



basic education

Department:
Basic Education
REPUBLIC OF SOUTH AFRICA

SENIOR CERTIFICATE EXAMINATIONS/ NATIONAL SENIOR CERTIFICATE EXAMINATIONS

AGRICULTURAL MANAGEMENT PRACTICES

2023

MARKS: 200

TIME: 3 hours

This question paper consists of 15 pages.

INSTRUCTIONS AND INFORMATION

1. This paper consists of TWO sections.
2. Answer ALL the questions in the ANSWER BOOK.
3. Read the questions carefully and answer ONLY what has been asked.
4. Number the answers correctly according to the numbering system used in this question paper.
5. You may use a non-programmable calculator.
6. Start EACH question on a NEW page.
7. Write neatly and legibly.

SECTION A**QUESTION 1**

- 1.1 Various options are provided as possible answers to the following questions. Choose the answer and write only the letter (A–D) next to the question numbers (1.1.1 to 1.1.10) in the ANSWER BOOK, e.g. 1.1.11 D.
- 1.1.1 An example of direct production capital:
- A Vehicles
 - B Implements
 - C Orchards in production
 - D Fixed improvements
- 1.1.2 A typical example of farm work associated with seasonal labour is ...
- A feeding animals twice a day.
 - B daily maintenance work.
 - C the harvesting of an annual fruit crop.
 - D constructing a new cattle-handling facility.
- 1.1.3 The soil colour that gives an indication of a high humus content:
- A Black
 - B Red
 - C Yellow
 - D Grey
- 1.1.4 The statement that serves as a guideline to lead a farming enterprise into the future:
- A Marketing statement
 - B Financial statement
 - C Promotion statement
 - D Vision statement
- 1.1.5 The marketing system where trade can take place on several online platforms:
- A Internet marketing
 - B Contract marketing
 - C Farm gate marketing
 - D Managed marketing

- 1.1.6 A worker forgot to hand in the equipment and only brought it back the next day. An appropriate disciplinary action for this situation will be ...
- A a verbal warning.
B withholding promotion.
C withholding part of the salary.
D dismissal.
- 1.1.7 A written plan for future action, expressed in financial quantities, is known as a ...
- A trial balance.
B Balance Sheet.
C budget.
D business plan.
- 1.1.8 During the harvesting process, it is important for a farmer to know the expected yield. This knowledge will enable the farmer to ...
- A accurately predict the price of the product for the next season.
B calculate the productivity of the labour.
C plan a mechanisation strategy.
D reconcile the possible income for budget control purposes.
- 1.1.9 The information printed separately on the packaging of an agricultural product and not necessarily on the label:
- A Ingredients
B Nutritional value
C Expiry date
D Producer's name
- 1.1.10 The preferred document used to show the profitability of an enterprise is the ...
- A Balance Sheet.
B Income Statement.
C inventory.
D Bank Statement.

(10 x 2) (20)

- 1.2 Choose a description from COLUMN B that matches a term in COLUMN A. Write only the letter (A–L) next to the question numbers (1.2.1 to 1.2.10) in the ANSWER BOOK, e.g. 1.2.11 M. Use each description in COLUMN B only ONCE.

COLUMN A	COLUMN B
1.2.1 Indicator plant	A pastures that contain sweet veld and sour veld grass species
1.2.2 Business plan assumptions	B the plant species that determines the succession status of the veld
1.2.3 Opportunities	C the grazing area that provides sufficient grazing to support a specific number of animals
1.2.4 Harvesting	D diagram of the business showing the positions and relationships between the workers
1.2.5 Agricultural Product Standards Act, 1990 (Act 119 of 1990)	E improve predator-prey relationships to prevent the use of chemicals and protect the environment
1.2.6 Carrying capacity	F external circumstances or events that have to take place for a business to be successful
1.2.7 Sterilisation	G external factors that will contribute to the achievement of farming enterprise goals
1.2.8 Hydrocooling	H products are either directly dipped into cold water or sprayed with a fine mist
1.2.9 Mixed veld	I marketing functions that may be disadvantaged by poor road conditions
1.2.10 Ecological agriculture	J heating of the product during processing to remove all pathogenic micro-organisms
	K the process whereby the farmer reaps what was sowed
	L legislation that controls the composition and quality of agricultural products

(10 x 2)

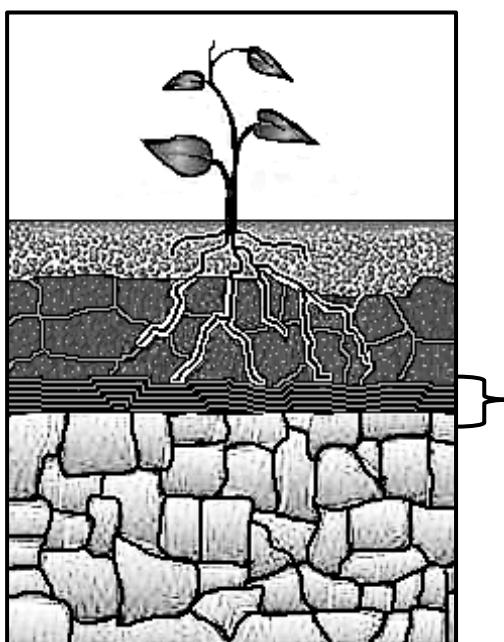
(20)

- 1.3 Give the CORRECT agricultural term for EACH of the following descriptions. Write only the term next to the question numbers (1.3.1 to 1.3.5) in the ANSWER BOOK, e.g. 1.3.6 Recording.
- 1.3.1 Removal of top soil by run-off water or strong winds
- 1.3.2 An indication of the acidity or alkalinity of the soil
- 1.3.3 The marketing channel where livestock and game are usually sold to the highest bidder
- 1.3.4 The process of placing an agricultural product into a container suitable for that specific product before marketing the product
- 1.3.5 The collective term for all the different documents that are needed to complete an Income Statement (5 x 1) (5)
- 1.4 Change the UNDERLINED WORD(S) to make the following statements CORRECT. Write the answer next to the question numbers (1.4.1 to 1.4.5) in the ANSWER BOOK, e.g. 1.4.6 Fixed capital.
- 1.4.1 Plant succession of veld refers to the progressive development from pioneer to sour.
- 1.4.2 Wind speed is measured with a wet-and-dry-bulb thermometer in km/h.
- 1.4.3 The tertiary agricultural sector includes value-adding and processing.
- 1.4.4 The substances that make up the content of a processed product are indicated by the nutritional value on the label.
- 1.4.5 Smoking is the process used to preserve fruit by placing it in syrup. (5 x 1) (5)

TOTAL SECTION A: 50

SECTION B**QUESTION 2: PHYSICAL FARM PLANNING****Start this question on a NEW page.**

- 2.1 Farm land is a valuable asset to the farmer.
- 2.1.1 Explain what it means when the value of farm land increases. (2)
- 2.1.2 Explain what it means when the value of farm land decreases. (2)
- 2.2 The workers on a farm are seen as a very valuable resource, but absenteeism of workers due to illness leads directly to a decrease in productivity.
- 2.2.1 Explain what it means when workers are productive. (2)
- 2.2.2 Describe possible reasons why absenteeism leads to a decrease in productivity. (2)
- 2.2.3 Discuss ways in which the farmer can help workers to stay healthy. (3)
- 2.3 Describe the principles that must be considered to make a grazing camp suitable for animal production. (3)
- 2.4 A plough pan (plough sole) develops if soil is tilled to the same depth year after year.



Plough pan (plough sole)
(strip of compacted soil)

- 2.4.1 State THREE disadvantages of a plough pan (plough sole). (3)
- 2.4.2 Describe how the farmer can solve the problem in QUESTION 2.4.1. (2)
- 2.5 Describe THREE advantages of no-cultivation and permanent soil coverage. (3)

2.6 Distinguish between the different farming methods.

Copy and complete the table below in the ANSWER BOOK.

	INTENSIVE FARMING	EXTENSIVE FARMING
INPUT: Labour: without mechanisation		
INPUT: Land: area/amount per animal		
OUTPUT: amount per unit area		

(6)

2.7 Explain EACH of the following concepts and its aim within precision crop farming:

2.7.1 GPS (2)

2.7.2 GIS (2)

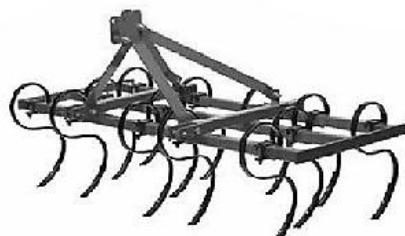
2.7.3 VRT (2)

2.8 Use of agricultural implements:

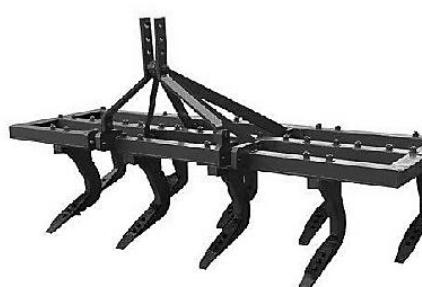
2.8.1 Distinguish between *primary* and *secondary cultivation implements*. (2)

2.8.2 Study the implements below and classify them as either primary or secondary implements.

IMPLEMENT A



IMPLEMENT B



IMPLEMENT C



(3)

2.8.3 State THREE disadvantages of the use of implements. (3)

- 2.9 Name FOUR aspects that must be considered when purchasing farming implements and farming equipment. (4)
- 2.10 Explain how starting an agritourism branch on a farm can reduce risks associated with commercial farming. (4)
[50]

QUESTION 3: BUSINESS PLANNING, ENTREPRENEURSHIP, MARKETING, PRICE DETERMINATION AND THE MANAGEMENT PROCESS**Start this question on a NEW page.**

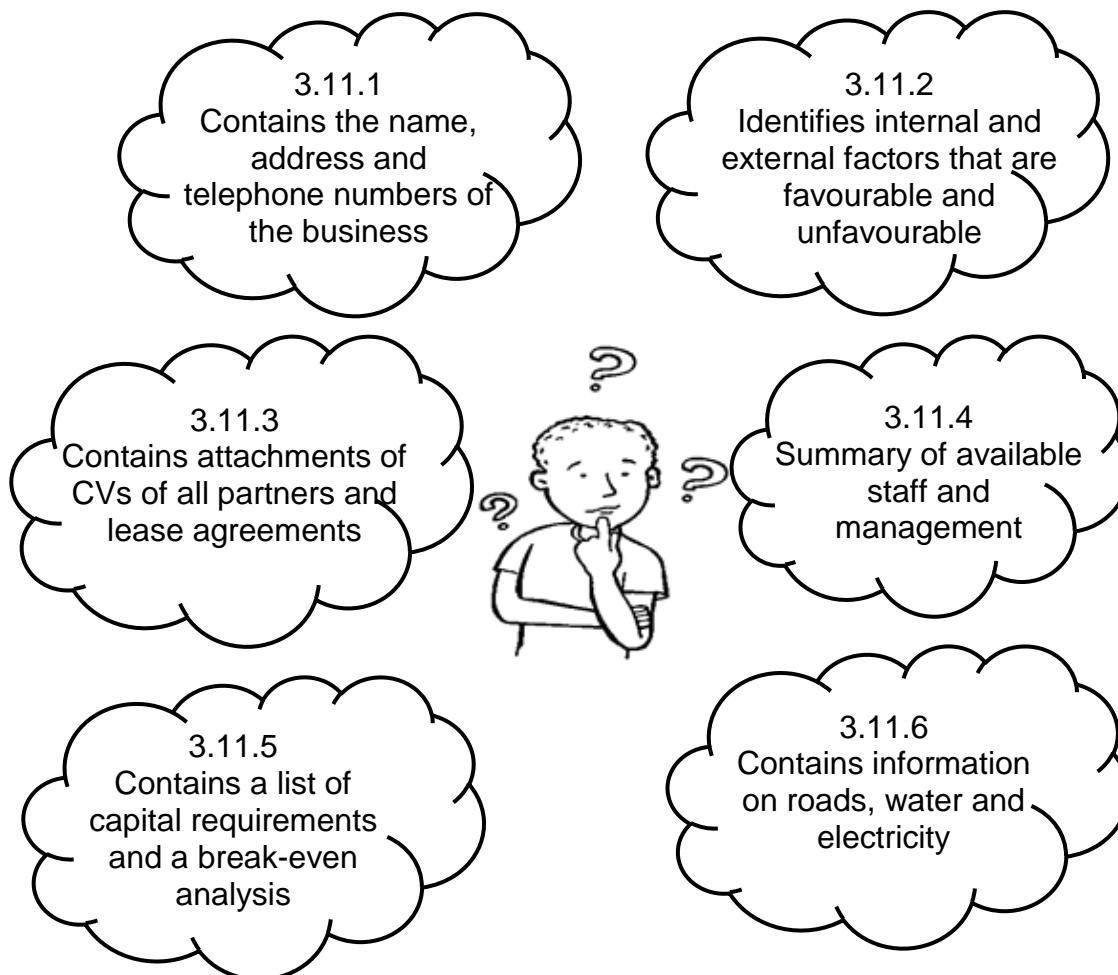
- 3.1 Marketing is important when selling products and providing services.
- 3.1.1 State THREE problems faced by a farmer selling livestock at an auction. (3)
- 3.1.2 Describe the *free-market system*. (2)
- 3.1.3 State TWO advantages of fresh-produce markets. (2)
- 3.2 Briefly discuss the following TWO aspects of farm planning:
- 3.2.1 Financial planning (2)
- 3.2.2 Marketing planning (2)
- 3.3 State TWO elements of organisation as a management principle. (2)
- 3.4 Indicate the aspects of decision-making that have an influence on the functioning of the farm. (3)
- 3.5 Name THREE advantages of coordination. (3)
- 3.6 Give THREE reasons for giving farm workers an employment contract. (3)
- 3.7 The aim of developing a sustainable business plan is to strive for better opportunities.
- Name and explain TWO pillars that make a farm sustainable. (4)

- 3.8 A group of business people came together and decided to buy land and start a farming enterprise. They did not have the skills or knowledge to farm, but they had capital to invest in this venture. A farm of 500 ha is currently on the market. The land has moderately good veld and a river runs through the farm. They plan to breed with horses and use the river for fishing. The soil is sandy and not very fertile.

Use the SWOT analysis to identify the following aspects in the scenario:

- 3.8.1 THREE strengths (3)
- 3.8.2 ONE weakness (1)
- 3.8.3 ONE opportunity (1)
- 3.8.4 TWO threats (2)
- 3.8.5 Recommend an action to address the weakness identified in QUESTION 3.8.2. (1)
- 3.9 A farmer's production enterprise has variable costs of R50 000 and produces 20 000 units of products.
- 3.9.1 Calculate the cost of EACH product. (2)
- 3.9.2 Distinguish between *variable costs* and *fixed costs*. (4)
- 3.10 Price is mostly determined by supply and demand factors. Briefly explain the following:
- 3.10.1 The concept of demand and price (2)
- 3.10.2 The concept of supply and price (2)

- 3.11 The illustration below shows different aspects of the framework of a business plan. Read the thought bubbles and identify the aspect of the business plan being described. Write the answers next to the question numbers (3.11.1 to 3.11.6).



(6)
[50]

QUESTION 4: FINANCIAL PLANNING, RECORDKEEPING, HARVESTING, VALUE ADDING AND PACKAGING

Start this question on a NEW page.

4.1 Budgets play an important role in the successful management of a farm as they form part of the financial planning of any farming enterprise.

4.1.1 Select THREE examples from the list below that are contained in a production budget:

- Feed budget
- Credit budget
- Household budget
- Maintenance budget
- Labour budget
- Training budget

(3)

4.1.2 Describe FOUR aims of a budget for a farming business. (4)

4.1.3 An element of a budget that represents all the unknowns of the production process is known as parameters (predictions).

Give TWO examples of parameters used in budgeting. (2)

4.2 The profit or loss of a farming enterprise is called the gross margin. Knowing the gross margin helps the farmer to make decisions about the profitability of the farming enterprise.

A farmer with two production enterprises has the following information available in separate financial records:

PRODUCTION ENTERPRISE A (10 ha)	PRODUCTION ENTERPRISE B (15 ha)
Variable costs	Variable costs
Seeds: R8 034,66	Animal feeds: R22 304,00
Fertilisers: R19 151,13	Medicines: R6 228,27
Chemicals: R4 916,45	
Income values = R39 011,00	Income values = R37 361,00

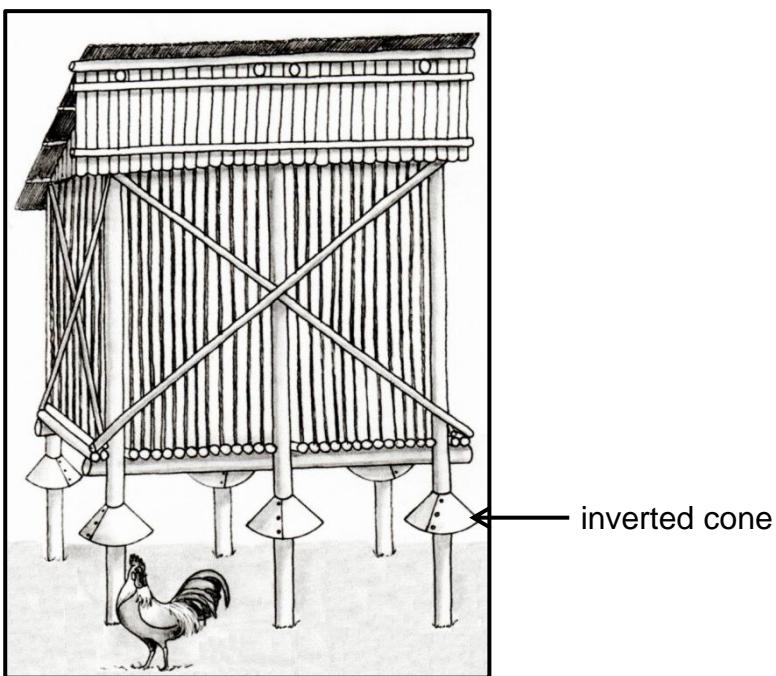
4.2.1 Calculate the gross margins of the two production enterprises above. (4)

4.2.2 Calculate the net income of this farm. (2)

4.2.3 Deduce the most profitable production enterprise per hectare (ha). Give a reason for your answer. (2)

- 4.3 A farmer received R38 600 for the sale of produce on 15 March 2022, R69 450 on 10 April 2022 and R61 500 for the last stock on 20 May 2022. The production cost over this period was R87 000 and another R2 500 was spent on marketing.

- Prepare a complete Income Statement for this farmer. (6)
- 4.4 Explain, in the correct order, THREE steps that should be followed when an inventory is developed. (3)
- 4.5 When a business transaction takes place, a source document is prepared. It captures the data (information) of the transaction.
- 4.5.1 Describe TWO instances when a farming enterprise would issue a receipt to a customer. (2)
- 4.5.2 Name the data that should be reflected on source documents used to complete accounting journals. (4)
- 4.6 The diagram below shows a grain storage structure used by small-scale grain farmers.



- 4.6.1 Give the name of a similar structure used by commercial farmers. (1)
- 4.6.2 Suggest a reason why the poles on which the crib is built are fitted with inverted cones. (1)
- 4.6.3 The structure above protects the grain against certain climate aspects. List FOUR of these aspects. (4)

- 4.7 State FOUR physical or visible characteristics used during the grading of harvested farm products. (4)
- 4.8 Processing involves the changing of a raw product into a form that is easier for the consumer to use. It kills or eliminates micro-organisms and inhibits their growth.
- 4.8.1 State THREE food preservation methods that a farmer can use to kill or eliminate micro-organisms. (3)
- 4.8.2 Explain how adding value to raw agricultural products contributes to the financial sustainability of a farming enterprise. (2)
- 4.9 Discuss the legal requirements regarding the compulsory information on the labels of packaged agricultural produce in relation to nutritional value. (3)
[50]

TOTAL SECTION B: 150
GRAND TOTAL: 200