basic education

Department:
Basic Education
REPUBLIC OF SOUTH AFRICA

NATIONAL SENIOR CERTIFICATE

GRADE 12

AGRICULTURAL MANAGEMENT PRACTICES

NOVEMBER 2023

MARKING GUIDELINES

MARKS: 200

These marking guidelines consist of 13 pages.

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SECTION A

QUESTION 1

1.1 Multiple choice

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

(10 x 2) (20)

1.2 Matching items

1.2.1 B ✓✓
1.2.2 G ✓✓
1.2.3 J ✓✓
1.2.4 D ✓✓
1.2.5 L ✓✓
1.2.6 A ✓✓
1.2.7 C ✓✓
1.2.8 H ✓✓
1.2.9 F ✓✓
1.2.10 K ✓✓

(10 x 2) (20)

1.3 Agricultural terms

1.3.1 Granular / Crumb ✓
1.3.2 Contour / Contour lines ✓
1.3.3 Organic / Biological / Regenerative ✓
1.3.4 Filtration ✓
1.3.5 Electronic devices / Data capturing devices✓

(5 x 1) (5)

1.4 Underlined words

1.4.1 Smaller / Lower / Less ✓
1.4.2 Advertising / Advertisement / Promotion ✓
1.4.3 Transportation / Transport ✓
1.4.4 Deposit slip / Deposit book ✓
1.4.5 Overhead costs ✓

(5 x 1) (5)
TOTAL SECTION A: 50

SECTION B

QUESTION 2: PHYSICAL FARM PLANNING

2.1 **State the functions of soil**

- Provides plant nutrients / minerals / raw materials ✓
- Stores and provides water to plants ✓
- Allows the movement of air ✓
- Allows water infiltration ✓
- Acts as a medium for plants growth ✓
- Provides shelter / habitat for organisms ✓
- Plays a role in carbon sequestration ✓
- Plays an important role in climate regulation ✓
- Provision of space ✓
- Anchors / support the plant ✓ (Any 4) (4)

2.2 **Southern slope and the Northern slope**

2.2.1 **Explain temperature of the soil**

- Southern slope is cooler than the Northern slope ✓
  because it is less directly exposed to sunlight ✓

OR

- Northern slope is warmer than the Southern slope ✓
  because it is more directly exposed to sunlight ✓ (Any 1 x 2) (2)

2.2.2 **Explain organisms in the soil (soil fauna)**

- Southern slope has less microbial activity ✓
  because organisms are less active under cooler conditions ✓

OR

- Northen slope has more microbial activity ✓
  because these organisms are more active under warmer conditions ✓ (2)

2.3 **Distinguish between soil texture classes**

CHARACTERISTICS	SAND	CLAY
Water holding capacity	low / less ✓	high / more ✓
Soil fertility	low / less ✓	high /more ✓

(4)

2.4 **Discuss the importance of soil surveys to farmers**

- Soil types are identified ✓so that production capacity can be determined ✓
- Till ability of soils is identified ✓ and classified ✓
- Determine purpose and type ✓ as high production soils, marginal soils, low production soils ✓
- Protects against degradation ✓ such as erosion, overgrazing and brackishness ✓
- Prevent silting of dams ✓ due to erosion ✓
- Assist engineers in the development of the area ✓ or buildings and structures on the farm ✓
- Developing soil maps ✓with information provided by the soil survey ✓

(Any 2 x 2) (4)

2.5 **Grazing system**

2.5.1 **Distinguish between grazing system**

(a) **FARM A – Continuous grazing**

- Livestock is allowed to have unrestricted, uninterrupted access to a whole area ✓
  throughout the entire grazing season ✓ (2)

(b) **FARM B – Rotational grazing**

- The movement of livestock to different camps ✓
  in regular sequence ✓ (2)

2.5.2 **State the disadvantages of the grazing system used on FARM B**

- More fencing required ✓
- More water provision points needed ✓
- More labour is needed ✓
- High management skills are needed ✓
- Costs will increase ✓ (Any 2) (2)

2.5.3 **Describe the advantages of resting a camp**

- Maximise the continuous production of high-quality feed ✓
- Prevent degradation of grazing ✓
- Pastures more resistant to periods of drought due to extensive root development ✓
- Dry matter (DM) production increases ✓
- Seeding increases and time is given for development ✓
- Extended grazing periods after resting period ✓
- Control of parasites ✓
- Succession of plants benefited ✓ (Any 3) (3)

2.6 **Labour Laws**

2.6.1 B ✓ (1)

2.6.2 D ✓ (1)

2.6.3 A ✓ (1)

2.6.4 C ✓ (1)

2.7 **Farming scenario's**

2.7.1 **Identify farming systems**

(a) **FARMER A**
- Commercial farmer ✓ (1)

(b) **FARMER B**
- Subsistence farmer ✓ (1)

2.7.2 **Describe intensity or level of land use by FARMER A**
- Intensive use of the land ✓
- Many animals per ha ✓
- Animals are fed by the farmer ✓
- Animals do not have to look for their own food ✓ (Any 2) (2)

2.7.3 **Deduce FARMER A's leather industry**
- NOT a niche market ✓ (1)

Reasons:
- Is large scale production (15 473 hides) ✓
- Farmer has an industry that produce the goods, it is not small scale ✓
- Farmer produces items in general, it is not exclusive/specialised for specific needs ✓ (Any 2) (2)

2.7.4 **Comment on FARMER B difficulty to sell excess**
- Far from market, transport costs are high ✓
- Market might be small, less buyers ✓
- Over-supply at the market ✓
- Farmer B must work through a market agent ✓ that needs to be paid
- Excess produce not of good quality ✓
- Produce takes long to reach market, quality deteriorates ✓
- Packaging may not be up to standard ✓
- Very difficult to compete with commercial farmers / with regard to quality and quantity ✓ (Any 3) (3)

2.8 **Describe importance of precision farming**

- Increase efficiency in the use of resources ✓
- Increase or maintain outputs with reduced inputs ✓
- Can manage smaller units more efficiently ✓
- Conservation of the environment ✓
- Makes the farm more viable by reducing input costs ✓ (Any 3) (3)

2.9 **Agritourism**

2.9.1 **Name activities on the farm**

- Picking/harvesting fruit ✓
- Horseback rides ✓
- Milking cows ✓ (3)

2.9.2 **Identify missing information**

- Name of the farm ✓
- Contact details / e-mail address / cell phone number ✓
- Electronic media (Facebook page / Instagram) ✓
- Address of farm / location ✓
- Description of possible activities ✓ (Any 2) (2)

2.9.3 **Indicate how to improve advert**

- Use colour ✓
- Use drawings done in the same style ✓
- Use photographs not drawings ✓
- Increase the size / formatting of the lettering in the heading ✓
- Add more information ✓ (Any 3) (3)

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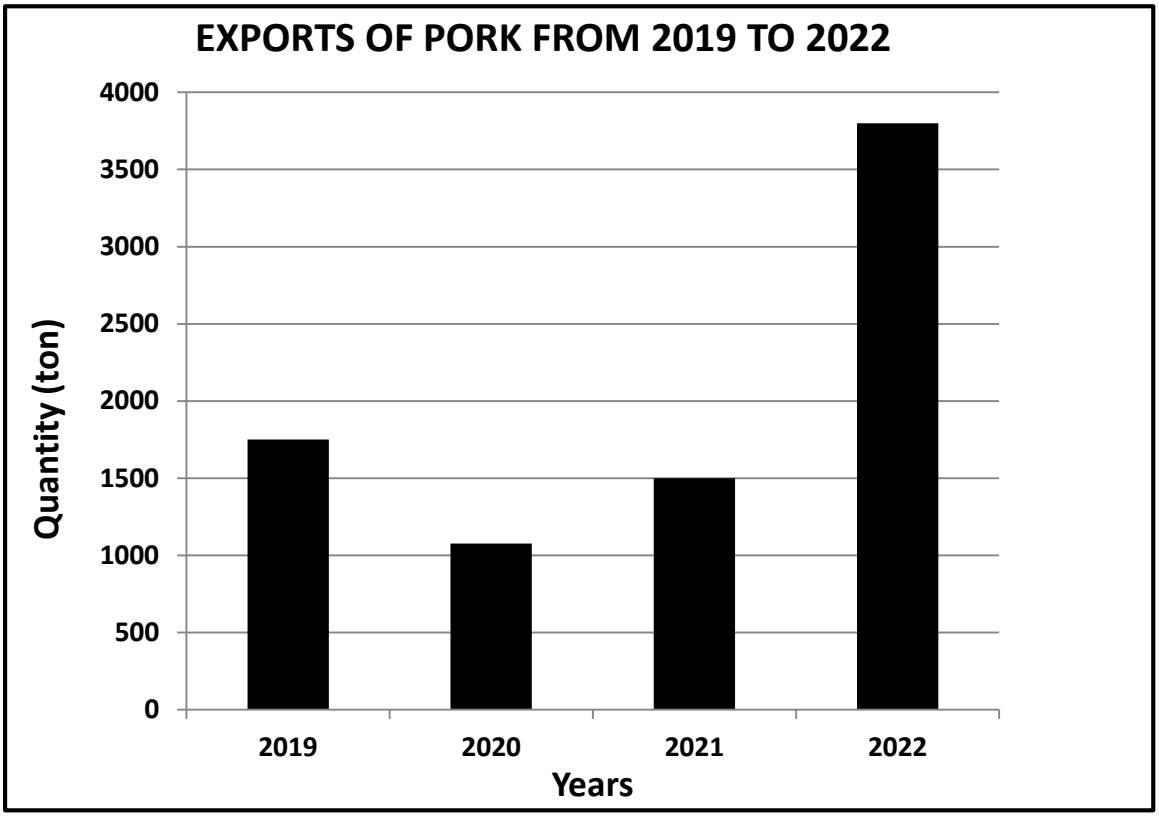
QUESTION 3: BUSINESS PLANNING, ENTREPRENEURSHIP, MARKETING, PRICE DETERMINATION AND THE MANAGEMENT PROCESS

3.1 Bar graph on prices

3.1.1 Draw a bar graph of pork



Rubric:

- Title of the graph (pork) ✓
- Labelling and calibration of x-axis and y-axis with units ✓
- Any two correct bars ✓ (2x1 = 2 ✓✓)
- Correct type of graph ✓ (5)

3.1.2 Give a reason for decline in 2020

- COVID-19 / outbreak of an animal disease ✓ that lock the borders for export ✓ (2)

3.2 **Name and describe factors for a product marketing strategy**

- Quality of produce ✓
  product must meet the quality requirements of consumer ✓
- Demand ✓
  the farmer must be able to identify changes in demand ✓
- Price of the product ✓
  the farmer must be able to compare/read tendencies of prices ✓
- Promotion of the product ✓
  value must be added to make it enough to be purchased ✓
- Place ✓
  the location must be convenient for consumers to access ✓

(Any 2 factors + description) (4)

3.3 **Entrepreneurship**

3.3.1 **Identify type and motivate of agricultural sector**

- Tertiary agricultural sector ✓ (1)

Motivation:

- The scenario provides goods and services needed by the primary and secondary agricultural sector ✓ (1)

3.3.2 **Give the importance of the tertiary sector**

- Economic growth/additional income ✓
- Provides with job opportunities ✓
- Leads to establishment of businesses ✓
- Give advice to farmers ✓
- Promotes the development of new and innovative goods and services ✓
- Provide services to the farmer ✓ (Any 3) (3)

3.4 **Choose principle of management**

3.4.1 Organisation ✓ (1)

3.4.2 Control ✓ (1)

3.4.3 Motivation ✓ (1)

3.5 **Break-even point**

3.5.1 **State sales lower than break-even point**

- The farm is making a loss ✓ (1)

3.5.2 **State sales higher than break-even point**

- The farm is making a profit ✓ (1)

3.6 **Marketing**

3.6.1 (a) **Farm A**
Cost per chicken = Feed + Vaccination + Electricity + Labour
= R20 + R5 + R5 + R20 ✓
= R50/chicken ✓ (2)

(b) **Farm B**
Cost per chicken
= Feed + Vaccination + Electricity + Labour + Processing + Transport
= R20 + R5 + R8 + R15 + R5 + R10 ✓
= R63/chicken ✓ (2)

3.6.2 **State possible methods of determine price**
- Market orientated pricing ✓
- Break-even point ✓
- Cost plus profit margin / Production cost and adding a mark-up percentage ✓
- Supply and demand ✓ (Any 3) (3)

3.6.3 **Identify TWO Marketing functions in B from scenario**
- Processing ✓
- Transportation / Transport ✓
- Sales ✓ (Any 2) (2)

3.7 **State ways of assistance of producer organisations**
- Negotiation with banks on terms of credit on behalf of farmers ✓
- Organise inputs and negotiate discounts on behalf of farmers ✓
- Organise markets for farmers ✓
- Provide technical / scientific advice to farmers ✓
- Give market information ✓
- Advertise and promote agricultural products ✓ (Any 3) (3)

3.8 **Choose roles and responsibilities of employees**

MANAGER	SUPERVISOR	WORKER	WORKER
		CROP PRODUCTION	ANIMAL PRODUCTION
3.8.1 B ✓	3.8.2 A / C / E ✓ 3.8.3 A / C / E ✓	3.8.4 D / F ✓	3.8.5 C / D ✓ 3.8.6 C / D ✓

(6)

3.9 **State the labour problems on farms**

- Theft ✓
- Damage of assets ✓
- Labour unrest / strike / conflict ✓
- Unreliability / irresponsible workers ✓
- Late for work / Leave early ✓
- Substance abuse ✓
- High labour costs ✓
- Lack of available / skilled / trained labour ✓
- Migration of farm workers to the cities ✓
- Absent without leave ✓
- Performing a variety of tasks ✓
- Absenteeism due to illness (HIV / AIDS / COVID etc.) ✓ (Any 4) (4)

3.10 **Describe the importance of market research**

- Guide the farming enterprise in decision making ✓
- Make sure the product meets the market demands ✓
- To provides knowledge of:
  - what the competition offers ✓
  - current sales in the industry ✓
  - benchmarks (standard) in the industry ✓
  - reliable suppliers ✓ (Any 2) (2)

3.11 **State the disadvantages of enterprise specialisation**

- Poor commodity prices ✓
- Seasonal fluctuation and poor weather conditions determine the planting time and the harvest time ✓
- Income limited to a specific time of year ✓
- Higher marketing risks ✓
- More susceptible to disease outbreaks ✓ (Any 2) (2)

3.12 **Formulate THREE questions to consider for suitable branch**

- What natural resources (veld type / climate / water) are available? ✓
- What markets are available? ✓
- Who is the competition in this market? ✓
- What production resources are available? ✓
- What is the available capital / input costs/initial costs? ✓
- What labour is available and what is their level of skills? ✓
- What is the knowledge / skills of enterprise is available? ✓
- What are the farmers' preferences? ✓
- Which support services / infrastructure / extension services are available? ✓
- Is synchronisation between branches possible? Is there conflicting interests? ✓ (Any 3) (3)

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

4.1 **Name aspects to consider when compiling a budget for crop production**

- Area to be planted ✓
- Labour costs ✓
- Costs of inputs for production process ✓
- Output/Price ✓
- Harvesting costs ✓
- Marketing cost ✓ (Any 4) (4)

4.2 **Budgets**

4.2.1 **Choose characteristics of a whole farm budget**

- D ✓
- F ✓ (2)

4.2.2 **Choose characteristics of an branch budget**

- C ✓
- G ✓ (2)

4.3 **Differentiate between**

4.3.1 **Invoice**

- Show all the different services or commodities, amount and value ✓ that was bought and the farmer still has to pay ✓ (2)

4.3.2 **Income Statement**

- Record of income and expenditure ✓ for a given time period ✓ and the resulting profit or loss on a farm ✓ (Any 2) (2)

4.4 **Complete the Balance sheet**

(a) Land and buildings – R1 150 000 ✓
(b) Second-hand tractor – R50 000 ✓
(c) Debtors – R13 000 / Cash – R2 000 ✓
(d) Cash – R2 000 / Debtors – R13 000 ✓
(e) Creditors – R10 000 ✓
(f) R1 295 000 / R1 260 000 ✓ (6)

4.5 **Record keeping**

4.5.1 **State the importance of keeping accurate records**

- Used in strategic decision making ✓
- Used for planning ✓
- Used in determining profitability of the enterprise ✓
- Create a database on farm's activities / records ✓
- Help the farmer in improving the efficiency of the farm's operations ✓

(Any 4) (4)

4.5.2 **Identify the main challenges leading to poor record keeping in farming**

- Lack of knowledge / Literacy levels ✓
- Not enough time / Time consuming ✓
- Too much work / Work load too high ✓
- Not based on facts but guessing / Poor realisation of the need to keep records ✓
- Inadequate management information system ✓ (Any 3) (3)

4.5.3 **Name an information management system**

- Agricultural management software/computer program ✓
- Hand written records ✓ (Any 1) (1)

4.6. **Matching source documents**

4.6.1 Invoice ✓ (1)

4.6.2 Pay slip ✓ (1)

4.6.3 Receipt ✓ (1)

4.6.4 Bank statement ✓ (1)

4.7 **State factors used to determine the quality of fresh produce at harvesting**

- Appearance ✓
- Texture ✓
- Flavour ✓
- Damage ✓
- Product specific content (nutritive value, sugar, protein, starch, acid content, moisture) ✓ (Any 4) (4)

4.8 **Recommend guidelines to consider when constructing a storage facility**

- Type of product stored ✓
- The structure must be easy to clean and sanitise ✓
- Floors and roofs must be water proof ✓
- Avoid wood materials ✓
- Use strong building materials ✓
- Adhere to legislation on building regulations ✓
- Adhere to legislation regarding to cleaning and hygiene ✓
- Include insulation material in the roof and walls ✓
- Avoid materials with rough surfaces ✓
- Non-combustible or heat resistant material must be used for building ✓
- Placement of the facility ✓
- Security in and around the facility ✓
- Prevent access to pests / rodents ✓ (Any 4) (4)

4.9 **Value adding**

4.9.1 **State advantages in drying**

- Extends the shelf life of the product ✓
- Increases the potential and value for a product ✓
- Less weight thus easier to transport to the market ✓
- Protect against organisms that cause product decay ✓
- Easier to package and store ✓ (Any 3) (3)

4.9.2 **Justify statement: "*Processing is valuable to job creation*"**

- Need for more workers / hiring more workers in processing ✓
  this result in more job opportunities ✓ (2)

4.10 **Packaging**

4.10.1 **Discuss benefits of using glass bottles / jars**

- It completely protects food ✓ against micro-organisms, pests, moisture, air and odours ✓
- Do not contain chemicals that migrate into food ✓ no contamination ✓
- Containers are rigid ✓ to allow stacking without damage ✓
- It is transparent ✓ to display the contents ✓
- It is re-usable ✓ saving on costs ✓ (Any 2 x 2) (4)

4.10.2 **State the disadvantages of plastic**

- Not environmentally friendly / not easily disposable / not easily biodegradable ✓
- Does not always protect from light ✓
- Not resistant to thermal damage ✓
- Not sturdy / difficult to stack ✓
- Can contaminate product when heated ✓ (Any 3) (3)

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TOTAL SECTION B: 150
GRAND TOTAL: 200

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