basic education

Department:
Basic Education
REPUBLIC OF SOUTH AFRICA

NATIONAL SENIOR CERTIFICATE

GRADE 12

AGRICULTURAL MANAGEMENT PRACTICES

NOVEMBER 2011

POSSIBLE ANSWERS

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)

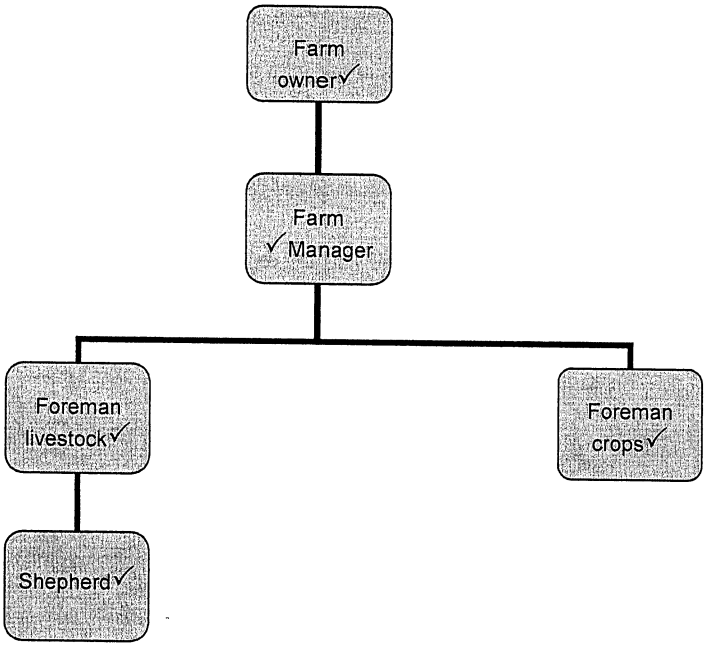
2.8.2 **Higher yield – verification**

- 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✓
- 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**

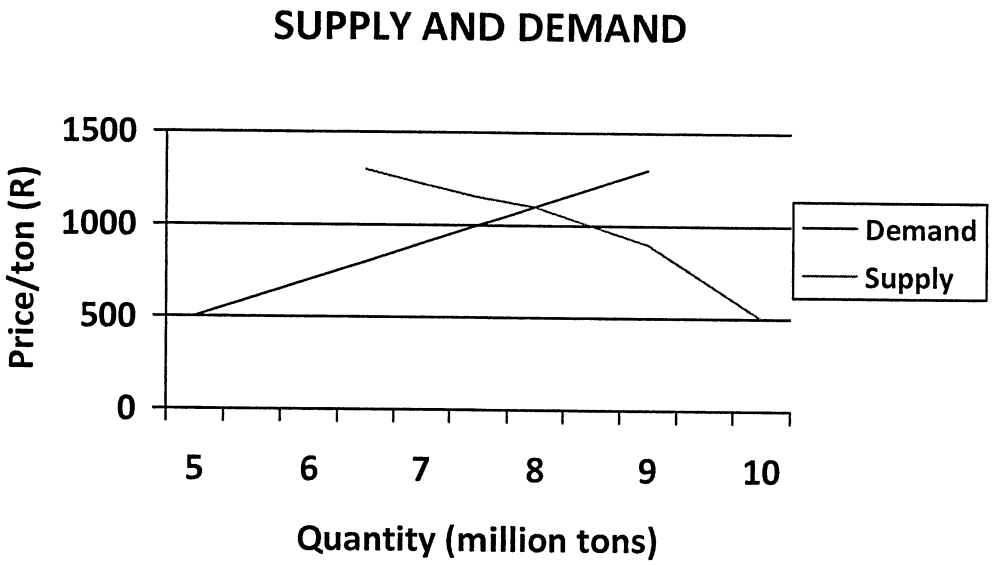
- A place where the supply of agricultural products ✓
- Will meet the demand to the product by the consumer ✓

OR

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

(2)

4.9.2 **GRAPH SUPPLY AND DEMAND**



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