



basic education

Department:
Basic Education
REPUBLIC OF SOUTH AFRICA

**NATIONAL
SENIOR CERTIFICATE**

GRADE 12

AGRICULTURAL MANAGEMENT PRACTICES

FEBRUARY/MARCH 2017

MEMORANDUM

MARKS: 200

This memorandum consists of 11 pages.

SECTION A

QUESTION 1

1.1 Multiple-choice questions

1.1.1	A ✓✓		
1.1.2	B ✓✓		
1.1.3	C ✓✓		
1.1.4	D ✓✓		
1.1.5	C ✓✓		
1.1.6	B ✓✓		
1.1.7	B ✓✓		
1.1.8	A ✓✓		
1.1.9	A ✓✓		
1.1.10	D ✓✓	(10 x 2)	(20)

1.2 Matching items

1.2.1	C ✓✓		
1.2.2	G ✓✓		
1.2.3	D ✓✓		
1.2.4	H ✓✓		
1.2.5	I ✓✓		
1.2.6	K ✓✓		
1.2.7	J ✓✓		
1.2.8	F ✓✓		
1.2.9	E ✓✓		
1.2.10	B ✓✓	(10 x 2)	(20)

1.3 Correct agricultural term

1.3.1	Price setting/price ✓		
1.3.2	Organogram ✓		
1.3.3	Annual leave ✓		
1.3.4	Turnover ✓		
1.3.5	Marketing costs ✓		
1.3.6	Production capital ✓		
1.3.7	Invoice ✓		
1.3.8	Logbook ✓		
1.3.9	Human resources ✓		
1.3.10	Crop rotation ✓	(10 x 1)	(10)

TOTAL SECTION A: 50

SECTION B

QUESTION 2: PHYSICAL AND FINANCIAL PLANNING

- 2.1 2.1.1 **Examination of a candidate and motivation**
- (a) **Farm manager**
Candidate A ✓
Has good qualifications and management skills ✓ (2)
- (b) **Farm worker**
Candidate B ✓
Is good in technical skills ✓ (2)
- 2.1.2 **A candidate that would not work in the workshop**
• Candidate A ✓ (1)
- 2.1.3 **Unskilled worker**
• No unskilled worker ✓
• Because both candidates are trained and have qualifications and certificates ✓ (2)
- 2.2.1 **THREE fixed capital from the case study**
• Borehole ✓
• Reservoir ✓
• Land ✓
• Small-stock housing ✓ (Any 3) (3)
- 2.2.2 **THREE methods to improve the productivity of agricultural land**
• Scientific farming methods/Intercropping ✓
• Irrigation system ✓
• Diversification ✓ (3)
- 2.2.3 **One method to reduce risks in a small-scale agricultural enterprise**
• Diversification ✓
• The risks are spread to different enterprises ✓
OR
• Irrigation ✓
• less dependence on rainfall and unpredictable climate ✓
OR
• Scientific practices ✓
• More precise to measure inputs ✓ (2)

2.2.4 **Advantages of organic farming**

- Less pollution with chemicals ✓
 - Protection of the natural predators ✓
- (2)

2.3 2.3.1 **Description of the carrying capacity**

- (a) Savannah: moderate ✓ (1)
- (b) Forest: very low ✓ (1)
- (c) Grassland: highest ✓ (1)
- (d) Karoo: low ✓ (1)
- (e) Fynbos: low ✓ (1)

2.3.2 **Feeding value and management of sweet and sour-veld**

(a) **Sweet veld**

- Feeding value stays the same throughout the year ✓
- If veld is well managed, animals can be kept on pastures throughout the year without extra feeding ✓
- Longer grazing periods as grass retains its nutritional value ✓
- Less to no supplementation in winter ✓ (Any 2) (2)

(b) **Sour-veld**

- Feeding value is high during spring and summer ✓
- Feeding values during winter months are very low ✓
- Management include supplementary feeds during the winter ✓
- Shorter grazing periods as older grass tends to lose its palatability. ✓
- Providing supplementary feeds and licks in winter. ✓ (Any 3) (3)

2.4 **Whole enterprise planning phases in their correct sequence**

- Data collection ✓
 - Land utilization planning ✓
 - Alternative and potential ✓
 - Systems ✓
 - Sustainability ✓
 - Management ✓
- (6)

- 2.5 2.5.1 **The physical aspects of the farm set out by farm budget**
- What to produce ✓
 - How much to produce/total hectares used for production ✓
 - Resources to be invested ✓
- (3)
- 2.5.2 **TWO basic elements of a budget**
- Estimated income ✓
 - Estimated costs ✓
- (2)
- 2.5.3 **The use of cash flow budget as a financial tool**
- To monitor expenditure/Checking whether money is spent as planned ✓
 - To avoid cash management problems/The budget shows whether income will be enough to pay for expenditures when they arise ✓
 - To indicate when surplus funds become available ✓
 - Indicate the spread of funds for new investments ✓
 - Indicate that the farm will always have enough money to operate/Ensure no cash flow problems during off seasons ✓
- (Any 4) (4)
- 2.6 **TWO reasons for soil cultivation**
- To prepare veld for crop production ✓
 - To form a seedbed ✓
 - To break hardened soils/plough layer/pan ✓
 - To control weed ✓
 - Improve aeration/drainage ✓
- (Any 2) (2)
- 2.7 **Precision farming**
- 2.7.1 **Debate principle of precision farming**
- No✓, farmer does not adhere to principles of precision farming ✓
- OR**
- No accurate fertilisation✓ or irrigation
 - no chemical soil analysis ✓
- (2)

- 2.7.2 **Farming practices to increase precision farming**
- Chemical soil analysis ✓
 - Fertiliser application according to chemical soil status ✓
 - Fertiliser spread throughout the season/as plant grow ✓
 - Irrigation scheduling/schedule irrigation according to plant growth ✓
 - Take amount of rainfall into account for irrigation ✓ (Any 4) (4)
- [50]

QUESTION 3: ENTREPRENEURSHIP, RECORDING, MARKETING, BUSINESS PLANNING AND ORGANISED AGRICULTURE

3.1 Budget

- 3.1.1 **The management principle that this budget addresses**
Financial planning ✓ (1)

- 3.1.2 **THREE possible markets**
- Livestock auctioning ✓
 - Farm gate marketing ✓
 - Manure retailers ✓ (3)

- 3.1.3 **Calculate the possible profit or loss**
- profit/loss = total income – total expenditure
= R477 500,00 – R113 564,00 ✓
= R363 936,00 ✓ profit ✓ (3)

- 3.1.4 **TWO possible ways to increase income**
- Find more markets ✓
 - Add value to the product/processing ✓
 - Sell at markets with higher prices ✓
 - Find a different place/time to auction to get higher prices ✓ (Any 2) (2)

- 3.1.5 **Identification of the section of a business plan**
- Financial aspects/budget ✓
 - Marketing ✓ (2)

3.2 Entrepreneurship

- 3.2.1 **FOUR main distinct phases of the entrepreneurial process**
- Identify and evaluate the opportunity/Notice a need ✓
 - Develop the business plan ✓
 - Determine the resources required ✓
 - Start and manage the agribusiness ✓ (4)

3.2.2 **Economic importance of a business plan**

- Determine the possible income/profit ✓
- Compare different alternatives to choose the best one ✓
- Needed for financial institutions to obtain credit ✓
- Make the management and control on financial aspects easier ✓
- Determine viability of a new enterprise ✓

(5)

3.3 **THREE important reasons of reviewing the business plan**

- To provide for any changes in the market ✓
- To help the owner to make the best use of opportunities ✓
- To be prepared for possible events ✓
- Adopt the plan to any changes in the external environment ✓

(Any 3) (3)

3.4 **Price setting**

3.4.1 **A factor that determines price**

- Supply ✓
- Demand ✓

(Any 1) (1)

3.4.2 **Line graph to represent**



Rubric:

- Correct heading ✓
- Correct calibration or labelling of both axes ✓
- Graph start at (50; 60) ✓
- Straight line to (140; 35) ✓
- Short dip in line to (150; 30) ✓
- Straight line from (150; 30) to (200; 20) ✓ (6)

3.4.3 **The values where greatest number of bags were bought**

- At the price of R20,00 ✓: 200 bags ✓
- OR**
- (200 bags ✓; R20,00 ✓) (2)

3.5 **Marketing**

3.5.1 (a) **The marketing strategy**

Product – consider

- Quality of the product ✓
- Design of packaging the product ✓
- The size of the product ✓
- The variety of the products ✓
- The brand/commercial name ✓ (Any 3) (3)

(b) **Placement** - consider

- Process of distributing the product from one point to the other ✓
- Transportation, storage and refrigeration of the product ✓
- Logistics/the control of movement of goods ✓ (Any 2) (2)

3.5.2 **THREE marketing costs**

- Packaging costs ✓
- Handling costs ✓
- Transport costs ✓
- Product losses ✓
- Promoting costs ✓ (Any 3) (3)

3.6 Statements

3.6.1 List farm assets

- (a) Fixed assets
- Borehole ✓
 - Farm shed ✓
 - Land ✓
- (Any 2) (2)
- Current assets
- (b) Current assets
- Pesticides ✓
 - Fertilizers ✓
 - Cash ✓
- (Any 2) (2)
- (c) Medium term assets
- Tractor ✓
 - Farm vehicle ✓
 - Livestock ✓
- (Any 2) (2)

3.6.2 Statement of assets and liabilities

- Balance sheet ✓ (1)

3.7 THREE reasons for returning items

- Incorrect items received ✓
 - Faulty items received ✓
 - Business/farmers not satisfied with the purchased items ✓
- (3) [50]

QUESTION 4: HARVESTING, PROCESSING, MANAGEMENT AND AGRITOURISM

4.1 Storage

4.1.1 The advantages of storing farm products on the farm after harvesting

- Products can be sold when there are better prices on the market ✓
 - Products can be stored and processed on the farm to add value and increase income ✓
 - Storing is essential to buffer irregular supply ✓
 - No external storage costs ✓
 - To provide a regular flow of products to the consumer throughout the year ✓
- (Any 2) (2)

4.1.2 Requirements for storage of agricultural products

- Dry ✓
 - Well ventilated ✓
 - Cool ✓
 - Dark place ✓
- (4)

- 4.2 **Labelling Act 54 of 1972**
- To protect consumers from buying contaminated food ✓
 - To protect consumers from misleading labels ✓
- (2)
- 4.3 **Behaviour of micro-organisms at different temperatures**
- 4.3.1 **5–10 °C**
- Microbes are inactive /not very active ✓
- (1)
- 4.3.2 **Above 100°C**
- Microbes are killed ✓
- (1)
- 4.3.3 **Below 0°C**
- Microbes are dormant ✓
- (1)
- 4.4 **Principles that should be part of a food handling strategy**
- Management commitment to healthy/hygienic procedures ✓
 - Education and training on preventative handling ✓
 - Health interviews to ensure good hygienic procedures ✓
 - Reporting illness of workers to management ✓
 - Applying basic good/correct food handling practices ✓
 - Applying basic personal hygiene practices ✓
- (Any 4) (4)
- 4.5 **Legal documents that regulate importing of meat and dairy products into South Africa**
- Import permit ✓
 - Veterinary health certificate ✓
- (2)
- 4.6 **Farmer as an agritourism entrepreneur**
- To promote the farm as an agritourist destination by direct selling of products ✓
 - By establishing educational facilities for schools and communities ✓
- (2)
- 4.7 **Preserving**
- 4.7.1 **Pasteurisation and sterilisation**
- Pasteurisation
- High temperatures (72°C–90°C) ✓
 - Longer period of time (15–40 minutes) ✓
- Sterilisation
- Very high temperatures (90°C–105°C) ✓
 - For very short time (30–40 seconds) ✓
- (4)
- 4.7.2 **TWO acids in preserving of food**
- Benzoic acid ✓
 - Propionic acid ✓
 - Scorbutic acid ✓
- (2)

- 4.8 **The planning process**
- Formulate aims and objectives ✓
 - Collect ideas and information and organise it ✓
 - Consider all variables which cannot be controlled ✓
 - Consider various possible methods of action then decide on a particular production in farming ✓
 - Draw up a plan of action for a particular production direction ✓
 - Evaluate the plan to eliminate possible shortcomings ✓
- (6)
- 4.9 **Niche market**
- 4.9.1 **Niche market**
- Specific market you give all your attention to ✓
 - With special attention to a specific market segment ✓
- (2)
- 4.9.2 **Steps followed in establishing a niche market**
- Identify the niche market ✓
 - Write down the goals of the market ✓
 - Decide which resources you need for the undertaking of the niche marketing ✓
 - Determine the resources not available and how to compensate for them ✓
 - Develop a business plan ✓
- (5)
- 4.10 **Management functions**
- Planning and Decision making ✓
 - Organising ✓
 - Motivation and Leadership ✓
 - Control ✓
 - Coordination and evaluation ✓
- (5)
- 4.11 **Safety requirements for processing agricultural products**
- Wear protective clothing at all times in the processing unit ✓
 - Provide a first aid kit at different stations ✓
 - Train first aid staff on a regularly basis ✓
 - Train staff on safe handling of machinery ✓
 - Train staff on safety rules applicable in the processing plant ✓
 - Clean the place regularly during the day or in case of spoilage ✓
 - Identify and indicate hazardous areas by proper methods ✓
- (Any 4) (4)
- 4.12 **Steps in the management control process**
- Develop norms and standards for control ✓
 - Measure real performance ✓
 - Measure and evaluate deviation ✓
- (3)

[50]

TOTAL SECTION B: 150
GRAND TOTAL: 200