

3.7

| | Farmer A | Farmer B |
|-------|---|--|
| 3.7.1 | Healthy animals√ | Better production√ |
| 3.7.2 | Does not change, irrespective of situation√ | Decision-making skills, taking action etc.√ |
| 3.7.3 | Stays rigid, no creativity in actions√ | Developing ideas, adaptation, reformulation of problems, find solutions√ |

(6) **[50]**

QUESTION 4: HARVESTING, VALUE-ADDING, MARKETING, AGRI-TOURISM AND INDUSTRY



4.2 Restrictions/Barriers for small-scale farmers to enter meat industry

4.2.1 A lot of money is needed to buy the animal stock, equipment and to pay for marketing and processing costs. Loans may be difficult to obtain. ✓✓

(2)

4.2.2 There must be enough buyers for the product and the buyers/customers must be convinced about the farm product and reliability of the farmer. ✓✓

(2)

4.2.3 Consumers, government, the meat industry and legislation demand high quality meat in terms of hygiene, taste and appearance. ✓ ✓

(2)

4.2.4 The farmer and the workers need skills and training in the handling and marketing of the product. $\checkmark\checkmark$

(2) [8]

4.3 Small-scale farmers vs commercial farmers

4.3.1 Small-scale farmers would use hand tools, manual labour ✓ Large-scale farmers would use mechanisation ✓

(2)

4.3.2 Small-scale farmers would harvest when the crop is ready ✓ Commercial farmers would harvest at the right time to preserve colour, quality and improve storage life. ✓

(2)

4.3.3 The commercial farmer normally has access to technology √to preserve quality (transport trucks) whereas the small-scale farmer might have to sell in the area due to no proper transport facilities√

(2)

4.3.4 Commercial farmers make use of sophisticated storage spaces which is aimed at longer storage life and marketability. ✓ Small-scale farmer might store in a cool dark room to try and preserve quality✓

(2) [8]

4.4 Options for processing

4.4.1 He/she needs to look at profitability of processed crop above fresh crops. ✓

He/she needs to take into account the risks of delivering a processed product ⁄

He/she needs to look at his direct competition when deciding what to do with his crop-

There might be an oversupply of product on the market√ Preservation is one of the key reasons for processing√

Processing often adds value to a product√

A processed product might fill a certain niche market that the fresh product would not \checkmark (Any 3)

(3)

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GRAND TOTAL:

200