

## basic education

Department:
Basic Education
REPUBLIC OF SOUTH AFRICA

# NATIONAL SENIOR CERTIFICATE

**GRADE 12** 

**AGRICULTURAL MANAGEMENT PRACTICES** 

**FEBRUARY/MARCH 2014** 

**MEMORANDUM** 

**MARKS: 200** 

This memorandum consists of 11 pages.

### **SECTION A**

### **QUESTION 1**

1.1	1.1.1 1.1.2 1.1.3 1.1.4 1.1.5 1.1.6 1.1.7 1.1.8 1.1.9 1.1.10	D ✓ ✓ C ✓ ✓ B ✓ ✓ A ✓ ✓ B ✓ ✓ C ✓ ✓ A ✓ ✓ C ✓ ✓ A ✓ ✓ D ✓ ✓	(10 x 2)	(20)
1.2	1.2.1 1.2.2 1.2.3 1.2.4 1.2.5 1.2.6 1.2.7 1.2.8 1.2.9 1.2.10	$ J \checkmark \checkmark  D \checkmark \checkmark  A \checkmark \checkmark  F ✓ \checkmark  L ✓ ✓  I ✓ ✓  C ✓ ✓  K ✓ ✓  E ✓ ✓  H ✓ ✓  $	(10 x 2)	(20)
1.3	1.3.1 1.3.2 1.3.3 1.3.4 1.3.5 1.3.6 1.3.7 1.3.8 1.3.9 1.3.10	Soil drainage ✓ Wind ✓ Planning ✓ Labour ✓ Controlled ✓ Decision making ✓ Deposit slip ✓ Auction ✓ Sugaring ✓ Ingredients ✓	(10 x 1)	(10)

TOTAL SECTION A: 50

(4)

#### **SECTION B**

#### QUESTION 2: ANIMAL AND CROP PRODUCTION

#### 2.1 2.1.1 Four basic data items required

- Soil characteristics√
- Topographic data√
- Climatic information√
- Present farm practices√
- Future ideas for the farm√
- The history of the farm ✓ (Any 4)

#### 2.1.2 Soil data to collect

- Soil series√
- Soil type√
- Soil texture ✓
- Soil structure ✓
- Degree of erosion√
- Length and degree of slope√
- Present soil boundaries √

#### 2.1.3 Four soil functions in the production process

- Soil stores and releases water for use by plants through capillary water√
- Soil allows air movement for respiration of plant roots and micro-organisms√
- Soil releases plant nutrients for absorption by plant roots√
- Soil serves as a growth medium for plants√
- Soil serves as a source of raw material√ (Any 4)

#### 2.1.4 Soil water

- Bonded water ✓
- Capillary water ✓
- Hygroscopic water ✓
- Gravitational water/seepage water ✓ (4)

#### 2.2 2.2.1 Three factors that influence capital needed Land prices ✓ Nature of farming activities operated ✓ Capacity of the business ✓ Production method ✓ Capacity of undertaking ✓ Prices of equipment√ Prices of production elements ✓ (Any 3) (3) 222 **Factors determining loan payments** Income√ Fixed responsibilities√ Interest rate√ Loan period√ (Any 2) (2)2.3 2.3.1 Two problems from case study Insufficient labourers during peak periods. ✓ Workers not busy/not productive during certain times of (2) the year. ✓ 2.3.2 Peak periods Lambing periods. ✓ Harvesting periods. ✓ (3) Weeding periods. ✓ 2.3.2 Three possible solutions Staff must work overtime during peak periods. ✓ Extra workers must be hired during peak periods. ✓ (3)Farmers can invest in machinery. ✓ 2.4 2.4.1 Five generic functions of farm manager Planning ✓ Organising ✓ Coordination√ Implementing ✓ Leading ✓ Control/evaluation ✓ Decision making ✓ (5)Communication ✓ (Any 5) 2.4.2 Steps in decision making Step 1: Describe/identify the problem/objective√ Step 2: Identify all possible solutions√ Step 3: Evaluate all the possible solutions according to their advantages and disadvantages. ✓ (4) Step 4: Choose the best solution√ 2.4.3 Accumulative nature of decision making A decision one makes will influence the next result. (1)

		Neo - Wemorandam	
2.5	2.5.1	Type of farming system of farmer A  • Extensive farming√	(1)
	2.5.2	Type of farming system of farmer B  ■ Intensive farming ✓	(1)
	2.5.3	<ul> <li>Motivation of QUESTION 2.5.2</li> <li>High capital investment ✓</li> <li>High output on small piece of land ✓</li> <li>High number of animals on small area ✓</li> <li>Feeding of animals with a mixed feed ✓</li> </ul>	(4)
	2.5.4	Farming method  • Feedlot ✓	(1)
2.6	<ul><li>Plar</li><li>Soil</li><li>Alie</li></ul>	aspects to evaluate  nt/vegetation coverage ✓ erosion ✓ n plant invasion ✓ sh/weed invasion ✓	(4) <b>[50]</b>

### QUESTION 3: RECORDING, FINANCIAL STATEMENTS AND ENTREPRENEURSHIP

#### 3.1 3.1.1 THREE prerequisites of a good farm record

- Recording must be accurate/authentic ✓
- Information (data) must be easy to retrieve ✓
- It must be clear/user friendly ✓
- It must be up to date√

(3)(Any 3)

(3)

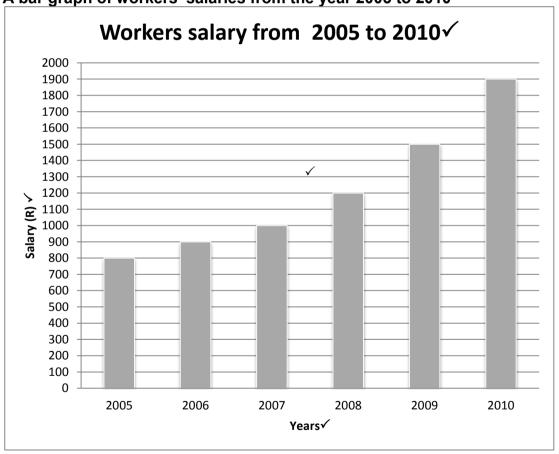
#### 3.1.2 THREE steps to develop inventory

- Step1: Make a physical count of all available property in the farm business√
- Step 2: Evaluate the property item at the current market value√
- Step 3: Make a closing inventory at the end of the year√

**NOTE:** Order is important.

#### 3.2 3.2.1

A bar graph of workers' salaries from the year 2005 to 2010



#### Marking rubric

- Heading ✓
- Correct y-axis labelling√
- Correct x-axis labelling√

Correct graphs ✓

(4)

#### 3.2.2 THREE factors for rapid salary increase from 2008 to 2010

- Introduction of labour laws/legislation√
- Democratic dispensation of 1994/more labourers in management positions√
- Farm workers recognition by the Department of labour√
- Minimum wage policy√
- Better skilled workers ✓
- Unionisation/bargaining power of farm workers ✓ (Any 3)

## 3.2.3 Calculate workers' salary increases as percentage (2009 to 2010)

- R1 900,00 R1 500,00 = R400,00√
- Increase  $\% = \frac{400}{1500} \times 100$ = 26,27%

Or

• Increase  $\% = \frac{1900,00-1500,00}{1500,00} \times 100$ =26,27% (3)

#### 3.3 Means of money payments

- Cash √
- Cheque √
- Bank deposit ✓
- Internet/bank transfer ✓ (4)

#### 3.4 3.4.1 **Net profit of farmer A**

• R67  $100,00 - R51 000,00 \checkmark = R16 100,00 \checkmark$  (2)

#### 3.4.2 **Net profit of farmer B**

•  $R61700,00 - R50000 \checkmark = R11700,00 \checkmark$  (2)

#### 3.4.3 More successful farmer and TWO reasons

- Farmer A is more successful √
- Make more profit/Net profit is higher than farmer B/farmer B net profit is lower √
- Farmer B feed costs are higher/Sales on waste is lower ✓
- Farmer A is a better marketer of waste ✓ (Any 2 reasons) (3)

#### 3.5 3.5.1 **FOUR main features of a cash flow budget**

- It concerns cash transactions only ✓
- Income and expenses are recorded in the actual month in which the transaction occurs with the respective activity ✓
- The timing of the cash received or expended has a direct bearing on the bank balance √
- It is usually prepared for a session or one year √

#### 3.5.2 FOUR important reasons for a Cash Flow Budget

- It indicates where and when money will be needed for any undertaking
- It indicates the source of money into the business√
- It evaluates the loan needs of the farm√
- It determines the credit worthiness of the farm√
- It guides one against the misuse of funds√
- It determines the ability of the farmer to meet the short term financial obligations/payments on bank accounts√ (Any 4)

#### 3.6 Reasons for a business plan

- It can help the group to find, describe, and refine their competitive advantage√
- It can assist to move their business in a direction that the goal and the objectives of the business can be achieved√
- It can help them to identify and manage the risks as well as set priorities and make decisions
- It shows the position of the business now, where the business is heading, also when and how to get there√
- It can help to spend money more wisely by prioritising actions and directions√
- It can help them to identify and take advantage of opportunities√
- It can assist to clarify roles and improve communication between the group members, employees and family members etc. √
- It is needed to obtain capital from a financial institution √ (Any 6)

#### 3.7 3.7.1 **Assets**

- Anything of value ✓
- In the possession of the business/on the farm√

#### OR

- Outstanding debits that other people owes the farm ✓
- Anything the farmer owns√

#### 3.7.2 Liabilities

- The total values of claims ✓
- On the assets of the business by various suppliers ✓

#### OR

- Any outstanding accounts √
- In the farm business that the farmer owes ✓

#### 3.7.3 **Product income**

- All Income received ✓
- Related to that specific product √

#### 3.8 THREE reasons for returning purchased items

- Incorrect items received√
- Faulty item received√
- Business not satisfied with the items√ (3)

[50]

(2)

(2)

(2)

## QUESTION 4: HARVESTING, VALUE-ADDING, MARKETING, AGRITOURISM AND INDUSTRY

#### 4.1 Reason for more effective harvesting by harvester

 A combine harvester combines different tasks ✓ which are cutting, sorting and cleaning at the same time ✓

4.2 4.2.1 Identify management process

Marketing/market research ✓ (1)

## 4.2.2 FOUR important factors in the physical functions of marketing

- Sorting√
- Storing√
- Grading√
- Transport√
- Processing√
- Packaging√

Distribution ✓ (Any 4)

### 4.3 Visible criteria for the grading of harvested farm crops

- Size of the crop ✓
- Colour of the crop ✓
- Damages on the crop ✓
- Form/shape of the crop ✓
- Freshness of the crop ✓
- Diseases/pests √
- Stage of development ✓
- Cleanliness ✓

• Contamination/foreign seeds√ (Any 4)

#### 4.4 4.4.1 FOUR critical components in design of packaging material

- Form that protect of the product √
- Outstanding features to draw people's attention/Brand/product recognising √
- Easily printable√
- Features that make it easy to handle ✓
- Cost effectiveness √
- Give information to consumers ✓ (Any 4)

#### 4.4.2 THREE types of packaging material

- Plastic √
- Carton √
- Polystyrene √
- Tin  $\checkmark$  (Any 1) (3)

4.5	4.5.1	<ul> <li>Produce of different farmers are pooled ✓</li> <li>Product are treated/handled together ✓</li> <li>Products are stored/sold as a unit ✓</li> </ul>	(3)
	4.5.2	<ul> <li>FOUR advantages of co-operative marketing</li> <li>Farmers do not have to build their own storage or packing facilities√</li> <li>Producers receive the average price of all the sales during a specific year √</li> <li>Producers receive a guaranteed price, which gives them financial security √</li> <li>It ensures orderly and effective marketing √</li> <li>It simplifies management and bookkeeping √ (Any 4)</li> </ul>	(4)
4.6	4.6.1	<ul> <li>THREE methods of preservation to eliminate organisms</li> <li>Through heating√</li> <li>Through filtration√</li> <li>Through UV light or radiation√</li> </ul>	(3)
	4.6.2	<ul> <li>FOUR methods of preservation for inhibiting growth of microorganisms</li> <li>Applying cold√</li> <li>Increasing the osmotic pressure√</li> <li>Drying/dehydration√</li> <li>Decreasing the pH through adding of acid√</li> </ul>	(4)
4.7	4.7.1	Section of Agriculture addressed  ■ Agritourism/Game farming ✓	(1)
	4.7.2	<ul> <li>Main aims of game farming</li> <li>Tourism ✓</li> <li>Hunting or harvesting for meat ✓</li> <li>Breeding ✓</li> <li>Conservation ✓</li> </ul>	(4)
	4.7.3	BIG FIVE animals  • Elephants ✓  • Rhino ✓  • Lion ✓  • Leopard ✓  • Buffalo ✓	(5)

- No transport costs√
- Products can be sold by the farmer himself/no middle man or agent √
- Better suited to small scale farmers ✓
- No need for grading of produce √ (Any 3)

#### 4.8.2 **TWO** disadvantages of gate marketing

- The farmer will have to accept the local price for his products√
- The farmer will not necessarily be well located to sell products√
   (2)

#### 4.9 THREE factors of decision on functioning of the farm

- The speed with which the decisions are taken ✓
- The degree of accuracy with which the decisions are taken ✓
- The acceptability of the decision to those who are affected by them √

[50]

TOTAL SECTION B: 150
GRAND TOTAL: 200