



basic education

Department:
Basic Education
REPUBLIC OF SOUTH AFRICA

SENIOR CERTIFICATE EXAMINATIONS/ NATIONAL SENIOR CERTIFICATE EXAMINATIONS

AGRICULTURAL MANAGEMENT PRACTICES

2022

MARKING GUIDELINES

MARKS: 200

These marking guidelines consist of 12 pages.

SECTION A**QUESTION 1****1.1 Multiple-choice questions**

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

(10 x 2) (20)

1.2 Matching items

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

(10 x 2) (20)

1.3 Agricultural terms

- 1.3.1 Productivity ✓
- 1.3.2 Radiation/Ultraviolet rays or light ✓
- 1.3.3 Diversification/Diversity ✓
- 1.3.4 Light or sunlight ✓
- 1.3.5 Entrepreneurship ✓

(5 x 1) (5)

1.4 Underlined words

- 1.4.1 Perishability/Perishing ✓
- 1.4.2 Organising/Organisation ✓
- 1.4.3 Climate of weather ✓
- 1.4.4 Break-even point ✓
- 1.4.5 Domestic or local ✓

(5 x 1) (5)

TOTAL SECTION A: 50

QUESTION 2: PHYSICAL FARM PLANNING**2.1 Veld management****2.1.1 Importance of knowing optimal plant growth**

- To know the time of optimal growth ✓ will establish the best plant potential ✓
- Knowledge on the different type of grasses ✓ will help to determine the carrying capacity of the farm ✓ (Any 1) (2)

2.1.2 TWO ways of how division of camps can assist the farmer

- Maximise the continuous production ✓ of high-quality feed ✓
- Have feeds available in times of slow growth ✓ and dormant periods ✓
- Provide the nutritional requirements of livestock and game (eg, winter pastures) ✓✓
- Plan and respond ✓ to unexpected events (droughts, floods, fire, etc.)
- Increase efficiency of daily management ✓✓
- Prevent degradation of veld ✓ by preventing overgrazing ✓
- Minimise animal stress ✓ by avoiding unnecessary movement ✓ (Any 2) (4)

2.1.3 TWO advantages of good pasture management

- No need to buy additional feed ✓
- Need for planted pastures would be less ✓
- The farmer would save money or have a higher income ✓ (Any 2) (2)

2.2 Factors influence grazing**2.2.1 Palatability – influence on grazing**

- Sweet veld – more palatable ✓ higher intake ✓
- Mixed veld – moderate palatable eaten first ✓, moderate intake ✓
- Sour veld – less palatable grasses ✓ thus lower intake ✓ (Any 1 x 2) (2)

2.2.2 Topography – influence on grazing

- Topography like e.g. low-lying fields and plains can be more accessible to animals ✓ This can lead to being grazed more often ✓
- Topography like e.g. mountain areas and slopes can be less accessible to animals ✓ These areas will be grazed less often ✓ (Any 1 x 2) (2)

2.2.3 Erosion – influence on grazing

- No erosion ✓ more areas for grazing ✓
- Moderate erosion ✓ areas for grazing decreases ✓
- Severe erosion ✓ little grazing available ✓ (Any 1 x 2) (2)

2.3 **Capital**2.3.1 **Fixed capital item**

- C✓ or fences✓ (Any 1) (1)

2.3.2 **Movable capital item**

- A✓ or B✓ or crop produce✓ or cattle✓ (Any 1) (1)

2.3.3 **Reasons reducing risk with B and A or E**

- There will be more than one income for the farmer ✓
- Farmer can sell animals as well as the product (milk) as an income ✓
- More sustainable farming enterprise from more sources of income ✓
- Diversification or have more than one enterprise on the farm reduce price, disease and marketing risk ✓
- Value adding of the product can create an extra income ✓ (Any 2) (2)

2.4 **Soil structure**2.4.1 **Definition soil structure**

- Is the grouping of soil particles ✓ into structural unit (aggregates) ✓
- Is the natural cohesion of soil particles ✓ to form larger parts (aggregates) ✓ (Any 1 x 2) (2)

2.4.2 **Soil structure and cultivation**

- **Structured soil**
 - Has high clay content – difficult to cultivate ✓
- **Non-structured soil**
 - Is loose and sandy – easy to cultivate ✓ (2)

2.5 **TWO advantages of organic farming**

- Lower input costs ✓
- Prohibits chemical input thus:
 - healthier for human consumption ✓
 - less harmful effects on the environment ✓
- Improves the soil health ✓ (Any 2) (2)

2.6 **Precision farming****Correct main element**

ACTION	MAIN ELEMENTS			
	PLAN	APPLY	RESULT	ANALYSE
Irrigation/Spraying		✓		
Data processing				✓
Precision maps	✓			
Harvesting			✓	
Fertilisation		✓		

(5)

- 2.7 **Physical inputs obtained in determining farming system**
- Soil ✓
 - Precipitation ✓
 - Sun ✓
 - Location ✓
 - Drainage ✓
- (5)
- 2.8 **Mechanisation**
- 2.8.1 **Influence on the costs of labour**
- More skilled labours needed ✓
 - Less labourers employed or labourers will reduce ✓
- (2)
- 2.8.2 **Negative social impact of mechanisation**
- It results in unemployment/job losses ✓
- (1)
- 2.9 **Effect of reduced wastage of pesticides in precision farming**
- Only a small area is sprayed ✓ that will reduce the cost of spraying ✓
 - Less pesticide (less wastage) used reduce the risk of pollution ✓
therefore less environmental damages (more environmentally friendly) ✓
 - Better control on the pest ✓ because of focused spraying ✓ (Any 2)
- (4)
- 2.10 **Agritourism**
- 2.10.1 **Educational tourists**
- People visiting places to do research ✓
 - on the veld, soil, topography ✓
- (2)
- 2.10.2 **Product route tourists**
- People follow routes to see how agricultural products are produced ✓
 - or how agricultural products are processed ✓
- (2)
- 2.11 **FIVE disadvantages of agritourism**
- Brings more responsibilities ✓
 - Not enough people available with the knowledge on agritourism ✓
 - Many laws that regulate agriculture and tourism ✓
 - Aspects like transport, nature conservation, social welfare can be a problem ✓
 - Costly to start ✓
 - The effect of loss of privacy ✓
 - Negative impact on environment ✓
 - Public liability ✓
 - Difficulty to stay interconnected to all people involved ✓
 - Highly affected by global health conditions ✓
- (Any 5) (5)
- [50]**

**QUESTION 3: BUSINESS PLANNING, ENTREPRENEURSHIP, MARKETING,
PRICE DETERMINATION AND THE MANAGEMENT PROCESS****3.1 Business plan****3.1.1 FIVE reasons for developing a business plan**

- Test the feasibility of the enterprise ✓
- To assist in determining the financial needs ✓
- To determine daily activities ✓
- Indicates the current position of the business ✓
- Outline the future prospects of the business ✓
- To gain knowledge of relevant marketing issues ✓
- To obtain credit from a financial institution ✓

(Any 5) (5)

3.1.2 FIVE marketing strategies

- Potential profit projections based on realistic figures ✓
- Indicate to what extent profit will be reinvested ✓
- Focus on weakness of competition and provide better product ✓
- Justify price by thinking like the consumer ✓
- Price or service must reflect business's overall strategy ✓
- Indicate cost that improve quality of the product ✓
- Indicate expected sales ✓
- Indicate possible market share ✓
- Indicate break-even point ✓
- Indicate weakness in financing ✓
- Make suggestions on how shortcomings can be reduced

(Any 5) (5)

3.2 Entrepreneurship**3.2.1 THREE entrepreneurial characteristics A, B, C and D**

- A – organisational/coordination abilities ✓
- B – technical/operational knowledge ✓
- C – innovative/creativity/vision insight ✓
- D – perseverance ✓

(4)

3.2.2 THREE resources that an entrepreneur requires when starting a farming enterprise

- Financial resources ✓ (appropriate examples)
- Human resources ✓ (appropriate examples)
- Physical resources ✓ (appropriate examples)

(3)

3.3 Distinguishing primary agricultural sector from secondary and tertiary agricultural sectors

- The primary sector uses natural resources to produce raw products in farming, fishing and forestry sectors ✓
- Secondary sector transforms raw materials obtained from the primary sector to produce semi-finished or finished goods ✓
- The tertiary sector includes goods and services that the primary and secondary agricultural sectors need to produce their products ✓

(3)

3.4 Marketing laws applicable to the marketing of agricultural products

- 3.4.1 C ✓ (1)
- 3.4.2 A ✓ (1)
- 3.4.3 B ✓ (1)
- 3.4.4 E ✓ (1)

3.5 Marketing channels**3.5.1 THREE advantages of farm gate marketing**

- No marketing costs ✓
- No transport costs ✓
- Better suited for small scale farmers ✓
- Products can be sold by the farmer/no middle man or agent ✓ (Any 3) (3)

3.5.2 THREE disadvantages of farm gate marketing

- The farmer will have to accept the local price for the product on sale ✓
- The farmer will not necessarily be well located to reach consumers ✓
- Risk of robbery is high ✓
- Volumes that are sold are sometimes small ✓ (Any 3) (3)

3.6 Difference between internet marketing and contract marketing

INTERNET MARKETING	CONTRACT MARKETING
No contract – done on several online platforms ✓	A signed contract between the producer and the consumer ✓
Fluctuating prices ✓	Price is fixed ✓
No guaranteed income ✓	Guaranteed income ✓
Sell to anyone – can reach a global audience ✓	Obligated to deliver to contract ✓

(6)

3.7 THREE functions of producer organisations in the agriculture industry

- Assist in the marketing of agricultural products ✓
- Research possible local markets for farmer's produce ✓
- Involved in export possibilities of farmer's products ✓
- Advice farmers on production methods of the product ✓
- Involved in research of the product to the benefit of all role players ✓
- Analyse markets and determine market tendencies ✓
- Promotion of the product ✓ (Any 3) (3)

- 3.8 **THREE advantages of fresh produce market**
- Farmers can benefit from higher prices in time of shortages ✓
 - Assuring the integrity of each party in the transaction ✓
 - Guaranteeing that the negotiated price will be paid ✓
 - Market is able to sell large quantities ✓
 - Farmer can use an agent to do the marketing ✓
 - Money is available immediately after sales ✓
- (Any 3) (3)
- 3.9 **FOUR advantages of evaluation**
- Increase the efficiency of the operation ✓
 - Resources are utilised optimally ✓
 - Increased productivity in the workplace ✓
 - Constant improvement of the operation or enterprise ✓
 - Indicate areas of wastage and how to correct it ✓
- (Any 4) (4)
- 3.10 **FOUR advantages of proper management regarding labour**
- Time saving ✓
 - It increases efficiency and work is done faster ✓
 - Each worker gains more skills in their part of specialisation and becomes an expert ✓
 - Devising simple machinery for each operation becomes possible ✓
 - The supervisor will know the responsibility of each worker ✓
- (Any 4) (4)
- [50]**

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

- 4.1 **A budget has both a planning function and a control function**
- Planning function - link expected income and expected expenses ✓ of the farm to the goals of the farm ✓
 - Control function – make sure that the real activities ✓ adhere to the planned activities ✓
- (4)
- 4.2 **Budgets**
- 4.2.1 **Inputs and outputs in budget**
- (a) **Input**
- Seed ✓
 - Fertilizer ✓
 - Poisons /chemicals/herbicide/pesticide ✓
 - Fuel ✓
- (Any 2) (2)
- (b) **Output**
- Harvested product ✓
 - Wastage from harvested product sold ✓
- (Any 1) (1)
- 4.2.2 **Budget for in terms of resources**
- Identification of the available resources ✓
 - Determine the utilization of resources ✓
 - Determine the cost for the use of resources ✓
- (3)
- 4.3 **Income statement**
- 4.3.1 **Calculate Gross Profit**
- Gross profit = sales – cost of sales ✓
 $= R942\ 700,00 - R780\ 900,00$ ✓
 $= R161\ 800,00$ ✓
- (3)
- 4.3.2 **Calculate Net Profit**
- Net profit = Gross profit – indirect expenses (overheads/non-production costs) ✓
 $= R161\ 800,00 - (R21\ 700,00 + R72\ 300,00 + R52\ 300,00)$ ✓
 $= R161\ 800,00 - R146\ 300,00$
 $= R15\ 500,00$ ✓
- (3)
- 4.4 **Distinguish between seasonal workers and occasional workers**
- **Seasonal workers**
 - Do repetitive tasks ✓
 - Tasks are season bound ✓ (e.g. of worker can be used)
 - **Occasional workers**
 - Do project based, not repetitive tasks ✓
 - Tasks are not seasonal ✓ (e.g. of worker can be used)
- (Any 1 comparison) (2)

4.5 **THREE requirements of good record keeping**

- Clear and simple ✓
- Practical and easy to use ✓
- Specific ✓
- Realistic ✓
- Relevant ✓
- Complete ✓
- Useful and address specific needs on the farm ✓
- Up to date ✓

(Any 3) (3)

4.6 **Acceptable condition of fresh raw products**

- Product must be firm ✓ and not wilted ✓
- No damage ✓, marks, bruises on the product ✓
- Smell and colour ✓ must be specific to the fresh product ✓
- No signs of diseases and pests ✓ visible on the product ✓
- The product must be clean ✓ from soil and residue ✓

(Any 2 x 2) (4)

4.7 **Mechanical harvesting and harvesting by hand**

	MECHANICAL HARVESTING	HAND HARVESTING
Influence of whether conditions	small / little ✓	great ✓
Theft of the produce	less ✓	more ✓

(4)

4.8 **THREE correct personal health and hygiene practices for labourers**

- Must be well trained (know the dangers of fresh produce) ✓
- Bath regularly ✓
- Good toilet practises ✓
- Regular hand washing ✓
- Wear clean clothes ✓
- Wear required protective clothing (gloves, masks, shoes, hair cover) ✓
- Keep nails short ✓

(Any 3) (3)

4.9 **TWO main factors that determine the method of storage**

- Type of product ✓
- The relative humidity of the environment during the storage period ✓
- The moister content of the product from the field ✓

(Any 2) (2)

4.10 Conversion through various actions and processes

- 4.10.1 Pasteurisation ✓ (1)
- 4.10.2 Extraction ✓ (1)
- 4.10.3 Fermentation ✓ (1)
- 4.10.4 Sterilisation ✓ (1)
- 4.10.5 Extrusion ✓ (1)

4.11 Methods of packaging agricultural products**4.11.1 Vacuum packaging**

- Removing the air will delay spoilage or rotting of the product ✓✓
- Removing of the air reduces the size of the product that make storage and handling easier ✓✓
- Delayed rotting increased the shelf-life the product ✓✓ (Any 1) (2)

4.11.2 Non-vacuum packaging

- Do not need specialized equipment thus less costs ✓✓
- Protect the product shape or crushing of the product ✓✓
- More products can be packed because it saves time on packaging ✓✓ (Any 1) (2)

4.12 Transport of products**4.12.1 Requirements of the truck and trailer**

- Floor must be slip-free – to prevent animals from falling and injuring themselves ✓
- Sufficient side panels – to prevent animals from falling-off and separating small and large stock ✓
- Height in multi-level vehicles must be sufficient – to allow larger animals to stand up and allow air to flow freely
- Must be spacious – to ensure animal safety during transport ✓
- Safety of the animals – animals are not injured when moving ✓
- Ensure biosecurity – power-wash and sanitize vehicle before loading animals ✓ (Any 3) (3)

4.12.2 TWO requirements of animals during the journey

- Water ✓
- Food – hay, concentrate ✓ (2)

4.12.3 Stress levels of the animals

- Stress has negative effects on the performance of farm animals ✓
- Weaken immune system ✓
- Reduce reproduction ✓
- Weight loss ✓
- Digestive upsets ✓
- Inflammatory reactions ✓
- Reduced feed consumption ✓

(Any 2) (2)
[50]

TOTAL SECTION B: 150
GRAND TOTAL: 200