higher education & training

Department:
Higher Education and Training
REPUBLIC OF SOUTH AFRICA

NATIONAL CERTIFICATE (VOCATIONAL)

AGRIBUSINESS
NQF LEVEL 3

(1011033)

9 March 2018 (X-Paper)
09:00–12:00

This question paper consists of 8 pages.

NCV

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TIME: 3 HOURS
MARKS: 150

INSTRUCTIONS AND INFORMATION

1. Answer ALL the questions.
2. Read ALL the questions carefully.
3. Number the answers according to the numbering system used in this question paper.
4. Use a BLACK or BLUE pen.
5. Leave at least THREE lines after each question.
6. Start each section on a NEW page.
7. Write neatly and legibly.

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SECTION A

QUESTION 1

1.1 Indicate whether the following statements are TRUE or FALSE. Choose the answer and write only 'true' or 'false' next to the question number (1.1.1–1.1.10) in the ANSWER BOOK.

1.1.1 Marinating is a process of combining animal and plant wastes with soil.

1.1.2 A cash flow statement can show how much credit is needed.

1.1.3 Import duty is a tariff paid at the border to allow a commodity to pass into that country.

1.1.4 The National Water Act allows farmers to build dams if there are no people who need the water downstream.

1.1.5 Profit refers to the positive gain from an investment after subtracting all costs.

1.1.6 Agribusiness does not need to be sustainable because it does not play an important part in the South African economy.

1.1.7 Sales above the break-even point result in a loss and sales below this point result in profit.

1.1.8 Overhead costs are direct costs.

1.1.9 Production rarely has a negative effect on the environment.

1.1.10 Productivity is closely linked to marketability.

(10 × 1) (10)

1.2 Complete the following sentences by filling in the missing word(s). Write only the word(s) next to the question number (1.2.1–1.2.10) in the ANSWER BOOK.

1.2.1 To be economically sustainable, an agribusiness must make efficient use of …

1.2.2 Sending and receiving messages using telephones, radio or television is called …

1.2.3 A policy aimed at limiting imports to protect local producers from foreign competition is called …

1.2.4 … is how much money a business has at the end of budget period.

1.2.5 The name of the whole group from which samples are taken is the …

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1.2.6 … is when a farmer cleans and lubricates machines and equipment to make sure that they are in good condition.

1.2.7 Finding information about the whole group by using a smaller part of the group is called …

1.2.8 A … is the tool used to take soil samples.

1.2.9 The … is the measurement used to determine whether or not fruit or vegetables are ready for harvesting.

1.2.10 … transform commodities either partially or completely into a form in which they can be consumed.

(10 × 1) (10)

1.3 Provide ONE word/term for each of the following descriptions by writing only the word/term next to the question number (1.3.1–1.3.10) in the ANSWER BOOK.

1.3.1 Sampling without a particular pattern or plan.

1.3.2 Electricity, clean water, sanitation and refuse removal.

1.3.3 Selling and sending goods to other countries.

1.3.4 Physical structures like roads and buildings.

1.3.5 A person or company acting on your behalf in business.

1.3.6 Ensuring that your agribusiness does not harm people or damage communities.

1.3.7 Putting things in order and determining when they need to be done.

1.3.8 Payment or a fee charged to game farm visitors.

1.3.9 To transfer goods from the producers/wholesalers to retailers.

1.3.10 Presenting a commodity to a consumer in a manner, location and form that the consumer desires and is willing to pay for.

(10 × 1) (10)
[30]

TOTAL SECTION A: 30

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SECTION B

QUESTION 2

2.1 What is a break-even point? (2)

2.2 Why is it important to calculate break-even point in a business? (2)

2.3 Use the information below to calculate the answers to the questions that follow.

The financial statements for Mr Mkhize's farm reveal that the tomato enterprise's fixed costs are R49 000 and its variable costs per unit of production are R0,30. The sales income is R1,00 per kilogram.

2.3.1 How many units (kilograms of tomatoes) must be sold to break even? (5)

2.3.2 How much profit will be generated if Mr Mkhize increases his sales by 10 000 kilograms above the break-even units? (5)

2.3.3 How much profit will be generated if Mr Mkhize increases his sales by 30 000 kilograms above the break-even units? (5)

2.3.4 What will the result be if sales were to drop by 10 000 kilograms from break-even to 60 000 units? (5)

2.3.5 What will the result be if sales were to drop by 30 000 kilograms from break-even to 40 000 units? (5)

2.3.6 What is the meaning of the term *data?* (1)

[30]

QUESTION 3

3.1 Joe Mabuza has a small plot of three hectares. He plants cabbages on two hectares of this plot. During the past two months, he sold 1 000 cabbages at R3,00 each. The total cost to produce the 1 000 cabbages was R1 100.

3.1.1 Calculate Joe Mabuza's gross income for the two months. (2)

3.1.2 What is his net income for the two months? (2)

3.1.3 Calculate the unit net income per hectare (assuming that the cost was equal on both hectares and that the same amount was harvested on each hectare). (2)

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3.1.4 Calculate his return on investment. Use the formula:

$$\text{Return on investment} = \frac{(\text{Total income} - \text{Total costs})}{\text{Total costs}} \times 100$$ (4)

3.1.5 Is this a good return? Motivate your answer. (2)

3.2 Monica has a small plot next to Joe Mabuza. She also wants to plant vegetables but does not want to compete with Joe. Study the table below and use the information to answer the questions that follow.

CROP	**COST PER HECTARE**	**INCOME PER HECTARE**
Maize	R5 010	R3 010
Tomatoes	R3 300	R5 000
Onions	R5 600	R6 700

3.2.1 Which of these crops have the best gross profit margin? (4)

3.2.2 Which of these crops do not break even? (2)

3.2.3 What advice would you give Monica based on these figures. (2)

3.3 Define the following terms/words:

3.3.1 Foreign exchange (2)

3.3.2 Rate of exchange (2)

3.3.3 Risk assessment (3)

3.4 Name THREE steps to be followed in the export of agricultural products. (3)
[30]

QUESTION 4

4.1 What are FOUR reasons for maintenance? (4)

4.2 Provide SIX examples of problems caused by not maintaining farm infrastructure. (6)

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4.3 Choose an item from COLUMN B that matches a description in COLUMN A. Write only the letter (A–M) next to the question number (4.3.1–4.3.10) in the ANSWER BOOK.

COLUMN A		COLUMN B	
4.3.1	Prevents destruction of forestry, veld and farm land through fire	A	tourist
4.3.2	Exchange of commodities between two or more parties	B	conservation tillage
4.3.3	A list of all the different tasks that need to be done	C	multilateral trade
4.3.4	People who visit a farm to see wild flowers or animals	D	firebreaks
4.3.5	Preparing the soil in a manner that leaves a cover on its surface	E	operational plan
4.3.6	Livestock unit per square kilometer	F	zoning regulations
4.3.7	A variety of living organisms found naturally in an area	G	ecosystem
4.3.8	The frequency at which an animal gives birth and the number of offspring born	H	carrying capacity
4.3.9	Rules that create special areas where law dictates that only certain activities may take place	I	breeding rate
4.3.10	Plants, animals and natural features in an environment and the ways they are related to each other	J	random sampling
		K	housing regulations
		L	mortality rate
		M	biodiversity

(10 × 1) (10)

4.4 Define the following terms:

4.4.1 By-product

4.4.2 Man-hours

4.4.3 Cash-flow budget

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4.4.4 Agrochemical

4.4.5 Intra-regional trade

(5 × 2) (10)
[30]

QUESTION 5

5.1 Distinguish between income and expenditure in the production process. (4)

5.2 Study the TABLE below. Classify the following costs as either variable costs or fixed costs. Write only 'variable' or 'fixed' next to the question number (5.2.1–5.2.10) in the ANSWER BOOK.

No.	COSTS	TYPE OF COST
5.2.1	Rent and share-crop payments	
5.2.2	Animal feed	
5.2.3	Packaging materials	
5.2.4	Cell phone contract fees	
5.2.5	Marketing costs	
5.2.6	Fuel, oil and lubricants	
5.2.7	Post box rental	
5.2.8	Irrigation water	
5.2.9	Bank charges	
5.2.10	Interest on loans	

(10)

5.3 Which questions would you ask in a market research questionnaire? (3)

5.4 What are FOUR ways of collecting data on pests and diseases on the farm before and after planting? (4)

5.5 How can the problems associated with poor maintenance of farm infrastructure be solved? State FIVE possible solutions. (5)

5.6 A farm-work plan includes the order in which work is to be done.

Give FOUR reasons that cause a work plan to change. (4)
[30]

TOTAL SECTION B: 120
GRAND TOTAL: 150

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