



education

Department:
Education
REPUBLIC OF SOUTH AFRICA

**NATIONAL
SENIOR CERTIFICATE**

GRADE 12

AGRICULTURAL MANAGEMENT PRACTICES

EXEMPLAR 2009

MEMORANDUM

MARKS: 200

This memorandum consists of 9 pages.

Question 1.1/Vraag 1.1

1.1.1	A	B	C	D	✓
1.1.2	A	B	C	D	✓
1.1.3	A	B	C	D	✓
1.1.4	A	B	C	D	✓
1.1.5	A	B	C	D	✓
1.1.6	A	B	C	D	✓
1.1.7	A	B	C	D	✓
1.1.8	A	B	C	D	✓
1.1.9	A	B	C	D	✓
1.1.10	A	B	C	D	✓

10x2 (20)

Question 1.3 / Vraag 1.3

- 1.3.1 Intensive ✓
- 1.3.2 Fixed ✓
- 1.3.3 HIV/Aids ✓
- 1.3.4 Seasonal ✓
- 1.3.5 Rotational ✓
- 1.3.6 Loss ✓
- 1.3.7 Variable costs ✓
- 1.3.8 Conventional farming ✓
- 1.3.9 optimise / maximise ✓
- 1.3.10 market equilibrium ✓

10x1 (10)

Question 1.2 / Vraag 1.2

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

10 X2 (20)

Total (Section A) [50]

QUESTION 2: ANIMAL AND CROP PRODUCTION.

Farming systems

- 2.1.1 Commercial farming is a farming system whereby a farming enterprise sells produce to consumers✓
And the producer generates a bigger profit to extent the enterprise.✓
Subsistence farming is a farming system whereby a farming enterprise only produces products for the household/community✓
And there is no or little profit generated. ✓ (4)
- 2.1.2 Taking of soil samples. ✓/ plant samples
Determine the precise amount of fertiliser needed per area cultivated. ✓
Correct application of fertiliser during the growing stages of plants. ✓
If applicable, correct calibration of equipment. ✓
More effective fertilisation methods, such as liquid/gas fertilisation or fertigation (4)

Precision farming

- 2.2 - remote sensing data and images assist farmers to detect temperature changes
- assist farmers to detect areas of plant stress✓ before its becomes visible
- assist farmers to monitor humidity, rainfall, soil temperature and wind
- assist farmers to identify the soil nutritional status (5)

Production systems

- 2.3 -profitability✓
-markets✓
-availability of feed✓and
-veld type.✓ (4)
- 2.4 -development stage
-introductory stage
-growth stage
-maturity stage
-decline stage (5)

Biotechnology

- 2.5.1 -A technological application that uses biological systems, living organisms,✓
or derivatives thereof, to make or modify products or processes for specific use.✓ (2)
- 2.5.2 -selection✓
-domestication✓
-developing hybrid crops✓
-developing products which are environmentally friendly✓
-developing crops which are disease and pest resistant✓ Any 4 (4)

Contours

- 2.6.1 -prevent excessive run-off and erosion✓ (1)
- 2.6.2 -percentage slope✓
-soil erodibility✓
-rainfall✓
-cultivation practices✓
-soil type✓
-type of crop✓
-machinery used in the farm✓ Any 3 (3)

Labour

- 2.7.1 35 hours x 4 weeks✓ x R5.59✓ = R782.60✓ (3)
- 2.7.2 Free / subsidised housing, ✓ food rations, ✓ performance bonus, ✓ sporting facilities, ✓ free / subsidised transport, ✓ part of the produce, ✓ partnership deals. ✓ Any 2 (2)

Evaluation of farming systems

- 2.8 (a) semi-intensive system. ✓✓
(b) intensive system. ✓✓
(c) extensive system. ✓✓ (6)

Production Factors

- 2.9.1 The yield increases from 10.5 to 80 units. ✓✓ (2)
- 2.9.2 The yield increases from 80 to 100 units. ✓✓ (2)
- 2.9.3 When the number of workers increased from one to four the yield increased at a high rate. ✓ When the number of workers increased from four to six the yield increased at a lower rate. ✓✓ (3)

[50]

QUESTION 3: RECORDING, FINANCIAL STATEMENTS AND ENTREPRENEURSHIP

- 3.1 $VAT = R30,00 \times \frac{14}{100} = R4,20$ ✓ ✓ or $VAT = R30,00 \times 14\% \checkmark = R4,20 \checkmark$
OR $VAT = R30,00 \times 0,14 \checkmark = R4,20 \checkmark$ (2)
- 3.2 Planning of the enterprise. ✓
Prioritise tasks. ✓
Don't waste time on non-important tasks. ✓
Develop / learn good working ethics. ✓
Concentrate on one task/activity at a time. ✓
Break bigger tasks into smaller compartments. ✓
Develop a working procedure that works for you. ✓
Develop a system where you can easily find stored goods/files✓ Any 5 (5)

- 3.3 Checklist rubric:
 Name of the enterprise
 Aim✓ / description✓ of the enterprise
 The budget ✓ of the enterprise including the possible income ✓ and costs✓
 Realistic values✓
 Design✓ (8)

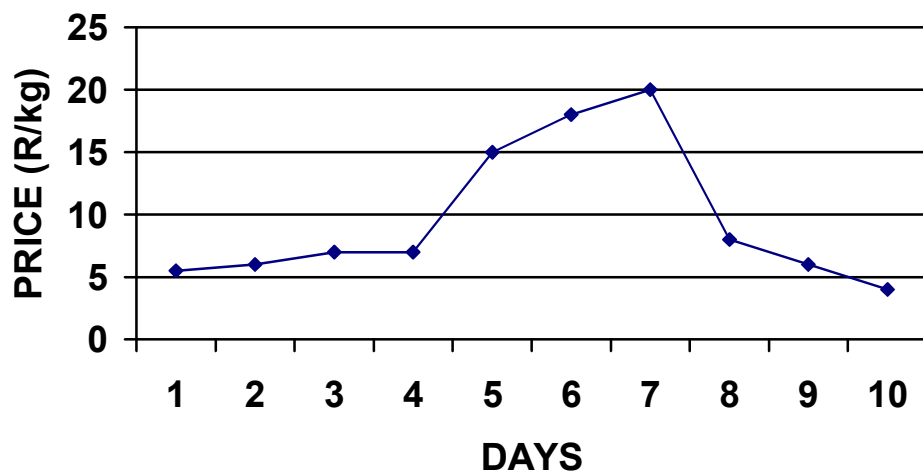
Budgeting

- 3.4.1 a) R30 000✓
 b) R13 000✓
 c) R7 500✓ (3)
- 3.4.2 Profit = income – expenditure = 174 000,00✓ – 138 700,00✓ = 35 300,00 ✓
 There is a profit✓ which means that she can extend the enterprise with care. ✓ (2)
- 3.4.3 The enterprise can be extended, taking into account a new business plan, ✓
 new research✓ to determine whether the market can absorb the new products. ✓ The farmer must make sure that it doesn't cost more to expand than the profit that will be made ✓ (Law of diminishing returns) ✓ (5)

Budgeting and marketing

3.5.1

DAILY PRICES



- ✓ correct type of graph
 - ✓ correct axis
 - ✓ total correct form of graph
 - ✓ header of graph (4)
- 3.5.2 Maximum price was reached on day 7 (1)
- 3.5.3 Sharp increase in demand. ✓
 Sharp decrease in supply. ✓ (2)
- 3.5.4 The farmer must plant on day 4.✓
 Harvesting will start at the beginning of the price increase. ✓
 Peak harvesting time will be when the price on its highest. ✓ (3)

Strategic planning

3.6

VISION	MISSION
- indicates the characteristics of the farm in the future✓	- indicates the characteristics of the farm in the future✓
- can help answer many questions about the business✓	- provides a concise summary of the farm business' purpose✓
- it provides a basis for leading the farm business into the future✓/focuses on the future. ✓	- deals with what the business is all about✓ and why. ✓

Any 4 (4)

3.7

PROFIT AND LOSS ACCOUNT ✓ YEAR ENDING: 31 MARCH 2009

EXPENDITURE		INCOME ✓	
Labour and machinery.	R11 000✓	Sale of crop products.	R48 000✓
Pesticides and chemicals.	R4 000✓	Sale of animal products.	R16 000✓
Fertilisers and animal feed.	R9 000✓		
NET PROFIT	R24 000	(68 000 – 24 000)	
	R44 000✓		
	R68 000		R68 000✓

(9)

3.8.1 Total trading receipts for the account / financial year✓✓

(2)

3.8.2 Total assets minus total liabilities✓✓

(2)

QUESTION 4: HARVESTING, VALUE ADDING, MARKETING, AGROTOURISM AND INDUSTRY

Value adding and preservation

- 4.1.1 The higher the quality of the product the higher the quality of the processed product. ✓
Grading ensures quality control. ✓
Grading is necessary to determine the application of the product. ✓ (3)
- 4.1.2 Increases the value of the product. ✓
Gives a more acceptable product to the consumer. ✓
Increases the shelf life of produce. ✓ (3)
- 4.1.3 Killing micro-organisms through heating ✓
Removing micro-organisms through filtration ✓
Killing micro-organisms by means of UV light or radiation ✓
Any (2)
- 4.1.4 Do market research and assist producers. ✓
Advertising the product. ✓
Control the sustainability of the product. ✓
Assist farmers on regulatory issues and market trends. ✓
Advisory service to farmers ✓
Promoting the product ✓
Any (3)

Agri- tourism

- 4.2.1 -is the practice of attracting travellers or visitors to an area or areas used primarily for agricultural purposes. ✓ (1)
- 4.2.2 -a project that can maintain itself for a long time. ✓ (1)
- 4.3 -increases the potential for higher margin/income, ✓ on-farm sales of value-adding products and services, ✓ further diversifying the product line of the farm operation. ✓ Or operators increase income ✓ through a variety of service initiatives such as farm demonstrations, harvest, festivals etc ✓.
-Job creation, ✓
-better life-style, ✓
-diversification, ✓
-marketing of local produce, ✓
-effective use of resources. ✓
Any 3 (3)

Value adding

- 4.4.1 -is to increase the value of each of the materials combined in the process ✓ to enable the company to sell a finished product that meets consumer needs and makes profit as a result. ✓
-increase the total profit - make product more marketable ✓
-take out the middlemen - shorten production chain (lower cost) ✓ (2)
- 4.4.2 -sufficient resources to meet and beat the competition. ✓
-don't bite off more than you can chew by trying to win a too large share of the market. ✓ /do not take risks -affordability.
-do your homework; people who fail to plan are planning to fail. ✓
market research – cost involved ✓
-size of the enterprise. ✓ (3)

Packaging

- 4.5 Rigid packaging✓ e.g. glass jars,/ bottles/laminated containers✓
Semi-rigid containers✓ e.g. aluminium containers✓
Flexible packaging✓ e.g. plastic film/paper foil/ aluminium foil✓ (6)

Marketing

- 4.6
- Knowing the target market
 - Taste of the consumer
 - Possible competition
 - Pricing of the product
 - Logistics such as packaging and transport
- Any 4 (4)

Product harvesting

- 4.7
- the size of the farm✓
 - the crop/cultivars✓
 - the period during which the harvesting must completed✓
 - the capacity of storing facilities✓
 - the condition of harvesting equipment✓
 - availability of labour (seasonal)
 - availability of contractors✓
- Any 3 (3)
- 4.8.1 -by hand/manually✓ (1)
- 4.8.2 -mechanically/machines. ✓ (1)

Sustainability

- 4.9
- is to promote sustainable development (to develop the land in a such a way that nature is also taken care of), ✓
 - to improve the quality of life of communities
 - to relieve poverty by helping people to find better ways of producing food. ✓
 - to promote scientific/coordinated research in agricultural production. ✓
 - to improve production/optomise production.
- Any 3 (3)

Packaging

- 4.10
- Exclusion of oxygen / stop oxidation / limit growth of some aerobic bacteria. ✓
 - Maintain long shelf life. ✓
 - Maintain colour. ✓
 - Maintain value / nutrients. ✓
 - Maintain taste. ✓
 - But allow enzyme activity to continue. ✓
- Any 5 (5)

Marketing and financial planning

- 4.11
- | MARKETING | FINANCIAL PLANNING |
|---|--|
| Where am I going to sell my product? ✓ | Where am I going to get the capital? ✓ |
| What are the customers' needs? ✓ | What is the cost of producing a unit of the product? ✓ |
| Are there any legal food safety considerations? ✓ | When will I reach the break-even point? ✓ |
- (6)

[50]

TOTAL SECTION B: 150

GRAND TOTAL: 200