



basic education

Department:
Basic Education
REPUBLIC OF SOUTH AFRICA

**NATIONAL
SENIOR CERTIFICATE**

GRADE 12

AGRICULTURAL MANAGEMENT PRACTICES

FEBRUARY/MARCH 2013

MEMORANDUM

MARKS: 200

This memorandum consists of 11 pages.

SECTION A**QUESTION 1.1**

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

(10 x 2) (20)

QUESTION 1.2

1.2.1	E ✓✓
1.2.2	G ✓✓
1.2.3	C ✓✓
1.2.4	K ✓✓
1.2.5	H ✓✓
1.2.6	I ✓✓
1.2.7	J ✓✓
1.2.8	B ✓✓
1.2.9	D ✓✓
1.2.10	F ✓✓

(10 x 2) (20)

QUESTION 1.3

- 1.3.1 Contours/terracing ✓
 1.3.2 Monoculture ✓
 1.3.3 Depreciation ✓
 1.3.4 Business plan ✓
 1.3.5 Productivity ✓
 1.3.6 Fixed ✓
 1.3.7 Source document/receipt/invoice ✓
 1.3.8 Processing/value-adding ✓
 1.3.9 Agri-tourism ✓
 1.3.10 Packaging ✓

(10 x 1) (10)

TOTAL SECTION A: 50

SECTION B**QUESTION 2: ANIMAL AND CROP PRODUCTION****2.1 Law of diminishing return**

- Agricultural production can usually be increased by increasing production inputs. ✓
- However at a certain stage the output does not increase in the same ratio as the input. ✓ (2)

2.2.1 The list of duties attached to the type of farm worker

- (a) Tractor driver – labourer ✓
- (b) Cleaning of animals housing – labourer ✓
- (c) Weeding – labourer ✓
- (d) Keeping record – farm foreman/manager ✓
- (e) Organising the work to be done – farm foreman/manager ✓
- (f) Erecting a fence – labourer ✓ (6)

2.2.2 Differentiate between farm managers and farm workers**(a) Type of work**

- Farm Manager
 - Are trained to do certain duties/skilled labourer ✓
 - Know how to do cognitive challenging tasks ✓
 - Administrative work /management tasks ✓ (Any 1)
- Farm Workers
 - Not trained or partially trained to do the particular work ✓
 - Do not perform cognitive challenging work ✓
 - Perform common tasks/hands on ✓ (Any 1) (2)

(b) Responsibilities

- Manager
 - Responsible for different managerial tasks ✓
 - Do work that involves more responsibility ✓ (Any 1)
- Labourers
 - Do work with less responsibility ✓
 - Not responsible for managerial work ✓ (Any 1) (2)

2.3.1 Description of credit

- Credit is when borrowing money which is paid back with interests ✓ (1)

2.3.2 Four sources of credit in agriculture

- Land bank ✓
- Agricultural bank ✓
- Commercial bank ✓
- Co-operatives ✓
- Insurance companies ✓
- Service providers / agents ✓

(Any 4) (4)

2.3.3 Name three types of credit and the purpose

	Long term credit	Medium term credit	Short term credit
Timeframe	10 – 20 years ✓	5 – 10 years ✓	1 – 5 years ✓
Purpose	Used to purchase land and its fixed improvements such as buildings, fences, boreholes etc. ✓	Used to buy livestock and agricultural machinery. ✓	Used to purchase production goods that are to be used within one production season, such as feed, fuel etc. ✓

(6)

2.4.1 Identification of the picture

- It is a hand sprayer ✓

(1)

2.4.2 Explain the use of the equipment

- Livestock farmer
 - Apply pesticides ✓
 - Apply insecticides ✓
 - Disinfecting buildings/structures ✓
- Crop farmer
 - Apply herbicides ✓
 - Apply insecticides ✓
 - Fertigation/foliar application of fertilizer ✓

(Any 2)

(Any 2) (4)

2.5.1 Practical application of GPS

- Global positioning system(GPS) – allows farmers to easily survey the land, ✓
- It presents a series of GIS maps ✓

(2)

2.5.2 Practical application of GIS

- Geographical information system(GIS) – it consists of a computer software data base system ✓
- Used to input data obtained ✓
- Retrieve data from equipment and satellites ✓
- Analyse data received from different sources ✓
- And display the relevant data ✓
- In a map like form spatially referenced geographical information ✓

(Any 4) (4)

2.5.3 Practical application of VRT

- Variable rate technology(VRT) – consists of farm fields equipment with the ability to precisely control the rate of application of crop inputs✓
- And tillage operations✓

(2)

2.6 Four soil qualities making soil texture an important soil property

- Soil fertility✓
- Water holding capacity of the soil✓
- Physical activity✓
- Erode ability of the soil✓

(4)

2.7 Relationship between water infiltration and clay content

- The higher the clay content of soils✓
- The lower the infiltration of water will be ✓

Or

- The lower the clay content of soils✓
- The higher the infiltration of water will be ✓

(2)

2.8.1 Identification of the farm implement

- It is a combine harvester/ harvester ✓

(1)

2.8.2 Main benefits

- Harvesting in bulk especially larger areas ✓
- Saving on time/ faster method of harvesting ✓
- Saving on labour ✓
- Not a large capital investment because the farmer make use of a contractor ✓
- Can be more cost effective ✓
- Make use of skilled workers/labourers to handle equipment ✓ (Any 4)

(4)

2.9 Three veld types

- Sour veld ✓
- Sweet veld ✓
- Mixed veld ✓

(3)

[50]

QUESTION 3: RECORDING, FINANCIAL STATEMENTS AND ENTREPRENEURSHIP**3.1.1 FIVE reasons why the farm enterprise should keep record**

- Physical aspects ✓
- Financial aspects ✓
- Climatologically information ✓
- Labour information. ✓
- Mechanical maintenance information ✓
- Marketing information of the farm ✓
- To provide a reliable source of information ✓
- Determine profitability of the farm ✓
- For budgeting ✓
- To access the bank balances ✓
- Tax returns ✓

(Any 3) (3)

3.1.2 THREE requirements of a good business record

It should be:

- Clear/simple ✓
- Concise/easy to use ✓
- Specific ✓
- Realistic ✓
- Relevant ✓
- Complete ✓
- Useful/meet specific needs of the farm ✓
- Up to date ✓

(Any 3) (3)

3.1.3 THREE methods to keep the farm business records

- Record books ✓
- Computers ✓
- Files ✓
- Cell phone ✓

(Any 3) (3)

3.2 Calculation of the Gross and the Net profit

Activity/Transaction	Amount
• Selling price (15 bags at R81.25 each) ✓	= R1218.75 ✓
• Cost price (15 bags at R65.00 each) ✓	= R975.00 ✓
• Gross profit :selling price less cost price ✓	= R 243.75 ✓
• Expenses	= R200.00
• Net profit : Gross profit less Expenses ✓	= R 43.75 ✓

(8)

3.3 FOUR characteristics of the vision and mission statements of the farm business

It should be:

- Challenging ✓
- Exciting ✓
- Concrete ✓
- Specific ✓
- Attainable/realistic ✓
- Indicate long term and short term aims/different timeframes ✓ (Any 4) (4)

3.4 Describe meaning of budgets

- Budgets – are working documents ✓
- That are drawn up and are used to monitor progress ✓
- To plan alternatives ✓
- To correct deviations ✓.
- They are based on projected incomes ✓
- And projected expenditures ✓
- Based on previous information ✓
- Never relate it to true results ✓ (Any 4) (4)

3.5 Complete Deposit slip**NB: Only one answer to each question. More answers – no mark allocated****3.5.1 Account number**

- 0194236429 ✓ (1)

3.5.2 Credit

- Joy-Smile livestock producers ✓ (1)

3.5.3 Notes

- 4500,00 / 4500,— ✓ NB cents (1)

3.5.4 Coins

- 1500,00 / 1500,— ✓ NB cents (1)

3.5.5 Bank

- Standard Bank ✓ (1)

3.5.6 Branch code

- 07746 ✓ (1)

3.5.7 Value

- 3000,00 / 3000,— ✓ NB cents (1)

3.5.8 Total

- 9000,00 / 9000,— ✓ NB cents (1)

3.6.1 **Assets and liabilities**

ASSETS	LIABILITIES
Debtors✓	Co-op accounts✓
Investments✓	Creditors✓

(4)

3.6.2 **THREE main contributing factors to the liabilities**

- Loans✓
- Outstanding debts✓
- Outstanding accounts✓

(3)

3.6.3 **Effect of high liabilities**

- Eligibility of the farm enterprise will be negatively affected ✓
- The farm enterprise may be bankrupt ✓
- Negative effect on liquidity ✓

(Any 2) (2)

3.7.1 (a) **Calculate gross profit**

- Purchases = 334 000 + 377 500
= 711 500 ✓

- Sales = 360 000 + 425 000
= 785 000 ✓

- Gross Profit = 785 000 – 711 500
= 73 500 ✓

(3)

(b) **Calculate net profit**

Total costs = 18 000 + 20 000
= 38 000 ✓

Net profit = 73 500 – 38 000
= 35 500 ✓

(2)

3.7.2 **Deduce economic viability**

Economic viability = 35 500 + 24 000
= 59 500 ✓

OR

The company is economic viable ✓

AND

The company is economically viable because it shows a profit✓
And there are stock left to sell ✓

(3)
[50]

QUESTION 4: HARVESTING, VALUE-ADDING, MARKETING, AGRI-TOURISM AND INDUSTRY**4.1.1 Method of harvesting in rocky steep areas**

- Hand harvesting ✓

(1)

4.1.2 Harvesting large areas

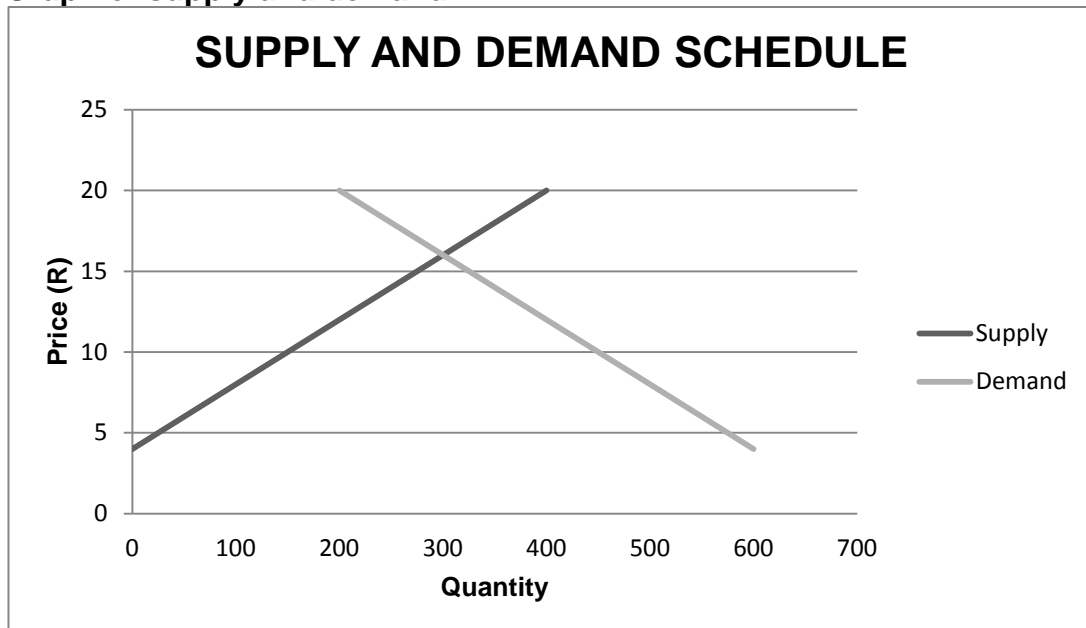
- Machine harvesting ✓

(1)

4.1.3 Four disadvantages hand harvesting

- Time – Slower/ consumes time ✓
- Area – Covers small area/ smaller fields ✓
- Labour – Uses a lot of labour/ more labour intensive ✓
- Quality – Lower quality / contaminated harvested produce ✓

(4)

4.2.1 Graph of supply and demand**Marking Rubric**

- Heading ✓
- Labelling and value of x – axes and y – axes ✓
- Legend / labelling graphs ✓
- Correct supply graph ✓
- Correct demand graph ✓

(5)

4.2.2 Market equilibrium

- R16,00/ kg ✓ (exact value)

(1)

4.2.3 Explain reason for shortage

- When the price is low the consumers buy more of the produce ✓
- When the price is low farmers produce /market less of the crop produce ✓
- Political instability/factors ✓
- Socio-economic factors ✓
- Natural disasters/ hail/ draught/ floods ✓

(Any 2)

(2)

- 4.3.1 **Three factors controlled in silo**
- Temperature ✓
 - Moisture ✓
 - Air ✓
 - Light ✓
- (Any 3) (3)
- 4.3.2 **Name two organism/animals that may damage crop**
- Insect pests/ weevil/ worms ✓
 - Rodents/ rats/ mice ✓
 - Livestock/ cattle/ goats/ sheep/ poultry/ pigs ✓
- (Any 2) (2)
- 4.4.1 **Reasons for preserving of an agricultural product**
- Safeguarding food against decay and food do not waste ✓
 - Food security/Produce high quality food on a big scale for large amount of people ✓
 - To supply food constantly to the market throughout the year ✓
 - To have certain food types in non – producing areas ✓
- (Any 3) (3)
- 4.4.2 **Methods of preservation**
- Applying of heat/pasteurisation/sterilization/blanching ✓
 - Cooling/freezing of product ✓
 - Irradiation ✓
 - Filtration ✓
 - Salting ✓
 - Fumigation ✓
 - Chemical preservatives ✓
- (Any 4) (4)
- 4.5 **Assistance to farmers by producer organizations**
- Negotiate credits with banks on behalf of the farmers. ✓
 - Organize inputs and negotiate discounts on behalf of the farmers. ✓
 - Organize markets for the farmers. ✓
 - Provide technical/ scientific advices to the farmers. ✓
 - Give market information ✓
 - Advertise and promote agricultural products ✓
- (Any 4) (4)
- 4.6 **Five items for Agri-tourism**
- Canteen ✓
 - Health centre or First Aid kit ✓
 - Tour guide ✓
 - Toilet ✓
 - Small museum ✓
 - Transport ✓
 - Computers ✓
- (Any 5) (5)
- 4.7.1 **Explain reason for evaluation**
- To see whether expenditure is to high ✓
 - To improve profitability/ to save costs/ cutting costs ✓
 - Determine if expenditure is according to the budget ✓
- (Any 2) (2)

4.7.2 Reducing costs

- Service the tractor to cut fuel consumption✓
- Do more than one cultivation at once✓
- Practice minimum or no cultivation✓
- Use different implements to cut fuel costs✓
- Make use of organic farming methods✓
- Plant pest resistant crops✓
- Make use of a maintenance plan to reduce high breakage costs✓
- Investigate the possible use of generic chemicals that is less expensive✓
- Make use of second hand parts✓

(Any 6) (6)

4.8 Essential information on labels

- Name of the farm ✓
- Name of the product ✓
- Quantity of produce ✓
- Packaging date/expiry date ✓
- Warning on possible allergies to consumers ✓
- Ingredients used in producing the products ✓
- Preservatives used ✓
- Nutritional value ✓
- Contact information of the producer ✓

(Any 5) (5)

4.9 Safety measures

- Wearing of protective clothing ✓
- Cut things away/ far from your body ✓
- Keep the work place clean and tidy ✓
- The work place must be well ventilated/ open windows ✓
- Use the correct tool for the correct purpose ✓
- Keep the floors clean and dry ✓
- Do not play/ run-around the work place ✓

(Any 2) (2)
[50]**TOTAL SECTION B: 150**
GRAND TOTAL: 200