



# basic education

Department:  
Basic Education  
**REPUBLIC OF SOUTH AFRICA**

## **NATIONAL SENIOR CERTIFICATE**

**GRADE 12**

**AGRICULTURAL MANAGEMENT PRACTICES**

**NOVEMBER 2016**

**MARKS: 200**

**TIME: 3 hours**

**This question paper consists of 15 pages.**

**INSTRUCTIONS AND INFORMATION**

1. This question paper consists of TWO sections.
2. Answer ALL the questions in the ANSWER BOOK.
3. Read the questions carefully and answer only what is 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. Round off ALL calculations to TWO decimal places, unless stated otherwise.
7. Write neatly and legibly.

**SECTION A****QUESTION 1**

- 1.1 Various options are provided as possible answers to the following questions. Write down the question number (1.1.1–1.1.10), choose the answer and make a cross (X) over the letter (A–D) of your choice in the ANSWER BOOK.

EXAMPLE:

1.1.11  A  B  C  D

- 1.1.1 Crops will grow best in ... soils.
- A rocky
  - B very shallow, sandy
  - C deep loam
  - D water-saturated clay
- 1.1.2 An important aspect when dividing pastures into camps:
- A All the different types of veld must be separated.
  - B Drinking water must be available in every camp.
  - C Animals must exceed the carrying capacity.
  - D Eroded areas must not be camped off.
- 1.1.3 A reason why a farmer stores harvested products for a period of time:
- A Waiting for higher prices before selling the product
  - B Increasing the quality of the product
  - C Paying the contractor first
  - D Waiting for the consumer to ask for the product
- 1.1.4 ONE way to improve soil productivity for crop production:
- A Do dry-land crop production
  - B Allow weeds to grow unchecked
  - C Strengthen the labour force
  - D Use effective technology and mechanisation
- 1.1.5 During the decision-making process on acquiring new equipment, it is important to evaluate the ... of the equipment.
- A value for money
  - B price
  - C brand
  - D country of origin

- 1.1.6 ONE advantage of precision farming:
- A Higher food prices
  - B Higher input prices
  - C Lower income for the farmer
  - D Sustainable environmental conditions
- 1.1.7 The main purpose of a Trial Balance Sheet is to ...
- A determine income.
  - B determine expenditure.
  - C verify entries in the Income Statement.
  - D determine the liquidity of the farm.
- 1.1.8 A disadvantage of using electronic devices, such as computers and tablets, for recording purposes:
- A They retrieve information too fast for the user.
  - B Programs are not necessarily compatible with new operating systems.
  - C They are easy to move.
  - D Documents can be saved in the 'cloud'.
- 1.1.9 Agricultural products in South Africa are marketed according to a ... marketing system.
- A free
  - B cooperative
  - C controlled
  - D government
- 1.1.10 The ingredients on the label of a processed agricultural product are listed in ...
- A alphabetical order.
  - B order of percentage represented.
  - C order of nutritional value.
  - D order of digestibility.
- (10 x 2) (20)

- 1.2 Choose a description from COLUMN B that matches an item/phrase in COLUMN A. Write only the letter (A–L) next to the question number (1.2.1–1.2.10) in the ANSWER BOOK, for example 1.2.11 M. Each description in COLUMN B may be used only ONCE.

COLUMN A		COLUMN B	
1.2.1	Partial budget	A	farming system with a high capital output on a small area
1.2.2	Information	B	specialised market that targets only a small number of consumers in the high-income group
1.2.3	Processing	C	used to decide which option in an enterprise is more profitable
1.2.4	Intensive farming	D	method of payment via the Internet or a cellphone
1.2.5	Control	E	resource used to obtain technical data and prices of equipment
1.2.6	Total cost	F	changing a raw agricultural product into a new product
1.2.7	Inventory	G	budget for the production of a specific crop
1.2.8	Extension of Security of Tenure Act, 1997 (Act 62 of 1997)	H	protects the employer and employee during evictions
1.2.9	Niche market	I	total amount of all fixed and variable costs
1.2.10	Electronic funds transfer	J	list of all the assets on a farm
		K	statement indicating the net worth of the farming enterprise
		L	management principle that ensures that all the daily work is done

(10 x 2)

(20)

- 1.3 The following statements are INCORRECT. Change the UNDERLINED word(s) to make each statement CORRECT. Write only the correct word(s) next to the question number (1.3.1–1.3.10) in the ANSWER BOOK, for example 1.3.11 Recording.
- 1.3.1 Soil reaction refers to the particle size of soils.
- 1.3.2 Temperature is the climate factor that has the biggest influence on the regrowth of natural pastures.
- 1.3.3 Calibration indicates the loss of value of equipment over time or with usage.
- 1.3.4 Contract workers work on the farm every year, doing the same type of work.
- 1.3.5 Production prices are needed for market research.
- 1.3.6 Quality determines both the supply of and demand for an agricultural product on a market.
- 1.3.7 Heat is a process that is used to make biltong.
- 1.3.8 A guest house is the type of agritourism where tourists visit a wine farm or cheese factory for a day.
- 1.3.9 A budget is needed to indicate the production process and possible financial aspects of a farming enterprise.
- 1.3.10 Planning is a management skill where workers are presented with certificates for good performance to improve productivity. (10 x 1) (10)

**TOTAL SECTION A: 50**

**SECTION B**

**QUESTION 2: PHYSICAL AND FINANCIAL PLANNING**

Start this question on a **NEW** page.

2.1 A farmer knows that land for agricultural production may be limited by a number of soil factors. The farmer recognised a few of these soil factors when he purchased new land. The area on the northern side of the hill was rocky. There were areas where rocks appeared on the surface and a few small dongas had formed, particularly on the lower parts of the hill. When the farmer tried to cultivate the soil, only 5 cm of the plough entered the soil. Most soil particles fell in the category of 0,2 cm and bigger.

2.1.1 Identify FOUR soil production factors in the paragraph above that will limit the use of this piece of land for agricultural purposes. (4)

2.1.2 Name THREE ways in which the crop farmer could overcome the problem of slope as a limiting factor. (3)

2.2 Name and discuss THREE factors on which the choice of agricultural production systems depends. (6)

2.3 Differentiate between the THREE types of animal production systems. Redraw the table below in the ANSWER BOOK and complete it.

PRODUCTION FACTOR	TYPE OF PRODUCTION SYSTEM		
	INTENSIVE	SEMI-INTENSIVE	EXTENSIVE
Type of shelter			
Feed provision			

(6)

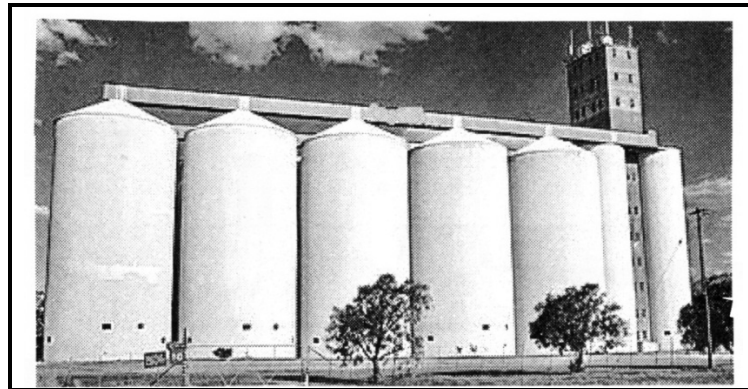
2.4 According to the Basic Conditions of Employment Act, 1997 (Act 75 of 1997), the minimum wages of farm workers for the term 1 March 2016 to 28 February 2017 is R14,22 per hour. A farmer has to comply with this legislation when budgeting for the following year.

2.4.1 The farm manager is compiling the budget for the following month. The farm manager plans for a worker to work 45 hours per week for a period of four weeks. There is a possibility that the worker will have to work 4 hours overtime per day on two Sundays.

Calculate the possible monthly wage for this farm worker. Show ALL calculations. (5)

2.4.2 Give THREE reasons why the training of workers is essential in the agricultural industry. (3)

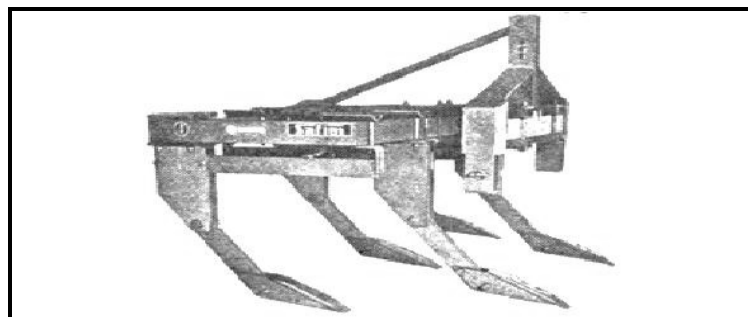
2.5 The pictures below show the different types of capital used in agricultural production.



A



B



C

Redraw the table below in the ANSWER BOOK and complete it with reference to the pictures above.

	PICTURE		
	A	B	C
<b>TYPE OF CAPITAL</b>			
<b>DEFINITION OF CAPITAL TYPE</b>			
<b>TYPE OF CREDIT USED</b>			

(3 x 3)

(9)



2.6 Study the information below and answer the questions that follow.

**LIST OF INPUTS FOR A FARM**

- Casual labour = R30 000,00
- Pesticides and herbicides = R10 000,00
- Depreciation = R150 000,00
- Marketing cost = R20 000,00
- Permanent labourers = R15 000,00
- Fuel, oil and lubricants = R10 000,00
- Municipal property tax = R5 000,00
- Hired management = R50 000,00

- 2.6.1 Categorise EACH of the inputs for the farm above as either VARIABLE or FIXED COSTS. (6)
- 2.6.2 Explain the following terms:
- (a) Variable costs (2)
- (b) Fixed costs (2)
- 2.6.3 Calculate the values of:
- (a) Variable costs (2)
- (b) Fixed costs (2)
- [50]**

**QUESTION 3: ENTREPRENEURSHIP, RECORDING, MARKETING, BUSINESS PLANNING AND ORGANISED AGRICULTURE**

Start this question on a **NEW** page.

- 3.1 Discuss the economic importance to the country of farmers as entrepreneurs. (4)
- 3.2 Distinguish between *formal* and *informal marketing channels* and give ONE example of EACH. (4)
- 3.3 Name FIVE types of records kept by a commercial livestock farmer who is interested in monitoring the productivity of the animal production enterprise. (5)
- 3.4 The table below shows part of an Income and Expenditure Statement of a crop farmer. Calculate the missing information and write the answer next to the question number (3.4.1–3.4.3) in the ANSWER BOOK.

**INCOME AND EXPENDITURE STATEMENT**

DESCRIPTION	CURRENT MONTH	YEAR TO DATE
Sales	R461 060	
Cost of sales	R20 200	
Gross profit		<b>3.4.1</b>
Overhead cost	R34 000	
Net profit		<b>3.4.2</b>
Cash withdrawals	R210 000	
Retained profit		<b>3.4.3</b>

- 3.5 The Balance Sheet shows the owner and financial institutions what the business is worth. It presents the financial position of the farm on a specific date.

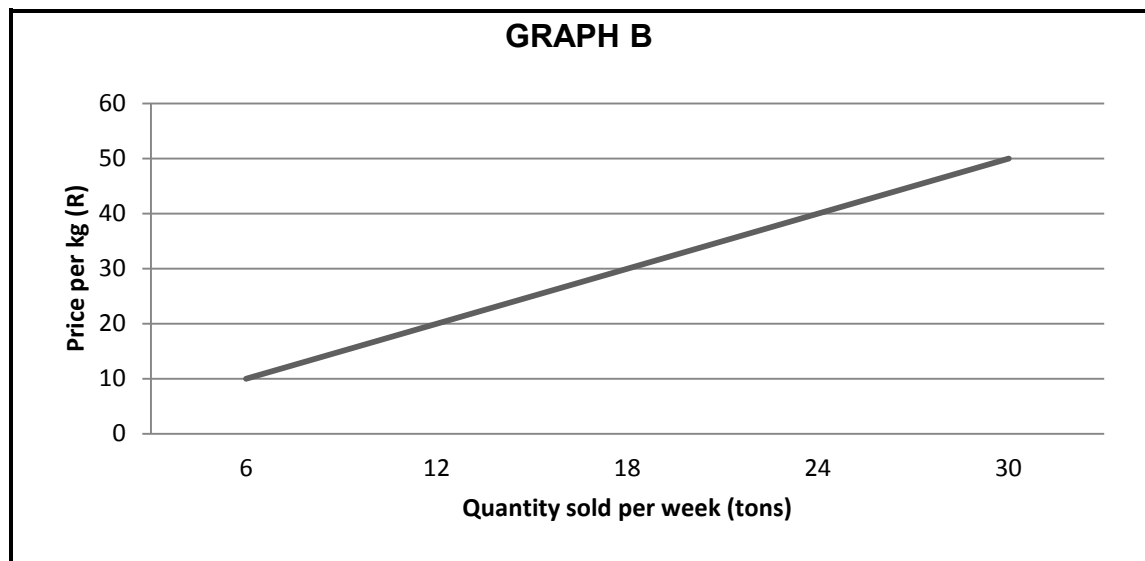
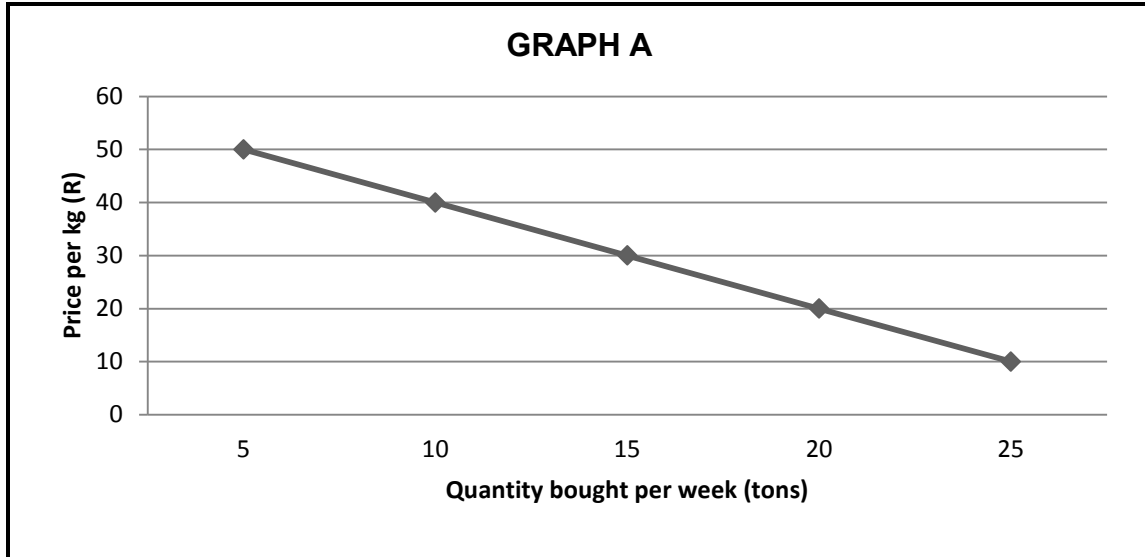
Use the information below to compile a Balance Sheet for a vegetable farming enterprise.

• Cash	R15 000
• Accounts payable	R100 000
• Accounts receivable	R109 000
• Debt payable	R48 000
• Long-term liabilities	R108 000
• Inventory	R210 000
• Fixed assets	R690 000

- 3.6 A business plan is a written description of aspects of a proposed or existing business. The intention of a business plan is to show legitimacy of the business to anybody reading it. Use an agribusiness of your choice and compile a business plan with the following headings:
- 3.6.1 Agribusiness overview and type of ownership (2)
  - 3.6.2 Vision and mission (2)
  - 3.6.3 Market plan (2)
  - 3.6.4 Financial plan (2)
- 3.7 The Marketing of Agricultural Products Act, 1996 (Act 47 of 1996) introduced import tariffs.
- Evaluate the necessity of introducing import tariffs in the marketing of agricultural products. (2)

3.8 GRAPHS A and B below represent the quantities of an agricultural product bought and sold on fresh produce markets.

Study the two graphs below and answer the questions that follow.



- 3.8.1 Identify the graph that represents the SUPPLY of the product on the market. (1)
- 3.8.2 Identify the graph that represents the DEMAND for the product on the market. (1)
- 3.8.3 Use the information in the graphs and explain how demand and supply work together to determine the price of a commodity on the market. (4)
- 3.8.4 Predict the market equilibrium price for this product. (1)

3.9 FARMER A and FARMER B use different marketing methods for their produce. FARMER A uses direct marketing (sells to the public and traders) while FARMER B uses contract marketing (enters into a legal agreement with a company to produce a specified quality and quantity of a produce and supply to the company at a fixed price).

Compare the advantages of EACH marketing method for both the farmer and the consumer. Redraw the table below in the ANSWER BOOK and complete it with the relevant information.

FARMER A		FARMER B	
ADVANTAGES TO		ADVANTAGES TO	
FARMER	CONSUMER	FARMER	CONSUMER

(4)

3.10 Define the following terms used in a farm business plan:

3.10.1 Cash flow

(2)

3.10.2 Turnover

(2)

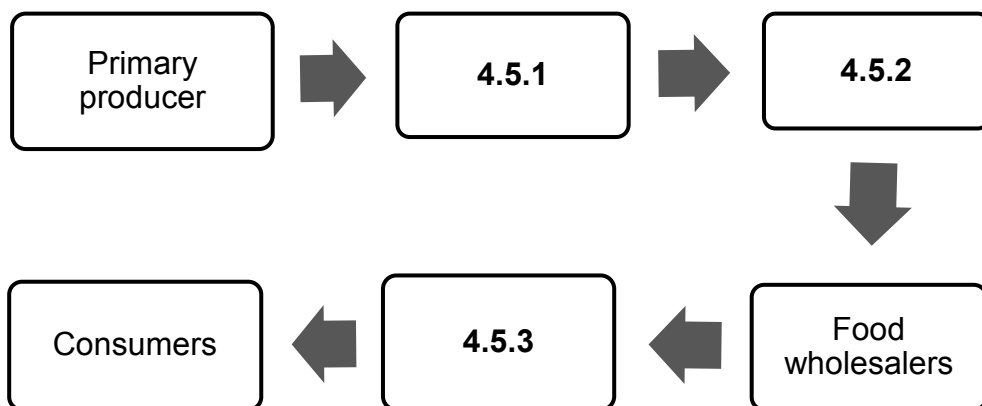
**[50]**

**QUESTION 4: HARVESTING, PROCESSING, MANAGEMENT AND AGRITOURISM**

**Start this question on a NEW page.**

- 4.1 Crops must be harvested at a certain stage of readiness to ensure that the consumer will be willing to pay for them.
  - 4.1.1 Why is it important that crops should be harvested at the correct stage? (1)
  - 4.1.2 Name FOUR aspects that a producer should take into consideration to ensure that fresh agricultural products of high quality reach consumers in the best possible condition. (4)
- 4.2 Give a reason why agricultural products are transported using the following:
  - 4.2.1 Sea (1)
  - 4.2.2 Rail (1)
  - 4.2.3 Air (1)
  - 4.2.4 Road (1)
- 4.3 Name FOUR processing methods that farmers use to preserve agricultural products. (4)
- 4.4 Give FOUR criteria that are used in the grading of fruit and vegetables. (4)
- 4.5 An agricultural commodity follows an agrimarketing channel. It starts on a farm and thereafter the product moves to food processors, wholesalers and fresh produce markets. It may end up in the consumer's basket at different retail outlets.

Refer to the above scenario and identify and complete the aspects of the marketing chain for a processed agricultural product. Write only the answer next to the question number (4.5.1–4.5.3) in the ANSWER BOOK.



(3)

- 4.6 Agritourism is a broader concept of tourism in the agricultural industry.
- 4.6.1 Distinguish between the following types of tourists:
- (a) Inbound tourists (1)
  - (b) Outbound tourists (1)
- 4.6.2 Agritourism may empower community members. Name THREE ways. (3)
- 4.7 Briefly explain the role of producer organisations in assisting farmers. (4)
- 4.8 Give FOUR reasons why agricultural products are packaged. (4)
- 4.9 State the advantages of labour management in an agricultural production enterprise. (4)
- 4.10 Choose ONE management task in the list below that matches each of the descriptions that follow. Write only the management task next to the question number (4.10.1–4.10.5) in the ANSWER BOOK.
- |   |
|---|
| Coordination; Organising; Motivation; Control; Planning |
|---|
- 4.10.1 Analyse and evaluate planning throughout the year (1)
- 4.10.2 Identify potential problems and opportunities (1)
- 4.10.3 Choose a plan and start implementing it (1)
- 4.10.4 Ensure that planned goals are met (1)
- 4.10.5 Set new goals once current goals are met (1)
- 4.11 Employees on a farm have certain physical and psychological needs. A farmer has to meet these needs to keep the employees motivated.
- 4.11.1 State THREE physical needs of employees. (3)
  - 4.11.2 State TWO psychological needs of employees. (2)
- 4.12 Briefly discuss the factors that determine the economic viability of a farm. (3)
- [50]**

**TOTAL SECTION B: 150**  
**GRAND TOTAL: 200**