NATIONAL SENIOR CERTIFICATE EXAMINATION
NOVEMBER 2023

AGRICULTURAL MANAGEMENT PRACTICES

MARKING GUIDELINES

Time: 3 hours 200 marks

These marking guidelines are prepared for use by examiners and sub-examiners, all of whom are required to attend a standardisation meeting to ensure that the guidelines are consistently interpreted and applied in the marking of candidates' scripts.

The IEB will not enter into any discussions or correspondence about any marking guidelines. It is acknowledged that there may be different views about some matters of emphasis or detail in the guidelines. It is also recognised that, without the benefit of attendance at a standardisation meeting, there may be different interpretations of the application of the marking guidelines.

SECTION A

QUESTION 1

1.1 1.1.1 C
1.1.2 B
1.1.3 D
1.1.4 A
1.1.5 C
1.1.6 B
1.1.7 D
1.1.8 A
1.1.9 C
1.1.10 B

1.2 1.2.1 D
1.2.2 G
1.2.3 A
1.2.4 J
1.2.5 I
1.2.6 H
1.2.7 B
1.2.8 C
1.2.9 E
1.2.10 F

1.3 1.3.1 Plant succession
1.3.2 Blanching
1.3.3 Disciplinary
1.3.4 Mixed farming
1.3.5 Hydroponics
1.3.6 Agritourism
1.3.7 Niche market
1.3.8 Sustainability
1.3.9 Infrastructure
1.3.10 Mission statement

SECTION B

QUESTION 2 RESOURCE UTILISATION, LAND USE AND FARMING SYSTEMS

2.1 PASSAGE

2.1.1 TWO PRIMARY RESOURCES

- Water
- Soil
- Climate
- Natural vegetation

Any 2

2.1.2 THREE SECONDARY RESOURCES

- Technology
- Finances
- Labour

2.1.3 TERM TO DESCRIBE TYPE OF DATA

(a) Soil structure

(b) Soil reaction/pH

(c) Soil qualities

(d) Topography

2.2 NATURAL PASTURES

2.2.1 MAIN REASON FOR VELD DETERIORATION

Poor veld management practices. Relevant examples.

2.2.2 EFFICIENT PRESERVATION OF VELD USING THE CAMP SYSTEM

(a) Veld types of the same potential and palatability is fenced off together.
(b) Rotational grazing and mob grazing are possible with frequent resting periods.
(c) Different groups of animals can be kept on one farm.
(d) Different types of animals with different grazing habits can be kept.
Water channels and parts prone to erosion can be fenced off separately.
Stock loads can be controlled according to the carrying capacity.
The burning of camps can more easily be controlled.

Any 4

2.2.3 COMPARING SOUR VELD WITH SWEET VELD

(a) Sour = high rainfall
Sweet = low rainfall

(b) Sour = fine texture (clay)
Sweet = sandy texture (sand)

(c) Sour = unpalatable in mature stage
Sweet = palatable in mature stage

(d) Sour = high carrying capacity – best for sheep farming
Sweet = low carrying capacity – best for cattle farming

2.2.4 REASONS FOR SOIL DEGRADATION

(a) Overutilisation as a result of poor farming techniques
(b) Overgrazing
(c) Climate change
(d) Pollution/dumping of waste
Deforestation
Population growth and urban expansion
Any 4

2.3 ANIMAL PULLING POWER

2.3.1 The cultivation of soil: animal pulling power vs mechanisation

2.3.2 The ploughing of soil

2.3.3 Primary cultivation implement

2.3.4 Primary agricultural sector

2.3.5 Animal pulling power can be used in water, which is not possible with machines.

2.3.6 Example:
- Transporting products, feed, etc.
- Distribution of fertiliser, manure, etc.
- Hoeing weed.

Any 1

Reason: Reduction of operating costs.

2.3.7 IMPORTANCE OF ANIMAL PULLING POWER FOR SUBSISTENCE FARMERS

- The initial capital investment is a much smaller investment risk with animal pulling power than with tractor-driven mechanisation.
- Buying animals is cheaper than implements that they borrow.
- The maintenance cost for animal pulling power is less than for mechanical implements.
- Mechanisation decreases in value (depreciate).
- Animal pulling power offers an alternative source of income, e.g. calves, milk.
- Many subsistence farmers are women with children and they can more easily handle lightweight equipment (as required by donkeys).

2.4 FARMING METHODS

2.4.1 CHOICE OF FARMING METHOD

(a) Profitability
(b) Efficiency
(c) Markets
(d) Natural resources
Climate
Policy on control over resources
Human capital
Training
Any 4

2.4.2 (a) Extensive

(b) Extensive

(c) Intensive

(d) Intensive

(e) Extensive

(f) Intensive

(g) Intensive

QUESTION 3 FARM MANAGEMENT, BUSINESS PLAN, ENTREPRENEURSHIP AND MARKETING

3.1 BUSINESS PLAN

3.1.1 TERMS FOR SECTIONS OF A BUSINESS PLAN

(a) Title page

(b) Production plan

(c) Marketing plan

(d) Labour plan/human resources plan

3.1.2 TWO REASONS FOR REVIEWING A BUSINESS PLAN

(a) Changes in the financial climate: the prices are changing all the time.
(b) Endless changes in the climate.
Technology changes and improves all the time.
Legal/political changes.

Any 2

3.2 ENTREPRENEURSHIP

3.2.1 DIVERSIFICATION AND DIVERSITY

- Diversification refers to an increase in the number of branches/ enterprises to contribute to the income of the farm.
  It involves better utilisation of land, capital and labour.
- Diversity involves the production of various specialised products from a basic product.
- It involves diversification of products within a specific branch/ product.
- It involves specialisation to supply a specific product to ensure food security.
- Both reduce the financial risks.

Any 6

3.2.2 PHASES IN THE ENTREPRENEURSHIP PROCESS

Rubric: Name the two missing phases: 2 marks
Arrange the phases in the correct order: 4 marks

PHASE 1: Identify and evaluate the opportunities.
PHASE 2: Determine which resources are available or needed.
PHASE 3: Develop a business plan.
PHASE 4: Establish and manage the business.

3.2.3 DEFINITION OF AN ENTREPRENEUR

An entrepreneur is someone who sees an opportunity or identifies a need and who is then willing to run a risk to offer a product or service to satisfy the need/opportunity.

3.2.4 MANAGEMENT FUNCTIONS

(a) Organising

(b) Motivation

(c) Control

(d) Planning

(e) Decision-making

3.3 MARKETING

3.3.1 ORDER OF MARKETING ASPECTS

c b a

3.3.2 MARKETING LEGISLATION

(i) b

(ii) a

(iii) c

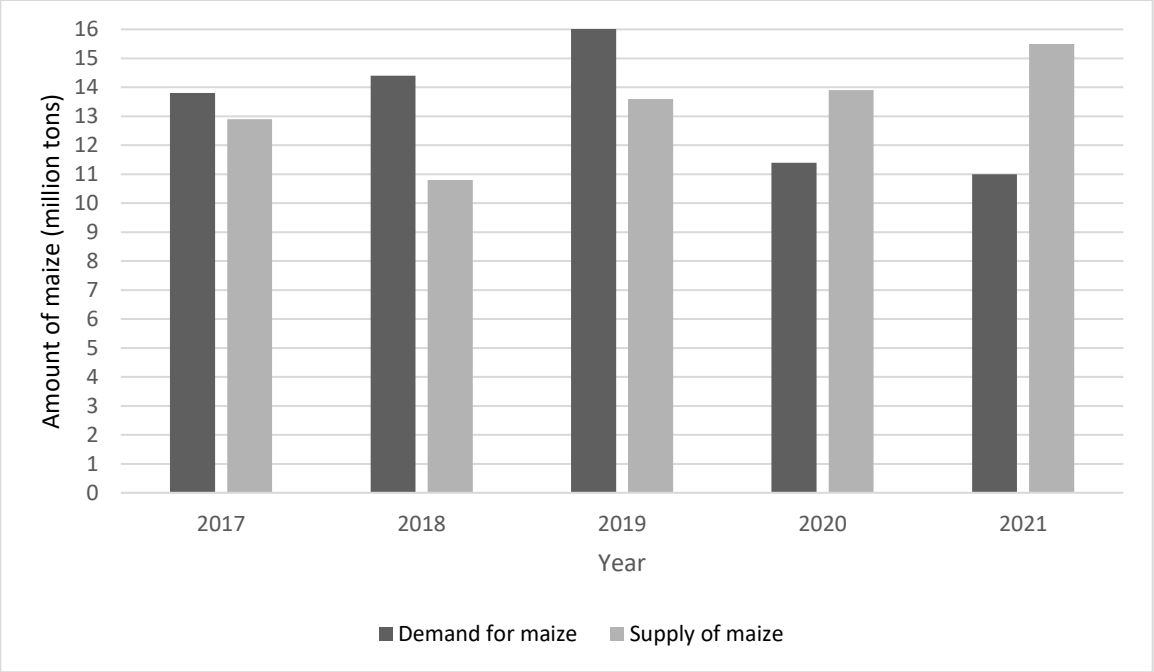
3.3.3 FACTORS DETERMINING THE DEMAND FOR PRODUCTS

- Price of the product.
- Tastes and preferences of the consumers.
- The number of consumers.
- The income of the consumers.
- The prices of competing products.
- Range of goods introduced to the consumers.
- Quality of the product

Any 4

3.3.4 MAIZE PRODUCTION IN SA

(a) BAR GRAPH



Marking Guideline

Heading	1
Correct labelling X axis	1
Correct labelling Y axis	1
Calibration X and Y axis	1
Bar Graph	1
All correct	1
Total :	6

(b) Year in which most people bought (demand): 2019

(c) Year in which most people supplied (supply): 2021

(d) The general trend is that the supply of maize increases and the demand for maize decreases.

(e) EFFECT OF PRICE ON SUPPLY

When the price is high e.g. 2021 the supply would be high
OR
When the price is low e.g. 2018 the supply would be low

(f) REASON WHY THE TREND HAS NOT BEEN MAINTAINED FROM 2017 TO 2021

In 2018 the supply was low because there was a shortage of maize production owing to a low rainfall during the year.

QUESTION 4 FINANCIAL PLANNING, RECORD KEEPING AND ADDING VALUE

4.1 CORRECT TYPE OF RECORDS

- Record the sire of each lamb.
- Record the dam number with the birth date.
- Record multiple births, etc.
- Record birth weights.
- Record weaning weights and after-weaning weights.
- Use reputable recording programs such as SA Stud Book.
- Record unique identification number of lamb.
- Record performance testing.
- Record production (meat/wool/reproduction).
- Financial records
- Feeding records

Any 4

4.2 FINANCES

4.2.1 COMPLETED BALANCE SHEET

Asset items	Value	Liability items	Value
Cash	R80 000	Combine harvester loan	R2800 000
Value of farm buildings	R3 200 000	Bank overdraft	R220 000
Value of farm	R3 150 000	Mortgage loan	R4 900 000
Implements on farm	R1 650 000	Cooperative account	R210 000
Value of vehicles	R680 000		
Livestock on farm	R390 000		
		SUBTOTAL	
		NET CAPITAL	
TOTAL		TOTAL	

Rubric: 1 mark for correct placing of assets and liabilities = 1 mark
6 assets = 1 mark for each 2 = 3 marks
4 liabilities = 1 mark for each 2 = 2 marks

4.2.2 CALCULATION OF NET VALUE OF FARM

Assets
= R80 000 + R3 200 000 + R3 150 000 + R1 650 000 + R680 000 + R390 000
= R9 150 000

Liabilities = R2 800 000 + R220 000 + R4 900 000 + R210 000
= R8 130 000

Net value = Assets – Liabilities
= R9 150 000 – R8 130 000
= R1 020 000

4.2.3 ANALYSIS OF ANSWER IN TERMS OF PROFITABILITY AND VIABILITY

- The farm is profitable.
- The farm is viable.
- The reason is that the farm shows a positive net value of R1 020 000.

4.2.4 EXPLAINING CONCEPTS

(a) Liquidity refers to the inflow and outflow of funds in the short term. This is determined by calculating the difference between the assets and liabilities.

(b) Solvency is the degree to which the assets exceed the liabilities of a farm enterprise.

4.3 MARKETING FUNCTION

4.3.1 Storage

4.3.2 Packaging

4.3.3 Transport

4.3.4 Financing

4.3.5 Sales

4.4 4.4.1 FAVOURABLE CONDITIONS FOR MICROORGANISMS

- Moisture
- Suitable temperature
- Suitable pH
- Oxygen/carbon dioxide (aerobes/anaerobes)
- Correct source/product/habitat

Any 4

4.4.2 METHODS TO ELIMINATE MICROORGANISMS

(a) Smoking

(b) Radiation

(c) Pasteurisation

(d) Sterilisation

(e) Fermentation

(f) Filtration

4.5 REASONS FOR/ADVANTAGES OF THE PACKAGING OF PRODUCTS

- Provides protection from microbial contamination, dirt, light, moisture, etc.
- Facilitates handling/transport.
- To communicate information.
- To identify products.
- Increases value of product.
- Prolongs shelf life.
- Looks better/marketing.

Any 4

4.6 HARVESTING PRODUCTS

4.6.1 FACTORS TO BE TAKEN INTO ACCOUNT DURING PRE-HARVEST PLANNING

- Time of harvesting.
- Amount of labour.
- Starting date and end date.
- Harvesting method.
- Availability and amount of harvesting equipment.
- Protective clothing when harvesting.
- Weather predictions

Any 4

4.6.2 ADVANTAGES AND DISADVANTAGES OF MECHANICALLY HARVESTING TOMATOES

Advantages:
- Quicker than manual harvesting.
- Less labour is required.
- Large areas can be harvested.

Disadvantages:
- It is expensive/capital intensive.
- It requires maintenance.
- It requires specialised knowledge.
- Damage of products

Total: 200 marks