



basic education

Department:
Basic Education
REPUBLIC OF SOUTH AFRICA

**NATIONAL
SENIOR CERTIFICATE**

GRADE 12

AGRICULTURAL MANAGEMENT PRACTICES

NOVEMBER 2013

MEMORANDUM

MARKS: 200

This memorandum consists of 12 pages.

SECTION A**QUESTION 1**

- | | | | | |
|-----|--------|------|----------|------|
| 1.1 | 1.1.1 | B ✓✓ | | |
| | 1.1.2 | C ✓✓ | | |
| | 1.1.3 | B ✓✓ | | |
| | 1.1.4 | A ✓✓ | | |
| | 1.1.5 | D ✓✓ | | |
| | 1.1.6 | B ✓✓ | | |
| | 1.1.7 | B ✓✓ | | |
| | 1.1.8 | A ✓✓ | | |
| | 1.1.9 | B ✓✓ | | |
| | 1.1.10 | C ✓✓ | (10 x 2) | (20) |
| 1.2 | 1.2.1 | B ✓✓ | | |
| | 1.2.2 | I ✓✓ | | |
| | 1.2.3 | J ✓✓ | | |
| | 1.2.4 | D ✓✓ | | |
| | 1.2.5 | H ✓✓ | | |
| | 1.2.6 | G ✓✓ | | |
| | 1.2.7 | A ✓✓ | | |
| | 1.2.8 | L ✓✓ | | |
| | 1.2.9 | K ✓✓ | | |
| | 1.2.10 | F ✓✓ | (10 x 2) | (20) |

1.3	1.3.1	Resources ✓		
	1.3.2	Precision farming ✓		
	1.3.3	Optimum/ideal temperature ✓		
	1.3.4	Cheque ✓		
	1.3.5	Budget ✓		
	1.3.6	Source document ✓		
	1.3.7	Seasonal labourer ✓		
	1.3.8	Marketing ✓		
	1.3.9	Coordination/organising/planning ✓		
	1.3.10	Producer/commodity organisation/cooperative/banks/agricultural companies ✓	(10 x 1)	(10)
			TOTAL SECTION A:	50

SECTION B**QUESTION 2: ANIMAL AND CROP PRODUCTION**

- 2.1 2.1.1 **Methods for reducing negative impact on veld**
- Stick to/stock below the carrying capacity of the region ✓
 - Leaving patches of natural vegetation where wild plants and animals can continue to grow alongside cultivated land ✓
 - Follow a good rotational grazing program/erecting camps ✓
 - Apply good veld/pasture management practises ✓
 - Exterminate foreign/invasive plants/weeds/trees ✓
 - Control soil erosion ✓
- (Any 4) (4)
- 2.1.2 **Three factors influencing veld management programme**
- Stocking rate will determine the number of animals ✓
 - The rainfall will determine the period of stay/absence/resting in the camp during the different seasons ✓
 - Stock intensity will determine the period of stay ✓
 - Herd composition will influence the number of camps ✓
 - Supplementary feeding will change the effect on natural grazing ✓
 - Natural disasters ✓
 - Veld type identification ✓
 - Condition of veld ✓
 - Choice of veld programme ✓
 - Camp outlay/number of camp ✓
 - Different type of animals (type of grazers) ✓
 - Capital/Economic implication ✓
 - Topography ✓
 - Climate ✓
- (Any 3) (3)
- 2.2 2.2.1 **Two causes of soil degradation**
- Soil erosion ✓
 - Salination ✓
 - Acidification ✓
 - Water logging ✓
 - Pollution ✓
 - Compacting of soils ✓
 - Poor farming practices ✓
 - Loss of soil fertility/organic material ✓
- (Any 2) (2)
- 2.2.2 **Two methods of rehabilitate soil**
- Planting of vegetation ✓
 - Correct carrying capacity of veld ✓
 - Covering of soils ✓
 - Adding agricultural lime/gypsum ✓
 - Draining of salty soils ✓
 - Soil contours ✓
 - Minimum/No tillage ✓
 - Adding of organic material ✓
- (Any 2) (2)

- 2.2.3 **Legislation on resource management**
- The National Water Act ✓
 - The National Veld and Forest Fire Act ✓
 - Conservation of Agricultural Resources Act (CARA) ✓
 - The Sustainable Utilisation Of Agricultural Resource Bill ✓
- (Any 2) (2)
- 2.3 2.3.1 **Soil texture**
- The texture of the soil at a certain place (location) ✓ is a given/cannot be change/one cannot change sandy soil into clay soil ✓
- (2)
- 2.3.2 **Soil depth**
- Soil has a certain depth ✓
 - in a specific area ✓ that cannot be changed
- (2)
- 2.3.3 **Slope**
- Slope is fixed ✓
 - on a specific land/veld ✓ that cannot be changed
- (2)
- 2.4 2.4.1 **Sources of capital and their explanation**
- Credit/Production loan ✓ ✓
 - Money borrowed from the bank/financial institution ✓ ✓
- (4)
- 2.4.2 **Three problems of capital as production factor**
- Capital is scarce ✓
 - Capital is expensive/high interest ✓
 - High risk ✓
 - Over capitalisation ✓
 - Under capitalisation ✓
 - Enough collateral/security for the loan ✓
 - Additional expenditure for capital redemption and interest ✓
- (Any 3) (3)
- 2.5 2.5.1 **Benefits of precision farming**
- Cost of producing the crop can be reduced/It increases the profit margin ✓
 - Risks of environmental pollution from agrochemicals decreases ✓
 - Improves the crop yield ✓
 - Provides information to make better management decision ✓
 - Provides more accurate farm records ✓
 - More accurate yield prediction ✓
 - Soil production potential can be determent ✓
 - Improved resource management ✓
- (Any 3) (3)

- 2.5.2 **Ordering information**
- Data collection ✓
 - Data evaluation ✓
 - Machine application/ Data capturing ✓
 - Data capturing /Machine application ✓
- (4)
- 2.6 2.6.1 **The specific type worker**
- A = Casual/contract worker/labourer ✓
 - B = Permanent/Full time worker/labourer ✓
 - C = Seasonal worker/labourer ✓
 - D = Permanent/Full time worker/labourer ✓
- (4)
- 2.6.2 **Worker with least job security**
- A/Casual worker ✓
 - C/seasonal worker ✓
- (Any 1) (1)
- 2.6.3 **Difference between worker A and C**
- Worker A**
- Does only a specific work on the farm ✓
 - And then leaves the farm ✓
- Worker C**
- Works on the farm every season/do seasonally work ✓
 - The same time every year on the farm ✓
- (4)
- 2.7 2.7.1 **Water for seedlings**
- Yes/Rainfall is adequate/There is enough water available ✓
- (1)
- 2.7.2 **Water during ripening**
- No/Rainfall is inadequate/There is not enough water available during ripening of the plant ✓
- (1)
- 2.7.3 **Possible solutions**
- Irrigate/give water to plants ✓
 - Cover soil with artificial/natural covering ✓
- (2)
- 2.7.4 **List problems of high rainfall**
- Difficult to harvest product/Can't harvest the product ✓
 - Harvesting is delayed/late on market
 - Delayed preparation for next crop ✓
 - Lower quality of product produced ✓
 - Lower/lack of income ✓
 - Increase possibility of diseases/rotting ✓
- (Any 4) (4)
- [50]**

QUESTION 3: RECORDING, FINANCIAL STATEMENTS AND ENTREPRENEURSHIP**3.1 Basic information on source document**

- The date ✓
- The amount (mass/volume)✓
- The description of the transaction ✓
- Name of company ✓
- Price ✓

(Any 2) (2)

3.2 Definition of petty cash

- It is the cash/money ✓
- That the farmer can use to pay for small expenses ✓

(2)

3.3 3.3.1 Definition of balance sheet

- Financial document that indicates the financial status/assets and liabilities of a farm ✓
- At a specific point in time/particular date ✓

(2)

3.3.2 Net value

- The difference between the assets and liabilities/assets minus liabilities/It is the money remaining when all the debt is deducted from the total assets on the farm ✓
- At a specific time ✓

(2)

3.3.3 (a) Long-term credit

- Used over 10–20 years ✓
- To buy fixed assets ✓
- For example land, buildings, fences, boreholes ✓

(3)

(b) Medium-term credit

- Have a lifespan of 2 to 10 years ✓
- Used to buy movable assets ✓
- Such as tractor, implements, livestock ✓

(3)

(c) Short-term credit

- Used within 2 year period ✓
- Used for trade expenses ✓
- Such as fertilizers, seeds, fuel ✓

(3)

- 3.4 3.4.1 **Four characteristics for an entrepreneur**
- Knowledge of the enterprise ✓
 - Have experience ✓
 - Planning skills ✓
 - Skilled labour/trained labourer ✓
 - Business skills ✓
 - Adapt to changing circumstances ✓
 - Good personal/human relationships ✓
 - Good organiser ✓
 - Responsible ✓
 - Communication skills ✓
 - Risk taker ✓
 - Reliable ✓
- (Any 4) (4)
- 3.4.2 **Three reasons for taking a risk**
- They want to work for themselves instead of others ✓
 - They prefer to take all business decisions themselves ✓
 - They want to keep the profit of their business ✓
 - They want to try out their own ideas ✓
- (Any 3) (3)
- 3.5 3.5.1 **Business description**
- Vision and mission statement ✓
 - Nature of the business ✓
- (2)
- 3.5.2 **Market analysis/overview**
- Growth potential ✓
- (1)
- 3.5.3 **Operational plan**
- Facility plan ✓
 - Administrative plan ✓
- (2)
- 3.5.4 **Risk analysis**
- Foreign exchange risk ✓
 - Price and other risks ✓
- (2)
- 3.5.5 **Financial plan**
- Assumptions and definitions ✓
- (1)

3.6 3.6.1 **Calculations**(a) **Total income**

- $R80\,600,00 + R15\,420,00 + R400,00 \checkmark$
= $R96\,420,00 \checkmark$ (Only answer $\checkmark\checkmark$) (2)

(b) **Total expenses**

- $R600,00 + R250,00 + R5\,925,00 + R310,00 + R1\,155,00$
 $+ R1\,150,00 + R2\,200,00 + R720,00 \checkmark$
 $R12\,310,00 \checkmark$ (Only answer $\checkmark\checkmark$) (2)

3.6.2 **Evaluate this table for profit/loss**

- The section worked at a profit \checkmark
- Profit/loss = total income – total expenses
= $R96\,420,00 - R12\,310,00 \checkmark$
= $R84\,110,00 \checkmark$
- Because income is more than expenses \checkmark (4)

3.7 Calculations

3.7.1 (a) 600 864 \checkmark (b) 523 252 \checkmark (c) 430 516 \checkmark (d) 454 408 \checkmark (e) 417 574 \checkmark (f) 449 450 \checkmark (6)3.7.2 **Month of loss and reason**

- December \checkmark
- The total payments/expenditure are more than the total receipts/income for the month \checkmark (2)

3.7.3 **Two reasons for farm budget**

- To determine the capital need \checkmark
- For control purposes \checkmark
- To determine the practicability of a decision \checkmark
- To determine the relative profitability of the alternatives/probable income and expenditure \checkmark
- To quantify the long term strategy and objectives \checkmark (Any 2) (2)

[50]

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

- 4.1 **Advantages of processing for the consumer**
- To increase the shelf/storage life of the product ✓
 - To meet consumer taste ✓
 - Consumer friendly ✓
 - Out of season availability of products /food security ✓
 - Increase the nutritional value ✓
 - Easier packaging/handling of product ✓
 - To shorten preparing/cooking time of the product ✓
- (Any 4) (4)
- 4.2 **Disadvantages of storing agricultural products in small quantities**
- Damaging of products is easier
 - Handling of product more often/Increased labour costs/ labour intensive ✓
 - Packaging material is more expensive in the long run ✓
 - Pests can cause great damages ✓
 - Difficult to move/transport greater volumes ✓
 - Theft ✓
 - Marketing is more difficult ✓
- (Any 4) (4)
- 4.3 4.3.1 **Disadvantages of harvesting by hand**
- Very slow/takes a long time ✓
 - Products not so clean ✓
 - Only small areas can be harvested ✓
 - Dependant on weather conditions ✓
 - Theft ✓
 - Labour intensive ✓
 - Labour related issues ✓
- (Any 4) (4)
- 4.3.2 **Problems labourer experienced**
- Harsh weather conditions ✓
 - Sunburn ✓
 - Injuries ✓
 - Long hours ✓
 - Long walking distances ✓
 - Little carrying capacity ✓
 - Hard physical work ✓
 - Poor working conditions ✓
 - Disabilities ✓
- (Any 4) (4)

4.3.3 Improvement of working conditions

- Correct equipment to do the work better ✓
- Supply protective clothing to protect against harsh conditions ✓
- Apply mechanization to ease the work of labourers ✓
- Supply clean water to drink during working hours ✓
- Supply sunscreen to protect exposed skin areas ✓
- Supply shade if possible ✓
- Provide ablution facilities/housing ✓
- Transport ✓
- Training ✓
- Appropriate time management/time management ✓ (Any 5) (5)

4.4 Differences between marketing channels

✓ for table with labels

Aspect	Fresh produce market	Contract marketing
• Pricing	• Great fluctuation in prices ✓	• Smaller fluctuations in prices ✓
• Product sold	• Not sure how many products will be sold ✓	• Contracted products will be sold ✓
• Income stability	• Income of farmer is instable ✓	• Income of farmer is more stable ✓
• Packaging	• Cheaper ✓	• More expensive ✓
• Quality control	• Less strict quality controls ✓	• More strict quality controls ✓

(Any 3 aspects) (7)

4.5 Methods of adding value meat

- Cut into the different cuts of meat ✓
- Smoking ✓
- Change into processed meat ✓
- Drying ✓
- Salting ✓
- Cooling ✓
- Precooking ✓
- Marinating of meat ✓
- Packaging ✓
- Aging of meat ✓ (Any 4) (4)

- 4.6 4.6.1 **Product information**
- Name/type of product ✓
 - Mass/volume of product ✓
 - Ingredients of the product ✓
 - Nutritional values ✓
 - Storage information ✓
- (Any 3) (3)
- 4.6.2 **Nutritional value**
- Table ✓ with the nutritional value
 - Value as mass/percentage of RDA ✓
 - Arrange from highest to lowest order ✓
- (3)
- 4.6.3 **Allergies**
- Any allergies that can be caused by the product must be indicated ✓
 - That is not related to the product itself /that is added ✓
- (2)
- 4.7 4.7.1 **Reasons for changing farms into agritourism**
- Livestock theft ✓
 - Fluctuating meat prices ✓
 - Higher income/more stable income/ earn foreign currency ✓
 - To venture into agritourism/to attract tourists ✓
 - Increased farm value ✓
 - Diversification ✓
 - Marketing/promotion/advertising of product/Niche market ✓
- (3)
- 4.7.2 **Reason for game farm to be tourist attraction**
- Game is more attracting than farm animals ✓
 - Most game farms have accommodation ✓
 - Game farms are more natural than ordinary farms ✓
 - Exotic game species ✓
 - Hunting /Recreation ✓
- (Any 2) (2)
- 4.8 **Evaluations and recommendations**
- The income from stud animals is increasing in contrast to the income of the commercial animals that is declining ✓
 - Put more emphasis on stud farming ✓
 - There are too many animals on the farm/overgrazing occurs ✓
 - Reduce the number of animals ✓
 - Start a feedlot to reduce the number of animals on grazing ✓
 - Find alternative markets for the commercial animals ✓
 - Feed animals/supplementary feeding to increase the weekly mass gain ✓
- (Any 5) (5)
- [50]**

TOTAL SECTION B: 150
GRAND TOTAL: 200