



basic education

Department:
Basic Education
REPUBLIC OF SOUTH AFRICA

NATIONAL SENIOR CERTIFICATE

GRADE 12

AGRICULTURAL MANAGEMENT PRACTICES

NOVEMBER 2011

MEMORANDUM

MARKS: 200

This memorandum consists of 14 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	C	C✓✓	D
1.1.5	A	B✓✓	C	B
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	J✓✓
1.2.2	D✓✓
1.2.3	G✓✓
1.2.4	F✓✓
1.2.5	E✓✓
1.2.6	I✓✓
1.2.7	L✓✓
1.2.8	A✓✓
1.2.9	B✓✓
1.2.10	H✓✓

(10 x 2) (20)

QUESTION 1.3

- 1.3.1 Soil erosion ✓
- 1.3.2 Closer/Nearer/lesser ✓
- 1.3.3 Optimum /ideal/best ✓
- 1.3.4 Calibration ✓
- 1.3.5 Short-term/production loan ✓
- 1.3.6 Loss ✓
- 1.3.7 Control/monitoring ✓
- 1.3.8 Organic/Biological/perma culture ✓
- 1.3.9 Depreciation ✓
- 1.3.10 Marketing ✓

(10 x 1) (10)



TOTAL SECTION A: 50

SECTION B**QUESTION 2: ANIMAL AND CROP PRODUCTION****2.1.1 Explain basic procedure of farm planning****a) Collection of recent data:**

- To analyse the present situation. ✓
- Any data that is relevant to enterprise – climate, soil, markets ✓ (Any 1)

b) Classification and evaluation of data

- To determine the land capability and determine field layout. ✓
- Data has to be classified in different categories and the influence that this aspect will have on the enterprise ✓ (Any 1)

c) Actual plan on utilisation of resources

- To coordinate farm activities and/or determine the soil and water management. ✓
- Final planning for the year/season/day to ensure that objectives are reached. ✓
- Setting of business plan ✓ (Any 1) (3)

2.1.2 Two important aspects

- Finances/capital needed ✓
- Farm activities/work for the day ✓
- Advertising/Marketing of the products ✓
- Availability of resources/water ✓ (Any 2) (2)

2.1.3 Four ways to improve soil structure

- Add organic material/compost/manure/organic fertilisers/green manuring ✓
- Practise crop rotation ✓
- Conservation cultivation methods ✓
- Correct cultivation methods ✓
- Add lime/gypsum to soils ✓
- Organic/Biological farming methods ✓ (Any 4) (4)

2.2 Classify type of capital

- A – Movable capital: ✓
- B – Fixed capital ✓
- C – Working (floating) capital/fixed capital ✓
- D – Working (floating) capital ✓
- E – Fixed capital ✓ (5)

2.3 Four factors for soil to produce

- Agricultural/production capacity of the soil/grazing capacity of pastures ✓
- Vulnerability of the soil to change or total destruction ✓
- Climate ✓
- Correct management practices ✓ (4)

2.4 Type of farming system AND one reason

- A = Subsistence farming system – ✓
- AND**
- Hand tools/no mechanisation ✓ Small area planted for family ✓
 - When a farmer is growing enough food to feed the family. ✓
 - But not selling much at all / there is no profit. ✓
 - A farmer does not spend more than they need on inputs. ✓ (Any 1) (2)

- B = Commercial farming system – ✓
- AND**
- More expensive technology/Mechanisation ✓
 - When a farmer produces products mainly for sale. ✓
 - It is aimed at profit making. ✓
 - They spend more on inputs. ✓ (Any 1) (2)

2.5 Describe procedure of caring

- Clean the implements/Remove the mud ✓ Wash it thoroughly with clean water ✓
- Service the implement/Grease the equipment if applicable ✓
- Releasing the tension of all belts and chains. ✓
- Replacing/repair all broken or worn out parts. ✓
- Protect it from rusting/ensure it is dried ✓
- Keep in a safe/sheltered place ✓ (4)

2.6 Name perspective

2.6.1 Science perspective ✓ (1)

2.6.2 Technical perspective/labour perspective ✓ (1)

2.6.3 Environmental perspectives ✓ (1)

2.6.4 Economic perspective ✓ (1)

2.7 Differentiate two groups of labourers**2.7.1 Skilled labourers**

- Are those labourers who are trained and provided with certificates ✓
- Know how to do specific tasks in the farm ✓

Unskilled labourers

- Are not trained ✓
- Perform common tasks/tasks which can be learned and done by most people quickly. ✓ (4)

2.7.2 Explain advantages of skilled labourers

- Higher income possibilities for farm ✓
- Skilled agricultural workforce ✓
- Increased productivity / Commitment for better work ✓
- Better quality product produced ✓
- Less damages/longer use of implements/equipment
- More efficient use of equipment ✓
- More stable workforce. ✓

(4)

2.8.1 Identification from graph

(a) Week 2 ✓

(b) Week 5 ✓

(2)

2.8.2 Higher yield – verification

- No ✓
- The temperatures during week 5 and week 6 are too low for maximum production. ✓

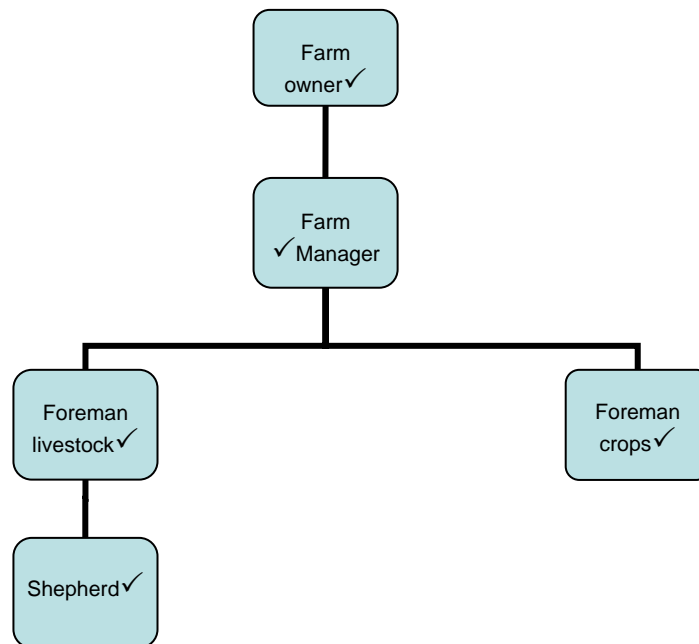
(2)

2.8.3 Two practices to solve problem

- Plant the crop earlier. ✓
- Make use of a cultivar with a shorter growing season. ✓
- Produce the crop in a green house / environmental controlled enclosure ✓
- Cover the plants when temperature decreases. ✓
- Burning of material next to the field when temperatures drop below the optimum temperature. ✓
- Plant crop on a northern slope ✓

(Any 2)

(2)

2.9 **Organogram****Footnote**

- Schematic representation ✓
- Straight line chain of command = 3 marks – farm owner, farm manager, any one of the foreman. Thereafter no marks
- Placing the worker under wrong foreman = 5 marks

(6)

[50]

QUESTION 3: RECORDING, FINANCIAL STATEMENTS AND ENTREPRENEURSHIP**3.1.1 Name four agricultural budgets**

- Enterprise budgets/production budget✓
- Partial budgets✓
- Break-even budgets✓
- Capital budget✓
- Whole farm budget✓
- Cash flow budget ✓
- Mechanisation budget✓
- Budget for maintenance of infrastructure✓

(Any 4) (4)

3.1.2 Redraw partial budget**Rubric for marking:**

Expected income:

- The name of the product / item to be sold✓
- Amount✓
- Unit price ✓
- Total✓(Correct)

Expected expenses:

- Name of item✓
- Amount ✓
- Unit price✓
- Total✓(Correct)

(8)

3.2 Five types of records

- Financial record✓
- Labour record✓
- General record✓
- Grazing and fodder record✓
- Livestock record✓
- Mechanisation record✓
- Production record/weaning records✓
- Medicine records✓
- Pedigree records ✓

Footnote: Any relevant agricultural livestock records

(Any 5) (5)

3.3 **Copy and complete forms of loans**

DURATION	LONG-TERM LOAN	MEDIUM-TERM LOAN	SHORT-TERM LOAN
Period	10 yrs and longer✓	2 to 10 years (not only 2 or 10 years)✓	2 years and less✓
Use of capital	Purchase of land✓	Purchase of machinery✓	Purchase of fertilisers✓

(6)

3.4 **Complete balance sheet**

- 3.4.1 (a) Cash - R2 000✓ or Stock - R100 000 ✓
 (b) Stock - R100 000✓ or Cash - R2 000 ✓
 (c) Creditors - R11 613✓
 (d) Total liabilities - R392 795✓ (CA apply Mark positively) (4 x 1) (4)

3.4.2 **Calculate net worth (incorrect calculation must be mark positively)**

- R442 000 – R392 795✓ = R49 205✓
- If only answer: Net worth = R49 205 ✓✓ (CA apply) (2)

3.5 **Identify source documents**

- 3.5.1 Cash invoice/ Invoice✓
 3.5.2 Cash/account deposit slip✓
 3.5.3 Credit note/Account/VAT invoice ✓
 3.5.4 Receipt /Proof of payment✓ (4)

3.6 **Differentiate cash flow and income statement**

- Cash flow is the movement of funds through the business✓ during a specific period and is represented by receipts and payment. ✓
- Income statement is the record of financial transactions✓ and the resulting profit/loss on a farm. ✓ (4)

3.7.1 **Indicate equal month**

February✓ (1)

3.7.2 **Two reasons for sudden drop in price**

- The farmer doesn't have many livestock or livestock products to sell so the income is less✓
- The demand for the specific livestock products was lower and therefore less were sold✓
- There was an over supply on the market and prices drop suddenly✓
- A sudden loss of animals (diseases/natural disaster / theft / predators/ problem animals) thus less to sell✓
- Restrictions on export/quarantine✓ (Any 2) (2)

3.7.3 **Calculate profit/loss****Calculations**

Income = 200 000 + 75 000 + 60 000 + 50 000 + 40 000 + 40 000 + 50 000
 + 60 000 + 100 000 + 150 000 + 250 000 + 350 000
 = R1 425 000✓

Expenditure = 70 000 + 75 000 + 80 000 + 85 000 + 90 000 + 95 000
 + 100 000 + 100 000 + 90 000 + 80 000 + 70 000 + 80 000
 = R995 000✓

And determine

Farmer had made a profit✓ of R430 000. ✓ (Mark positively/CA apply) (4)

3.8 **Redraw and categorise in appropriate column in business plan****SECTION OF A BUSINESS PLAN**

MARKETING	FINANCIAL PLANNING
What are the set quality standards for selling my product? ✓	Where am I going to get the capital? ✓
Where am I going to sell my product? ✓	When will I reach the break even point? ✓
What are the customers' needs? ✓	How much are business registration fees and taxes? ✓

(6)
[50]

QUESTION 4: HARVESTING, VALUE-ADDING, MARKETING, AGRITOURISM AND INDUSTRY**4.1 Explain importance of grading**

- To ensure quality control/better quality of product ✓
- Grading is necessary to determine the appropriate use of the product/**to ease marketing** ✓
- The higher the quality of the raw product, the higher the quality of the processed product/**motivation for farmer to produce better product** ✓
- To group harvested products in prescribed classes ✓
- To guide the consumer in the available categories ✓
- **Improved price of product** ✓

(Any 3) (3)

4.2 Aims of processing

- To increase the value of the product/**increased income** ✓
- To increase the shelf/storage life of the product/To preserve the product ✓
- To meet consumer taste/**consumer friendly** ✓
- To cope with over supply of products ✓
- Easier packaging/handling of product ✓

(Any 3) (3)

4.3 Three non-chemical methods to control micro-organisms

- **Heating** ✓
- **Pasteurisation** ✓
- **Sterilisation** ✓
- **Blanching** ✓
- **Smoking** ✓
- **Sugaring** ✓
- **Salting** ✓
- Refrigeration/cooling/cold storage/freezing/chilling ✓
- Filtration ✓
- Ultraviolet light (uv)/radiation ✓
- Vacuum packaging ✓
- Drying/spray drying/sun-drying/air-drying ✓
- Tinning ✓

(Any 3) (3)

4.4 Role of producer organisations

- Do market research/**Marketing** ✓
- Advertise the produce/Promote the product/**Promotion** ✓
- Assist farmers on regulatory/**policy** issues and market trends ✓
- Advisory service to farmers ✓
- Financial advice ✓

(Any 3) (3)

4.5 Five requirements of packaging material for meat

- Non-toxic ✓
- Transparent ✓
- Cleanable ✓
- Easily disposable/degradable ✓
- Suited for meat ✓
- Impermeable to gases and odours ✓
- Resistant to mechanical and temperature damage ✓
- Recyclable ✓
- Cheap ✓
- Lightweight ✓
- Appealing ✓
- Strong ✓

(Any 5) (5)

4.6 Aims of Agri-BEE

- Ensure equal, fair income distribution ✓
- Participation of previous disadvantage people in the economy ✓
- Economic empowerment of previous disadvantage people ✓
- Correcting inequalities of past ✓
- Gender equity ✓
- Land reform targets ✓

(Any 3) (3)

4.7.1 Define Agri-tourism

- Attracting travellers, visitors/ tourists ✓
- To an area that is used for farming/agricultural purposes (agrarian activities) ✓
- With conservation in mind and buildings with agrarian function ✓

(Any 2) (2)

4.7.2 Three benefits of Agri-tourism

- Efficient use of resources ✓
- Increase in income generated by farm workers/farm workers produce articles to sell ✓
- Increased job creation ✓
- Beneficiary to the community involved ✓
- Uplifting the quality of life for the people involved ✓
- Protection/Conservation of environment ✓
- Diversification extra income ✓
- Marketing tool ✓

(Any 3) (3)

4.8 Six factors to consider before harvesting

- Size of the farm ✓
- Crop/cultivars ✓
- Weather/climate/ soil conditions ✓
- Harvesting method ✓
- Time frames/when to start when to finish ✓
- Storing facilities ✓
- Condition and availability of harvesting tools/equipment/ machinery ✓
- Availability of labour ✓
- Option of hiring harvesting contractors ✓
- Service harvesting equipments ✓
- Employment of seasonal labour ✓
- Transportation of harvested product ✓
- Measurement of the readiness of crop to be harvested ✓
- **Sorting and grading**
- **Market research**

(Any 6) (6)

4.9.1 Define agricultural market

- A place where the supply of agricultural products ✓
- Will meet the demand to the product by the consumer ✓

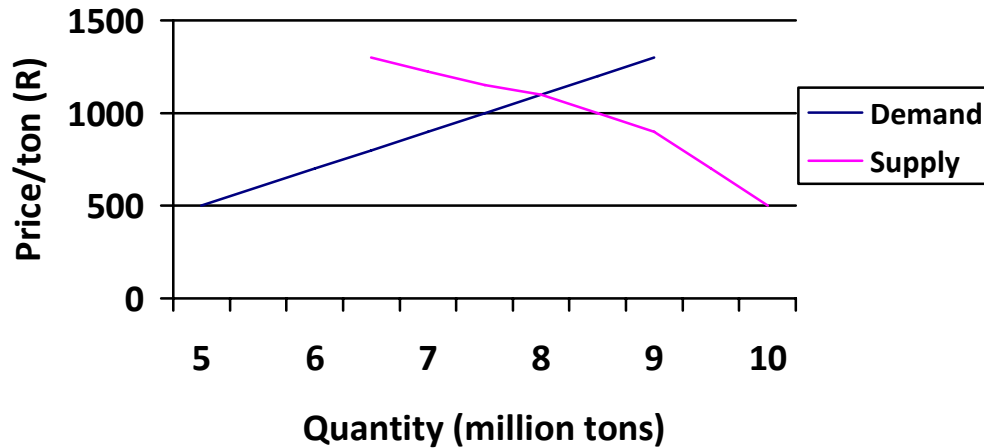
OR

- Any place where an agriculturist ✓
- Can sell his/her produce to a consumer ✓

(2)

4.9.2 **GRAPH SUPPLY AND DEMAND**

SUPPLY AND DEMAND



Check list:

Heading ✓ Label Y-axis ✓ X-axis ✓ Supply curve ✓ Demand curve ✓ (5)

4.9.3 **Ideal point of supply and demand**

At R1 100 per ton or at 8 million tons ✓ (1)

4.9.4 **Term ideal point**

Market equilibrium ✓ (1)

4.9.5 **Explain ideal point**

This is the point where the quantity of the crop supplied to the market is equal to the quantity of the crop demanded from the market ✓✓ (2)

4.10.1 **Reason why farm equipment is dangerous**

- Sharp ✓
 - Fast moving ✓
 - Mechanical ✓
 - Open machinery ✓
 - Heavy ✓
- (Any 1) (1)

4.10.2 **State legislation**

OHS Act/(ACT 85 OF 1993)/Safety act ✓ (1)

4.11 REPORT FOR SMALL SCALE FARMER**A. Agritourism**

- Donkey cart rides for tourists✓
- Demonstrations of oxen at work✓

B. Irrigation

- Borehole to supply water✓
- Dam to store water✓
- Land to irrigate✓

(Any 2)

C. Mechanisation

- Mules work✓
- Sale of products to buy tractor. ✓
- Sale of mules to buy tractor✓
- Selling of donkey cart to buy a wagon
- Contractor to cultivate soil✓

(Any 2)

(6)
[50]**TOTAL SECTION B: 150**
GRAND TOTAL: 200