



basic education

Department:
Basic Education
REPUBLIC OF SOUTH AFRICA

NATIONAL SENIOR CERTIFICATE

GRADE 12

AGRICULTURAL MANAGEMENT PRACTICES

FEBRUARY/MARCH 2016

MEMORANDUM

MARKS: 200

This memorandum consists of 11 pages.

SECTION A**QUESTION 1****1.1 Multiple-choice questions**

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

1.2 Matching items

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

1.3 Correct agricultural term

1.3.1	Selective grazing ✓		
1.3.2	Extensive system ✓		
1.3.3	Yield ✓		
1.3.4	Sterilising ✓		
1.3.5	Mechanisation ✓		
1.3.6	Short-term credit ✓		
1.3.7	Budget ✓		
1.3.8	Supply and demand ✓		
1.3.9	Planning ✓		
1.3.10	Cooperative ✓	(10 x 1)	(10)

TOTAL SECTION A: 50

SECTION B**QUESTION 2: PHYSICAL AND FINANCIAL PLANNING****2.1.1 FOUR effects of ill health on productivity**

- Absenteeism from work ✓
- Loss of productive time during medical treatments ✓
- Work overload on healthy workers ✓
- Loss of experience ✓
- Increase in medical costs for the business ✓
- Lower profit margins ✓

(Any 4) (4)

2.1.2 The Unemployment Insurance Act, 2001 (Act 63 of 2001)

- It makes provision for the security of farm workers ✓
- When they become unemployed through illness, resignation, dismissal or retrenchment ✓

(2)

2.2 Items that must be included in a service contract

- The full name and address of the employer ✓
- The name and occupation of the employee ✓
- The date of commencement of services ✓
- Working day and working hours ✓
- Remuneration and overtime remuneration ✓
- Leave conditions ✓

(Any 5) (5)

2.3 Functions of soil as a resource in agricultural production

- Medium for plant growth/provides anchorage to plants ✓
- Supplies mineral/elements to the plants ✓
- Keeps and supplies moisture to the plants ✓
- Habitat for beneficial and non- beneficial micro- organisms ✓
- It plays a recycling function for polluted water and air ✓

(Any 4) (4)

2.4.1 Best methods of disposing chemical containers

- Incineration ✓
- Bury containers deep into the soil ✓
- Sending the containers back to the manufacturing company for reusing/ recycle ✓

(Any 2) (2)

2.4.2 Effects of incorrect application of chemicals on soil and environment

- Soil degradation ✓
- Environmental pollution ✓
- Kills soil organisms ✓
- Underground water pollution ✓
- Surface water pollution ✓
- Drastic change in the soil reaction ✓

(Any 4) (4)

- 2.5 **Soil quality**
- Fertility ✓
 - Water holding capacity ✓
 - Physical activity ✓
 - Ability to erode ✓
- (Any 3) (3)
- 2.6 **Functions of contours in relation to control of soil erosion**
- By shortening the slope length the rate and quantity of water flow will be reduced ✓
 - Changes the angle of running water to be slower ✓
- (2)
- 2.7.1 **Advantages of using GPS in farm operations**
- Saving of inputs ✓
 - Application of input where it is required ✓
 - Saving money ✓
 - Optimal resource utilisation ✓
- (Any 3) (3)
- 2.7.2 **The abbreviation GPS in full**
- Global Positioning System ✓
- (1)
- 2.7.3 **Farming system that utilises GPS**
Precision farming ✓
- (1)
- 2.7.4 **Definition of the term grid cell**
- Is the division of an agricultural field into small units ✓
 - For the purposes of soil sampling and soil analysis ✓
- (2)
- 2.7.5 **Type of data that can be obtained from grid cell**
- pH status ✓
 - nutrient status of the soil ✓
 - Soil form/series ✓
 - Soil type ✓
- (Any 2) (2)
- 2.8 **Precautions to adhere to when using farm implements and machinery**
- Always wear appropriate protective clothing ✓
 - Never touch a moving part of a machine ✓
 - Make sure people are safe when coupling implements ✓
 - Make sure gears, pulleys are protected by a safety guard ✓
 - Only one person should be allowed on the tractor/implement ✓
 - Make use of correct tools for every operation ✓
- (Any 4) (4)

- 2.9.1 **THREE primary aims of a budget for a farm business**
- To set limits on the amounts to be used for farming activities ✓
 - To obtain credit on time ✓
 - To coordinate resources and money spent as planned ✓
 - To help determine whether to expand the business or not ✓
- (Any 3) (3)
- 2.9.2 **Advantages of a cash flow budget**
- Provides a guideline for farming expenses ✓
 - Informs the source of money ✓
 - Prevents impulsive purchases by the farmer ✓
 - Informs how much money is available each week or month ✓
- (4)
- 2.10 **Sources of information available to the farmer**
- Websites ✓
 - Publications from commodity associations ✓
 - Agricultural extension services ✓
 - Farmers' information days ✓
 - Publications from financial institutions ✓
 - News media (newspapers, radio or television) ✓
- (Any 4) (4)
[50]

QUESTION 3: ENTREPRENEURSHIP, RECORDING, MARKETING AND BUSINESS PLANNING

- 3.1.1 **THREE reasons for developing a business plan**
- To test the feasibility and economic viability of the business idea ✓
 - To determine your financial needs ✓
 - To guide daily operations ✓
 - To ensure effective business management ✓
 - To allow you to foresee problems ✓
 - To gain knowledge about marketing opportunities ✓
 - To reposition the business ✓
- (Any 3) (3)
- 3.1.2 **TWO internal factors and TWO external factors from the SWOT analysis**
- (a) Internal factors**
- Strengths ✓
 - Weaknesses ✓
- (2)
- (b) External factors**
- Opportunities ✓
 - Threats ✓
- (2)
- 3.2.1 **Definition of entrepreneurship**
- It is the process of discovering, evaluating and exploiting opportunities ✓
 - To start and grow a new business ✓
- (2)

3.2.2 **THREE characteristics of entrepreneurs**

- Strong self- belief/confidence ✓
 - Takes risks ✓
 - Initiates things/self- starter ✓
 - Good people skills ✓
 - Handle responsibilities ✓
 - Hard worker ✓
 - Visionary ✓
 - See opportunities ✓
 - Decision maker ✓
 - Reliable ✓
 - Energetic ✓
 - Management skills ✓
- (Any 3) (3)

3.3.1 **Primary business**

- Producing an agricultural raw product ✓ (1)

3.3.2 **Secondary business**

- Processing of the agricultural raw product on the farm into another product ✓
 - Processing the raw product to make it more acceptable for the consumer ✓
- (Any 1) (1)

3.3.3 **Tertiary business**

- Service delivery to tourists/customers visiting the farm ✓ (1)

3.4 **Aim of keeping records by a farmer**

- Setting objectives for the enterprises ✓
 - Planning and implementing farming activities ✓
 - Planning for the future ✓
 - Creating a data base (history) for the farm ✓
- (Any 2) (2)

3.5 **Table of advantages and disadvantages of using computers**

Advantages	Disadvantages
<ul style="list-style-type: none"> • Easier access to information ✓ • Calculations more accurately done ✓ • More information can be stored in less space ✓ • Comparisons can be made easier ✓ • Can make use of trusted and tested programs for production, financial and physical records ✓ • Transfer of information is easier ✓ <p style="text-align: right;">(Any 2)</p>	<ul style="list-style-type: none"> • The farmer must be computer literate ✓ • In the case of electricity outage, records are not accessible ✓ • It is expensive to buy computers ✓ • Technology must be updated on a regular basis ✓ • It takes time to update data ✓ <p style="text-align: right;">(Any 2)</p>

(4)

3.6 Information about each farm worker

- The farm worker's name and ID number ✓
- Personal information ✓
- Date of employment ✓
- Presence/Absence from work ✓
- Annual/Sick leave ✓
- Working hours and over- time ✓
- Contract of employment ✓
- 'In Natura' payment ✓ (Any 3) (3)

3.7 Aspects in a log book for all farm machinery and implements

- Date of purchase ✓
- Price of the item purchased ✓
- Annual depreciation on items bought ✓
- Quantity of each item bought, lost, replaced, and stock ✓ (Any 2) (2)

3.8.1 An inventory

- An inventory form is used to provide the farmer with a complete list of all assets belonging to the farming enterprise ✓ (1)

3.8.2 A cheque

- A cheque is used to withdraw cash from the bank or it can be used to pay for services/goods rendered ✓ (1)

3.8.3 An invoice

- An invoice is used to document the sale of goods ✓ (1)

**3.9 TRIAL BALANCE OF VEGETABLE FARMING COOPERATIVE ON
31 OCTOBER 2014**

		Debit		Credit		
3.9.1	Capital			250 000	00 ✓	(1)
3.9.2	Cash withdrawals	45 000	00 ✓			(1)
	Vehicles	88 000	00			
	Trading stock	176 000	00			
	Debit orders	69 000	00			
	Sales			890 000	00	
3.9.3	Rent income			36 000	00 ✓	(1)
	Interest on income			7 000	00	
	Cost of sales	550 000	00			
	Salaries	225 000	00			
3.9.4	Bank charges	2 000	00 ✓			(1)
	Stationery	13 500	00			
	Interest on loan	4 000	00			
	Water and electricity	7 000	00			
	Advertising	2 000	00			
3.9.5	TOTAL	1 183 000	00 ✓	1 183 000	00 ✓	(2)

- 3.10 **Factors which determine the economic viability of a farm**
- Output per season ✓
 - Price obtained per unit ✓
 - Costs of inputs ✓
- (Any 2) (2)
- 3.11 **Wholesalers and commission agents**
- Wholesalers transfer goods from producers to retailers by handling quantities of product as large as possible at lower prices ✓
 - Commission agents operate on behalf of wholesalers/producers at a certain percentage as commission ✓
- (2)
- 3.12.1 **Marketing system**
- Free marketing ✓
- (1)
- 3.12.2 **Marketing aspect**
- C ✓
- Reasons**
- The most intermediaries are used ✓
 - The product has been value added ✓
- (3)
- 3.12.3 **Marketing channel**
- Farm stall marketing ✓
- (1)
- 3.13 **Methods of setting prices**
- Cost/Pricing plus % profit ✓
 - Competition oriented/going rate pricing/Market oriented pricing ✓
 - Cost plus two times labour/labour plus two times cost ✓
 - Supply and demand ✓
 - Break – even – point
- (Any 2) (2)
- 3.14.1 **Calculate gross income**
- Gross income = 4 ton x 10 ha x R3 000/ton ✓
= R120 000 ✓
- (2)
- 3.14.2 **Calculate break- even point**
- Yield break even point = $\frac{(FC+VC)}{SP}$
 - Yield break even point = $\frac{(R4\ 000+R2\ 000)}{R3\ 000}$ ✓
= 2 ton/ha ✓
- (2)
[50]

QUESTION 4: HARVESTING, PROCESSING, AGRITOURISM AND MANAGEMENT**4.1 Importance moisture content at harvesting**

- Moisture contributes to mass according to which payment is done ✓
- High moisture content cause produce to be susceptible to fungal attack ✓
- High moisture content promotes rotting ✓ (Any 2) (2)

4.2. Tabulate advantages and disadvantages of storing perishable crops

	Advantages of storing perishable crops		Disadvantages of storing perishable crops
4.2.1	Products keep longer ✓	4.2.1	It is expensive ✓
4.2.2	Quality will keep for a longer time ✓	4.2.2	Very expensive ✓ Change in taste ✓ (Any 1) (4)

4.3.1 Meaning of the term value adding

- Means taking a raw material and processing it ✓
- OR**
- Adding something to it to change raw material into a saleable item that would be purchased by a specific group of customers ✓ (2)

4.3.2 Advantages of value adding in agribusiness

- Increase the prize you get for your raw material/higher income ✓
- Available throughout the year ✓
- Longer shelf life ✓
- You are master of your own destiny/determine the income ✓
- Creates goodwill value ✓
- Job creation ✓ (Any 2) (2)

4.3.3 Financial sustainability of a value added farming enterprise

- The farmer identifies a gap in the market and through processing value is added to a raw product ✓
- The new value added product can generate an income which may contribute to the financial viability of the farm ✓ (2)

4.4.1 Conditions under which microbes will not survive

- Environment which is dry ✓
- Where temperatures are low (cold) ✓
- Where temperatures are very high (heat) ✓
- Where there is no oxygen ✓
- Where chemicals are present ✓ (Any 4) (4)

4.4.2 Food products from fermentation

- Yeast products like bread/wine/beer ✓
- Vinegar ✓
- Cheese ✓
- Yogurt (Any 2) (2)

- 4.5.1 **Exporting**
- When products from one country is moved/sold to other countries for consumption or use. ✓ (1)
- 4.5.2 **Liability on export products**
- Latent defects ✓
 - Faulty descriptions ✓
 - Manufacturing defects ✓
 - Faulty shipments ✓
 - Inappropriateness of the article for the purpose ✓ (Any 2) (2)
- 4.6 **Rules and regulations to be followed during the transport of animals**
- A non-slip floor (of truck or trailer) ✓ – to prevent animals from falling and hurting themselves ✓
 - Adequate sidewalls of truck or trailer ✓ – to prevent animals from falling from vehicle ✓
 - Height between decks in multi-tier vehicles should be adequate ✓ – to enable larger animals to stand fully erect and to allow free flow of air ✓
 - Vehicle must be spacious ✓ – to ensure the safety of the animals during transportation ✓ (8)
- 4.7 **Role of local communities in agritourism**
- 4.7.1 **Empowerment of community**
- Community develops its own eco-attraction and provides employment for the whole community ✓
 - Money spent by tourists filter through to the whole community ✓ (2)
- 4.7.2 **Involvement by community members:**
- Community members must work hand in hand with agritourism operators ✓
 - They must conserve the environment by creating an area which is safe and attractive to tourists ✓ (2)
- 4.7.3 **Awareness of agritourism**
- Individuals become environmentally sensitive and try to preserve indigenous plants ✓
 - Work towards development of land for agritourism, selling of local craft to tourists and make the area a friendly one ✓ (2)
- 4.8.1 **Steps a farmer has to implement for efficient control**
- Setting standards ✓
 - Measuring and evaluating achievements ✓
 - Measurements plus review of variances ✓
 - Correction to achieve standards ✓ (4)

- 4.8.2 **Advantages to the farmer through the application of control measures**
- Deviation from planned activity brought to the attention of the manager ✓
 - Time and money are saved through speedy intervention ✓
 - Any problem which occur can be attended to in due time ✓
 - Production process is not interrupted ✓
- (Any 3) (3)
- 4.9 **Reasons for re-planning an enterprise in the farm business**
- Changes in technological and biological relationships ✓
 - Changes in the pattern of resources ✓
 - Labourers resign ✓
 - New inputs in the market ✓
 - Changes in prices ✓
 - Prices of certain inputs rise, e.g. fertiliser ✓
 - Risks and uncertainties ✓
 - Changes in weather patterns ✓
- (Any 5) (5)
- 4.10 **Ways that farm business promote well-being of workers**
- By being involved in social community programmes ✓
 - By implementing skills development programmes in the workplace ✓
 - Promoting safety in the workplace ✓
 - Providing learnerships for employees ✓
 - Giving bursaries to children of their employees ✓
- (Any 3) (3)
[50]
- TOTAL SECTION B: 150**
GRAND TOTAL: 200