



education

Department:
Education
REPUBLIC OF SOUTH AFRICA

**NATIONAL
SENIOR CERTIFICATE**

GRADE 12

AGRICULTURAL MANAGEMENT PRACTICES

FEBRUARY/MARCH 2010

MEMORANDUM

MARKS: 200

This memorandum consists of 9 pages.

SECTION A**QUESTION 1.1**

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

(10 x 2) (20)

QUESTION 1.2

1.2.1	D	√√
1.2.2	C	√√
1.2.3	A	√√
1.2.4	E	√√
1.2.5	F	√√
1.2.6	G	√√
1.2.7	H	√√
1.2.8	J	√√
1.2.9	K	√√
1.2.10	L	√√

(10 x 2) (20)

QUESTION 1.3

1.3.1 Transaction/Sales√

1.3.2 Income statement/profit-loss
statement√

1.3.3 Forage crops/pastures√

1.3.4 Medium term /two to ten years√

1.3.5 Working/ Floating capital√

1.3.6 Mechanization√

1.3.7 Motivation/leadership√

1.3.8 Indigenous knowledge√

1.3.9 Supply√

1.3.10 Scale/counter/ screener√

(10 x 1) (10)

TOTAL SECTION A: 50

SECTION B**QUESTION 2****2.1 “Go Green”**

- 2.1.1 Organic farming/Biological farming/Conservation farming ✓ (1)
- 2.1.2 Practices must adhere to regulations of organic farming ✓
Relies on crop rotation ✓
Recycling of farm produced organic material ✓
No chemical pesticides, insecticides, herbicides applied to control to diseases ✓
Use of organic fertilisers ✓
Method of genetically engineering is prohibited ✓ (5)
Chemical growth regulators and feed additives are prohibited ✓ (Any 5)
- 2.1.3 If not proper managed then the quality will decrease ✓
Convey diseases/weeds/pests ✓
Availability of pesticides/insecticides/herbicides is limited ✓
It is more expensive type of farming ✓ (Any 2) (2)
[8]

2.2 Soil Erosion

- 2.2.1 soil erosion is removing of soil ✓
through the action of wind/water ✓
to an area that it is not wanted/unproductive/less fertile ✓
erosion remove topsoil first ✓
without nutrients, few plants will grow ✓ (5)
- 2.2.2 Slope ✓ / Steep slopes
Areas with little or no vegetation ✓
Incorrect land use ✓
Intensity of rainfall/thunderstorms/draught ✓ (4)
[9]

2.3 Soil survey

- 2.3.1 Determine the exact agricultural value of the soil. ✓
Use the soil according to its potential/value. ✓ (2)
- 2.3.2 Aerial photographs of the region. ✓
Soil map of the area. ✓
Replanning document or map. ✓
Soil utilization report. ✓
Overlay to indicate the potential of soils. ✓
Pasture utilization report ✓
Crop recommendations. ✓ (Any 6) (6)
[8]

2.4 Precision Farming

- Water stress ✓ - sensors that measure soil moisture/mobile weather stations ✓
- Weed management ✓ - use of machine vision technology to spray only where the weeds are present ✓
- Insect detection ✓ - field scouting is the best way to detect infestation. ✓
- Nutrient stress ✓ - use high resolution colour infrared aerial images/leaf samples ✓
- Irrigation scheduling ✓ - simulation technology/ satellite ✓
- Harvesting quantities ✓ - measurements in technological advanced harvester ✓
- Soil preparation ✓ - difference between soils- satellite ✓ (Any 4) (8)

2.5 Possible utilization enterprises

- 2.5.1 Shallow, rocky soil ✓
Soils with low potential that cannot afford high inputs ✓ (2)
- 2.5.2 Field crops ✓
where the good potential soil can be used for a cash crops, where high inputs is sometimes needed/invested into the soil ✓ (2)
- 2.5.3 Marginal soil is not economically viable on the long term and will not justify high inputs ✓
Planted pasture has a low input and need little inputs over a long period ✓ (2)
- 2.5.4 One or other animal production enterprise, such as cattle or sheep ✓
Diversification/ Planted pastures and natural grazing is available ✓ (2)
[8]

2.6 Labour management

- 2.6.1 Control ✓
- 2.6.2 Organisation/mechanisation ✓
- 2.6.3 Planning/organisation ✓
- 2.6.4 Leadership/ motivation ✓
- 2.6.5 Organisation/ coordination ✓ (5)

2.7 Farm machinery

- Own equipment versus using a contractor ✓
- Funds available for equipment ✓
- Functionality of equipment ✓
- Technological advancement ✓
- Running efficiency ✓
- Mechanisation needs on the farm ✓
- Lifespan of the equipment ✓
- Basic maintenance costs ✓ (Any 4) (4)

[50]

QUESTION 3: RECORDING, FINANCIAL STATEMENTS AND ENTREPRENEURSHIP**3.1 Animal stock sheet**

A- 75✓

B- 0✓

C- 20✓

D- 70✓

E- 94✓

F- 110✓

G- 0✓

H- 258✓

I - 664✓✓

(10)

3.2 Types of capital

TYPE	SOURCE	USE	PERIOD	TERMS OF PAYING THE LOAN/SECURITY
LONG	3.2.1 land bank ✓ commercial banks e.g. ABSA, FNB, Nedbank, Standard bank etc ✓ (Any 1)		3.2.2 10-35 yrs ✓	3.2.3 Mortgage ✓
MEDIUM	3.2.4 land bank ✓ commercial banks ✓ (Any 1)	3.2.5 machinery, livestock for breeding, equipment etc. ✓		3.2.6 higher purchase and instalments ✓
SHORT	3.2.7 commercial banks ✓ or personal bank account ✓	3.2.8 -to buy perishable items e.g. seeds, fertilizers, fuel ✓	3.2.9 1 season or 1yr ✓	3.2.10 instalments after selling the produce ✓

(10)

3.3 Depreciation

$$3.3.1 = \frac{800\,000 - 80\,000}{10} = \frac{720\,000}{10} \checkmark = \frac{R72\,000}{10} \checkmark \checkmark$$

(3)

3.3.2 because it is a liability/cost to a farmer ✓
and it can be used for tax reduction purposes ✓

(2)

[5]

3.4 Jappie's Business

3.4.1 Somebody who:

- Sees a unique business opportunity✓
- Is willing to take a risk✓
- To make it a reality ✓

(3)

3.4.2 Saw a unique opportunity (selling egg yolk to cellars) ✓
 Took the risks (bought 100 hens with little starting capital) ✓
 Successfully expanded the operation (expanded) ✓

(3)

3.4.3 Chicken manure✓
 old layers for slaughtering✓
 egg shells✓
 Dry yolk as powder as protein source✓

(Any 3)

(3)
[9]**3.5 Methods of communication**

3.5 Verbal- language ✓
 Telephone ✓
 Fax ✓
 E-mail – electronically ✓
 Cellphone –SMS ✓
 2 way radios ✓
 Letters/ circulars ✓

(Any 3)

(3)

3.6 SEDA

3.6.1 Empowerment ✓
 and training of emerging farmers✓

(2)

3.6.2

- Operational skills✓
- Human relation skills✓
- Technical skills✓
- Business skills✓
- Entrepreneurial skills✓
- Management skills ✓

(Any 3)

(3)
[5]

3.7 Farm management

- 3.7.1 Farm management encourage and make provision that workers are constantly trained and developed✓
in order to keep up with the changing environment in which the farm business functions✓
The demand is to become more productive and keep up with technological advancements ✓ (Any 2) (2)
- 3.7.2
- done for promotion✓
 - pay increase ✓
 - and to determine and address work deficiencies. ✓
 - measure productivity/ effectiveness✓
 - career opportunities (promotion) ✓
 - use workers in their most suited positions where their interest lies✓
 - motivation for workers✓ (Any 2) (2)
- 3.8 **Business plan**
evaluate your business on a regular basis✓
monitor and evaluate your actual income and expenses as opposed to your forecasts✓
make future decisions✓
help the business to obtain credit from new suppliers✓
help the business to recruit new staff✓
keep you on track to achieve your goals and objectives✓
help you when approaching local authorities and government institutions for permission and assistance. ✓ (Any 4) (4)
- [50]

QUESTION 4: HARVESTING, VALUE ADDING, MARKETING, AGRITOURISM AND INDUSTRY**4.1 Impact of HIV/AIDS**

- a decline in total labour supply ✓
- a decline in labour productivity resulting from HIV/Aids morbidity ✓
- increased production costs, decline in savings and investment ✓
- lost of special skills ✓
- smaller market for produce ✓
- longer sick leave (financial impact) ✓ (Any 4) (4)

4.2 Advantages of producer groups

- to address a range of constraints on agricultural production and marketing✓
- provide better access to sources of production equipment, supplies and technology ✓
- promotion/ advancement of agricultural products ✓
- Assist farmers in obtaining financing for production ✓
- Research in aspects that would enhance production ✓
- Bargain for better prices on behalf of the farmers ✓ (Any 5) (5)

4.3 Climate change

- 4.3.1 Drought✓
Flooding✓ (2)
- 4.3.2 Causes for the increase in insurance costs revolve around the fact that there is more risks, unreliable production output, difficult to budget ✓
Unexpected disaster which lead to the loss of a crop ✓/livestock (2)
- 4.3.3 Built ridges to prevent flooding ✓
Lower plant density and fertilizer in drought years ✓
Lower stocking rates/ mineral supplements✓ (Any 2) (2)

[6]

4.4 Product life cycle

- 4.4.1 According to the graph there are no sales ✓
This is the period in which the market is analysed and product and market strategy are developed ✓ (2)
- 4.4.2 According to the graph there is a introduction phase ✓
sales are still low ✓ (2)
- 4.4.3 According to the graph sales gain momentum ✓
and prices tend to hold steady ✓ (2)
- 4.4.4 According to the graph sales are reaching a plato ✓
or even slight decline as the market becomes saturated ✓ (2)
- 4.4.5 According to the graph sales decline rapidly ✓
there might be a substitute product or new consumer preferences ✓ (2)

[10]

4.5 Dali's farm stall

- 4.5.1 Dali would know the names and personalities of the regular customers✓
She knows that they are buying into her company and that they are close to her companies' well-being. ✓
For the undecided customer she needs a bit more patience ✓
by guiding them because the often do not know what they want ✓
and need to know the advantages and disadvantages of buying certain products ✓ (5)
- 4.5.2 Dali made effort to supply to her customers needs, and she was always friendly and helpful ✓ (2)

[7]

4.6 Agritourism

- 4.6.1 A practice of attracting visitors ✓
to an area used primarily for agricultural purposes ✓ (2)
- 4.6.2 Increases the potential for higher profits ✓
Diversify the product line of the farm operation ✓
Operators increase income through a variety of service initiatives ✓
Increase the on-farm sales of value adding products and services ✓
Increase income per farm ✓ (5)
[7]

4.7 Food industry

- Regular inspections by officials to ensure the cleanliness and standard of products supplied/Setting of health standards for the food industry ✓
An indication of the content of the product ✓
An expiry date indicated on the packaging ✓
Safe and hygienic practices during the processing of the products ✓
Inclusion of preservation practices/ cooling etc. ✓
Prosecution of companies that does not adhere to the regulations ✓ (Any 5) (5)

4.8 Food processing

- 4.8.1 Taking a raw material and processing it or adding something ✓
to it to change it into a more saleable item that will be purchased by a different group of customers ✓ (2)
- 4.8.2 Increase the potential and value for a product ✓
Less weight thus easier to transport to the markets ✓
Protection against organisms that causes product decay ✓
Easier to package and store ✓ (4)
[6]
[50]

TOTAL SECTION B: 150**GRAND TOTAL: 200**