



basic education

Department:
Basic Education
REPUBLIC OF SOUTH AFRICA

**NATIONAL
SENIOR CERTIFICATE**

GRADE 12

AGRICULTURAL MANAGEMENT PRACTICES

FEBRUARY/MARCH 2015

MEMORANDUM

MARKS: 200

This memorandum consists of 13 pages.

SECTION A**QUESTION 1: SHORT QUESTIONS****1.1 Multiple-choice questions**

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

1.2 Matching items

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

1.3 Term/Word(s)

1.3.1	Marketing/Marketing plan ✓	1.3.6	Whole farm ✓		
1.3.2	Soil ✓	1.3.7	Elasticity ✓		
1.3.3	Crop rotation ✓	1.3.8	Controlled ✓		
1.3.4	Precision ✓	1.3.9	Equity scheme ✓		
1.3.5	Fixed ✓	1.3.10	Cash flow ✓	(10 x 1)	(10)

TOTAL SECTION A: 50

SECTION B**QUESTION 2: FARM PLANNING****2.1 Soil structure****2.1.1 FOUR main factors that influence soil productivity**

- Agricultural capacity ✓
- Vulnerability of soil to change or destruct ✓
- Climate ✓
- Correct management practices ✓ (4)

2.1.2 Explain THREE methods to conserve soil moisture

- Mulching of soils to form a protective layer ✓
- Covering of soils with organic material/plastic to reduce evaporation ✓
- Increase the soil depth for water capillary movement of soils ✓
- Planting of crops that cover soil to reduce evaporation ✓ (Any 3) (3)

2.2 Soil reaction**2.2.1 Deduce land for crop production**

- Land B ✓ (1)

2.2.2 Explain answer with TWO reasons

- The soil physical characteristics are better ✓
- More nutrients available for the plants ✓ (2)

2.3 Reasons for laying out camps

- To apply rotational grazing ✓
- Highest possible production ✓
- To protect vulnerable pastures from overgrazing ✓
- To allow for stocking the veld according to the carrying capacity of the pasture ✓
- To allow the livestock farmer to have different type of animals ✓
- Separate different sexes/ages/groups ✓
- Controlling of pests ✓ (Any 3) (3)

2.4 Budget**2.4.1 TWO Initial factors that are required for setting up a budget**

- Land area to be planted ✓
- Predicted yield / Predicted production ✓
- Predicted fertility ✓
- Labour costs ✓
- Capital needed ✓
- Expenditure on necessities ✓ (Any 2) (2)

2.4.2 Describe THREE indicators of a cash flow budget

- Income received for the set period of time ✓
 - Cost incurred for the same period of time as the income ✓
 - Stages of cash surplus and shortages to review availability of capital ✓
 - Amount and type of credit needed to bridge shortages ✓
 - Time that credit will be needed ✓
 - Differences to the budget to make adjustments ✓
- (Any 3) (3)

2.5 Safety of labourers

2.5.1 Safety clothing

- Overall/Apron/Laboratory coat ✓
 - Gloves ✓
 - Goggles ✓
 - Safety boots/gum boots ✓
 - Head covering ✓
 - Mouth and nose mask ✓
- (Any 4) (4)

2.5.2 Impact of HIV/Aids on labour

- Higher absenteeism from work/More days for sick leave/ Productivity is lower ✓
 - Low staff morale/psychological impact ✓
 - Tension at the work place/stigma attached to status ✓
 - High staff turn over ✓
 - More expenses for the business ✓
- (Any 4) (4)

2.6 Steps to prevent environmental pollution

- Apply poisons only if necessary ✓
 - Correct application of poisons ✓
 - Make use of organic methods ✓
 - Make use of natural enemies as far as possible ✓
 - Do not spill poisons on soil/in water ✓
 - Correct method to get rid of poison/container ✓
- (Any 5) (5)

2.7 Precision farming

2.7.1 Functions of GPS (Global Positioning System) and GIS (Geographical Information System)

Functions of GPS	Functions of GIS
<ul style="list-style-type: none"> • Pin points your exact location within one metre ✓ 	<ul style="list-style-type: none"> • Shows areas in the arable land where there are factors that limit production ✓
<ul style="list-style-type: none"> • Surveys the land ✓ 	<ul style="list-style-type: none"> • Supplying information on a piece of land ✓
<ul style="list-style-type: none"> • Mapping logistics ✓ 	<ul style="list-style-type: none"> • Producing yield maps ✓

(Any 2 comparisons) (4)

2.7.2 Meaning of the abbreviation of 'VRT'

- Variable Rate Technology ✓

Function of VRT

- Controls the rate of application of crop inputs and tillage operations ✓ (2)

2.8 Functions of the Agri-industry

- Provides food ✓
- Provides raw materials ✓
- Provides jobs/employment opportunities ✓
- Development of secondary industry ✓
- Provides agricultural economic stability and growth ✓ (Any 3) (3)

2.9 Effect of prices on budget**2.9.1 Effect of change in prices on profit**

- As the prices of necessities (inputs) rise ✓
- The lesser the profit of this enterprise will be ✓

OR

- Higher inputs results in lower income ✓
- And less profit ✓ (2)

2.9.2 Graph Analysis to predict budget

- The budget for labour will stay the same/at R105✓ because the cost stays the same ✓
- Increase the budget on feeds by slightly/10 – 15 % ✓ because the cost increase slightly ✓
- The budget for fertiliser must increase a lot/20 – 30% ✓because of the steep increase in fertiliser prices ✓
- The budget for the product can increase slightly/1 – 5% because it becomes the end of the year and prices tend to rise ✓

(8)
[50]

QUESTION 3: ENTREPRENEURSHIP, RECORDING, MARKETING AND BUSINESS PLANNING

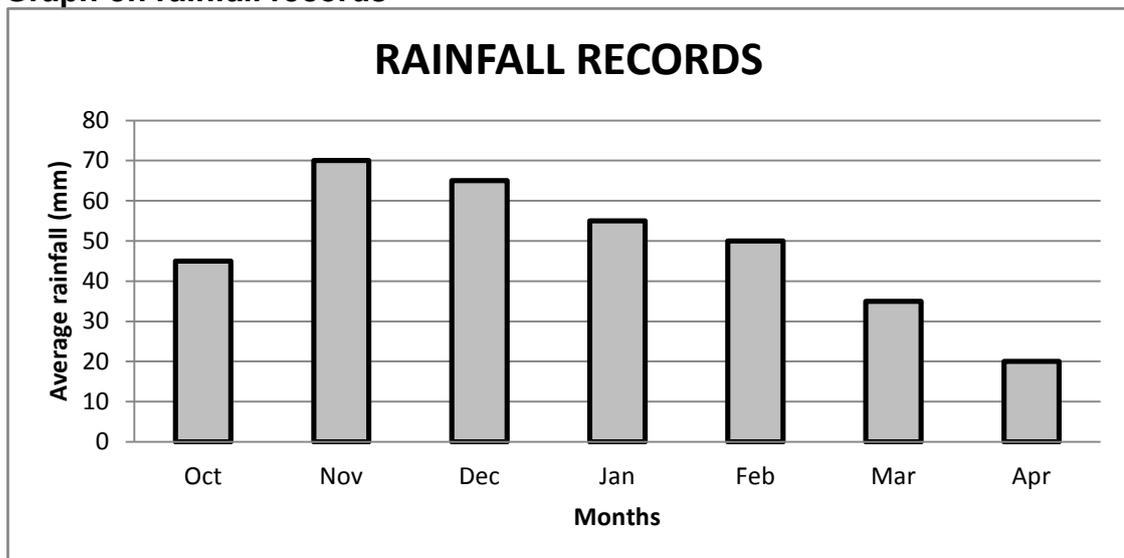
3.1 Types of computers

- Desktop ✓
- Laptop/Notebook ✓
- Palmtop ✓
- Workstations ✓
- Mainframe computer ✓
- I-pad/tablet ✓
- Cell phone ✓

(Any 2) (2)

3.2 Climatically factors

3.2.1 Graph on rainfall records



Marking rubric

- Heading ✓
- Correct x-axis labelled ✓
- Correct y-axis labelled ✓
- Correct bars ✓
- Bar graph ✓

(5)

3.2.2 Elements of weather measured by these instruments

NAME OF INSTRUMENT	ELEMENT OF WEATHER MEASURED
Cup anemometer	Wind ✓
Wet-and-dry bulb thermometer	Humidity ✓
Rain gauge	Rainfall ✓
Maximum and minimum thermometer	Day and night temperature ✓

(4)

3.3 **Allocate assets**

DEPRECIABLE ASSETS	NON-DEPRECIABLE ASSETS
Buildings ✓ Machinery ✓	Fertilisers ✓ Marketable livestock ✓

(4)

3.4 **Source documents**3.4.1 **Deposit slip**

- The account holder's name ✓
- The account number ✓
- The branch code ✓
- Details of the person depositing the money ✓
- The amount to be deposited ✓
- Date ✓
- Signature ✓

(Any 4) (4)

3.4.2 **Cheque payments**

- It means that the cheque cannot be passed on to another person ✓
- Must be deposited into a bank account of the person ✓

(2)

3.5 **Income statement**3.5.1 (a) **Total income**

- Total income = R25 000,00 + R20 000,00 ✓
= R45 000,00 ✓

(2)

(b) **Total expenditure**

- Total expenditure = R2 240,00 + R1 200,00 + R1 360,00 + R1 000,00 +
R2 570,00 + R3 000,00 ✓
= R11 370,00 ✓

(2)

3.5.2 **Profit or loss**

- Profit/Loss = R45 000,00 – R11 370,00 ✓
= R33 630,00 ✓
- It was a profit ✓

(3)

3.6 **Marketing function of an Agribusiness**

- Marketing the product at a price that will attract the customers, e.g. utility value ✓
- Continually changing the nature of the product e.g. to satisfy the needs of consumers based on feedback ✓
- Marketing in such a manner so as to obtain a greater share of the market e.g. branding ✓
- Advertising of the product must be in line with ethical advertising ✓ (Any 3)

(3)

3.7 Labour records**3.7.1 Gross wage**

- Gross wage = $8 \text{ hrs} \times R12,70 \times 5 \text{ days} \checkmark + 3 \text{ hrs}(1,5 \times R12,70) \checkmark$
- = R565,15 \checkmark

OR

- Normal wage = $8 \text{ hrs} \times R12,70 \times 5 \text{ days}$
- = R508,00 \checkmark
- Overtime = $3 \text{ hrs}(1,5 \times R12,70)$
- = R57,15 \checkmark
- Total wage = $R508,00 + R57,15$
- = R565,15 \checkmark

(3)

3.7.2 Net wage

- UIF = $R565,15 \times 1\% \checkmark$
- = R5,65 \checkmark
- Net wage = income – deductions
- = $R565,15 - R5,65 - R15,00 \checkmark$
- = R544,50 \checkmark

(4)

3.7.3 Abbreviation UIF

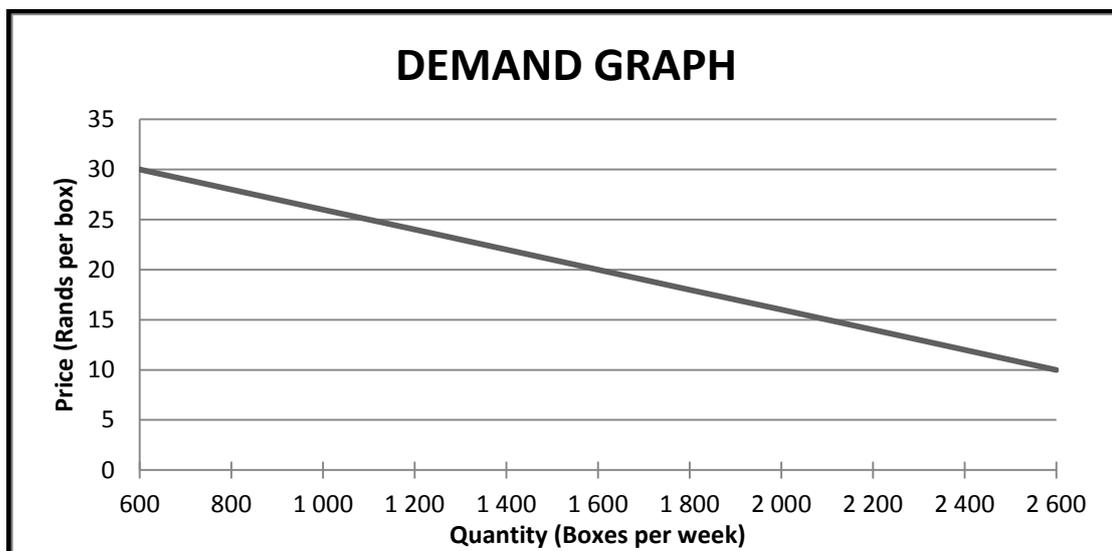
- Unemployment Insurance Fund \checkmark

(1)

3.7.4 Contribution towards the UIF

- The employer \checkmark

(1)

3.8 **Supply and demand**3.8.1 **Demand graph****Marking Rubric**

- Heading ✓
- Correct x-axis ✓
- Labelling of x-axis with units ✓
- Correct y-axis ✓
- Labelling of y-axis with units ✓
- Line graph ✓

(6)

3.8.2 **Calculate the profit**

- Profit margin = $R20 \times \frac{100}{125}$ ✓
- = R16,00 ✓
- Profit = $(R20 - R16,00) \times 1\,600$ ✓ OR Profit = $R4 \times 1\,600$ ✓
- = R6 400,00 ✓ = R6 400,00 ✓

(4)
[50]

QUESTION 4: HARVESTING, PROCESSING AND MANAGEMENT**4.1 FOUR factors to considered embarking on value adding business**

- Government policy and regulations ✓
- Socio-economic conditions ✓
- Level of business skills among the people ✓
- Financial support from the bank or other financial institution ✓
- The availability and cost of infrastructure ✓
- Development of the market ✓
- Access to appropriate technology ✓

(Any 4) (4)

4.2.1 THREE forms of processing agricultural products

AGRICULTURAL ENTERPRISE	DESCRIBE DIFFERENT WAYS OF PROCESSING
• Frozen/cold storage ✓	• Cooling down to a frozen product to preserve ✓
• Baking enterprise ✓	• Continuously making of a product like bread ✓
• Meat enterprise ✓	• Processing meat in another product like polony ✓
• Fruit enterprise ✓	• Juice and cold drink industry ✓ OR • Canning/drying of fruit ✓
• Dairy enterprise ✓	• Easier bulk handling of the products ✓ OR • Processing to make different products like cheeses ✓
• Snack enterprise ✓	• Making of products through extraction ✓
• Grain enterprise ✓	• Milling ✓ • Canning • Freezing ✓ • Feeds ✓
• Wool/mohair enterprise ✓	• Textile/material ✓
• Oil seeds enterprise ✓	• Oil ✓ • Feeds ✓
• Cultivated feeds enterprise ✓	• Pilling ✓ • Feed mixes ✓

(Any 3 x 2) (6)

4.2.2 TWO disadvantages of processing

- Difficult to access capital for new industries ✓
- New products compete with established product in the market ✓
- Lack of experience and expertise on the side of business owners ✓

(Any 2) (2)

- 4.3 **Attaching duties to their relevant management function**
- 1 = Implementing ✓
 - 2 = Control ✓
 - 3 = Organising and co-ordinating ✓
 - 4 = Planning ✓
 - 5 = Decision making ✓
- (5)
- 4.4 **Management**
- 4.4.1 **Meaning of delegation**
- To make other people/workers ✓
 - Co-responsible for the execution of tasks ✓
 - And the control of workers/tasks ✓
- (3)
- 4.4.2 **TWO effects of delegation of tasks**
- Higher productivity ✓
 - Feel appreciated ✓
 - Enrich self confidence ✓
 - Feels satisfied ✓
 - Feels part of management ✓
- (Any 2) (2)
- 4.5 **Differentiate between types of agritourism**
- 4.5.1 **Farm stay holidays**
- Tourists visit farms, that is a holiday resort with bed and breakfast facilities ✓
 - To enjoy the cultural and natural landscape ✓
- (2)
- 4.5.2 **Ecotourism**
- Is a travel to natural areas to learn about how the people live and natural history of the environment ✓
 - Taking care not to change the environment and contribute to the economic welfare of the local people ✓
- (2)
- 4.6 **Harvesting**
- 4.6.1 **ONE reason for harvesting at correct stage of readiness**
- To ensure that it reaches the consumers in good condition ✓
 - To prevent rotting and spoilage of crop ✓
- (Any 1) (1)
- 4.6.2 **THREE important factors to be considered when planning for harvesting**
- Time of harvesting ✓
 - Amount of labour ✓
 - Availability and amount of harvesting equipment ✓
 - Starting date and ending date of harvesting ✓
 - Harvesting method ✓
 - Protective clothing for harvesting ✓
- (Any 3) (3)

4.7 Storing**4.7.1 Verify statement with TWO reasons**

- More evenly distribution of products throughout the year ✓
 - To sell products when the price at the markets increase ✓
- (2)

4.7.2 FOUR types of packaging material

- Cartons ✓
 - Packet/bags ✓
 - Barrel ✓
 - Cup ✓
 - Cans ✓
 - Bottles ✓
- (Any 4) (4)

4.8 Aspects of labelling requirements

- The use of a trade mark and product description of the content. ✓
 - Pictorial representation of the content or serving suggestions in which the product is used with a clear distinction in terminology and representation ✓
 - The name and street address of the manufacturer of the product ✓
 - A list of ingredients in order of contribution in mass to the whole ✓
 - The main ingredients are mentioned first and additives are mentioned under collective names except in case of tartrazine, preservatives and phenylalanine ✓
 - Nutritional information determined according to RDA tables and which exceeds set minimum values ✓
- (Any 4) (4)

4.9 Farm evaluation

- Lacks financial insight and skilled financial management ✓
 - Lacks knowledge of target markets and competitors ✓
 - Unwillingness to take risks ✓
 - Poor customer service ✓
- (Any 3) (3)

4.10 Business plan**4.10.1 Design coversheet for business plan**

- Name of the business – TAU Fresh Produce Enterprise ✓
- Address and contact details of Agri-business or farm ✓
- Ownership – (private owner) ✓
- Type of business – fresh produce ✓
- Name(s) of owner(s) – Francis Louw ✓
- Date of plan ✓

AND

- Design with information ✓ (Any 5) (5)

4.10.2 TWO market information that should be included in the agribusiness plan

- Market research ✓
- Target market ✓
- Products to be produced ✓
- Distribution ✓
- Competition ✓

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