



basic education

Department:
Basic Education
REPUBLIC OF SOUTH AFRICA

**SENIOR CERTIFICATE/
NATIONAL SENIOR CERTIFICATE**

GRADE 12

AGRICULTURAL MANAGEMENT PRACTICES

NOVEMBER 2020

MARKING GUIDELINES

MARKS: 200

These marking guidelines consist of 10 pages.

SECTION A**QUESTION 1****1.1 MULTIPLE CHOICE**

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

(10 x 2) (20)

1.2 MATCH COLUMN A AND COLUMN B

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

(10 x 2) (20)

1.3 AGRICULTURAL TERMS

- 1.3.1 Budget ✓
- 1.3.2 Sorting ✓
- 1.3.3 Basic Conditions of Employment Act ✓
- 1.3.4 Surplus / Glut ✓
- 1.3.5 Current / short term liabilities ✓

(5 x 1) (5)

1.3 UNDERLINED WORDS

- 1.4.1 Management / Crop rotation/ Sustainability ✓
- 1.4.2 Capital ✓
- 1.4.3 Stability ✓
- 1.4.4 Topography ✓
- 1.4.5 Contract marketing ✓

(5 x 1) (5)

TOTAL SECTION A: 50

SECTION B**QUESTION 2: PHYSICAL AND FINANCIAL PLANNING****2.1 Negative influence of strong winds on crop production**

- The wind can damage the leaves, flowers, and fruit setting ✓ this will lead to a reduction in photosynthesis ✓ and thus lower production. ✓
 - More transpiration and evaporation ✓ plants to stress more ✓ production will be lower. ✓
 - Plants can also be uprooted ✓ or be blown over ✓ this will result in no production ✓
 - Plants are smaller ✓, grow abnormally ✓ and low production ✓
 - Pollination negatively affected ✓ less fruit form ✓ thus lower production ✓
- (Any 3) (3)

2.2 Agricultural Acts**2.2.1 Farm workers have the right to work in a safe environment**

- Occupational Health and Safety Act, 1993 (Act 85 of 1993) ✓ (1)

2.2.2 FOUR protective measures

- Wash their hands after using the chemicals ✓
- Wear protective clothing like overalls with long sleeves, masks ✓
- Never pour chemicals from hand to hand but on a stable surface ✓
- Mix chemicals according to instructions of manufacturer ✓
- Be properly trained to work with chemicals ✓
- Don't bring chemicals close to water, food, fish and animals ✓ (Any 4) (4)

2.3 Needed capital

	Long-term capital (fixed capital)	Medium-term capital (movable capital)	Short-term capital (working capital)
Livestock		✓	
Implements		✓	
Fences	✓		
Wages			✓

(4)

2.4 Types of labour

2.4.1 Seasonal worker ✓ (1)

2.4.2 Permanent/ full-time employee ✓ (1)

2.4.3 Casual / occasional labour/ contracted worker ✓ (1)

2.5 Protecting soil fertility and erosion

- Additional organic material reduce erosion ✓
- Better groundcover reduce erosion ✓
- Use zero/minimum tillage for better soil cover ✓
- Correct cultivation-/ irrigation- /grazing practices ✓
- Reduce length of slope to reduce speed of water that contributes to erosion ✓
- Mulching reduce erosion ✓

(Any 5) (5)

2.6

		Commercial farming system	Subsistence farming system
2.6.1	Technology	Mechanised/ More ✓	Use animal traction/hands / Less ✓
2.6.2	Outputs	Large amounts ✓	Small amounts ✓

(4)

2.7 Resource utilization and grazing management

2.7.1 Evaluate the sizes of the camps

- The farmer must fence veld types with the same potential and palatability of grazing together ✓
- If the natural veld is more palatable ✓ the farmer needs a smaller area ✓ to get the same nutrition for the livestock. ✓
- If the natural veld is less palatable ✓ the farmer needs a bigger area ✓ to get the same nutrition for the livestock ✓

(Any 2) (2)

2.7.2 THREE advantages of a wagon wheel layout

- The water trough is in the middle of all the camps ✓
- Only one trough to maintain ✓
- Reduces labour costs ✓
- Reduces time, energy and money spend on maintenance ✓

(Any 3) (3)

2.7.3 Problem of rotational grazing between camps of different size and nutrition

- The time ✓ that the animals spend in a small camp should be shorter and vice versa ✓

(2)

2.7.4 Reasons for resting camps

- The maximum production of grazing material can then take place ✓
- Mature climax grasses can form seeds ✓
- Young plants can get the opportunity to establish themselves ✓
- Further root development can take place
- Plants can recover after grazing ✓
- Prevent overgrazing ✓

(Any 3) (3)

2.8 Soil properties**2.8.1 Soil colour**

- Red / yellow soils have good drainage ✓ and crops will grow well if sufficient water is available ✓
- Dark / brown soils are rich in organic matter ✓ and have a natural 'fertility' making them good for crop production ✓
- Grey soils are waterlogged soils ✓ and not good for crop production ✓

(Any 2 x 2)

(4)

2.8.2 Soil texture

- Sandy soils have a fast infiltration ✓ rate but does not hold water ✓ – soil will produce well if enough rainfall present ✓
- Sandy soils are less fertile than clay soils and more fertilisers ✓ need to be added to sandy soils than to clay soils ✓ to obtain good production ✓
- Clay soils have a slow infiltration ✓ and hold water better ✓ – good for production ✓
- Clay soils are also more fertile ✓ because of nutrients retained ✓ – good for production ✓

(Any 2 x 3)

(6)

2.9 Soil pollution**2.9.1 Soil degradation**

- A too high concentration of pesticides will kill soil organisms (bacteria/earthworms) ✓
- Infertility of soil leads to bare areas and no vegetation ✓
- Contribute to loss of ecosystems ✓

(Any 2)

(2)

2.9.2 Water pollution

- A too high concentration of pesticides from the polluted soil drain ✓ into the ground water and cause pollution of the ground water ✓
- Pesticides drift can pollute water sources ✓

(Any 2)

(2)

2.10 Use of animal traction on the farm

- Ploughing ✓
- Pulling a cart to deliver lick/transport material etc. ✓
- Gathering and counting livestock/checking fences ✓
- Transporting people ✓

(Any 2)

(2)

[50]

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

- 3.1 **FOUR aspects a farmer should consider in conducting a market survey**
- Location of the market /demographic of the market ✓
 - The products that consumers need ✓
 - The price consumers are willing to pay for the product ✓
 - Expectations of the consumers on the product you are producing ✓
 - Competitors producing the same product ✓
- (Any 4) (4)
- 3.2 **Agricultural businesses**
- 3.2.1 **Primary agricultural sector**
- Vegetables ✓
 - Dairy ✓
- (2)
- 3.2.2 **Secondary agricultural sector**
- Agritourism ✓
 - Abattoirs ✓
- (2)
- 3.2.3 **Tertiary agricultural sector**
- Feed companies ✓
 - Irrigation supplier ✓
- (2)
- 3.3 **Comparison of free and cooperative marketing**
- 3.3.1 • Less bargaining power ✓ (1)
- 3.3.2 • High marketing costs ✓ (1)
- 3.3.3 • Less protection ✓ (1)
- 3.3.4 • High bargaining power ✓ (1)
- 3.3.5 • Low marketing costs per unit ✓ (1)
- 3.3.6 • More protection ✓ (1)
- 3.4. **Need for finance in the process of selling produce**
- For transport costs ✓
 - For storage costs ✓
 - For labour costs ✓
- (Any 2) (2)
- 3.5 **Price determination**
- Cost ✓ – it determines the minimum price that one can sell produce to make a profit. ✓
 - Demand ✓ – the higher the demand for a specific product, the higher the price will be and vice versa. ✓
 - Competition ✓ – competitive products will have an influence on the price. ✓
- (6)

3.6 Supply and demand

- It is best to supply the market with your product when demand ✓ for the product is high ✓ and the supply ✓ from other producers is low ✓ in order to collect the highest possible market price. (4)

3.7 Crop production budget

3.7.1 Definition of a budget plan

- It is a plan of the future income and expenses of a business ✓ ✓ (2)

3.7.2 Crop production budget: Missing values

- (a) R80,00 ✓
- (b) R85,00 ✓
- (c) R1 600,00 ✓
- (d) R10 012,00 ✓
- (e) R22 500,00 ✓ (5)

3.7.3 Calculate the profit or loss

- Profit/ loss= total income minus total expenses (Formula) ✓
- Profit/ loss=R22 500–R10 012 ✓ (CA-marking)
- Profit/loss = R12 488 ✓ (profit) because the expenses are less than the income. ✓ (Unit must be indicated) (4)

3.7.4 Basic elements of a budget

- Estimated income for a certain period ✓
- Estimated cost/expenditure to obtain it ✓ (2)

3.8 List of farming enterprise records

Production record	Physical record	Financial record
• Crop yield per ton of fertilizer. ✓	• Workshop tool inventory ✓	• Cash flow ✓
• Number and condition of young animals born ✓	• Stock of seeds for the next planting season ✓	• Workshop tool inventory ✓

(5)

3.9 Balance sheet

3.9.1 Increase in asset

- Land and building: ✓ Fixed assets will grow in value over time with normal maintenance ✓
- Livestock: ✓ There could be an increase in livestock numbers ✓
- Cash ✓ Selling more products/obtain higher prices for products ✓ (Any 1 x 2) (2)

3.9.2 Increase in liability

- Accounts payable ✓ (1)

3.9.3 Reason for lower value

- Depreciation ✓ (wear and tear/old) (1)

[50]

QUESTION 4: HARVESTING, PROCESSING, MANAGEMENT AND AGRITOURISM**4.1 Farm Management****4.1.1 Reasons for planning**

- Change in resource patterns✓ – how resources are available and the balance between these resources requires new planning✓
- Change in technological and biological relations✓ – new technology used required new planning✓
- Change in prices✓ – higher input costs require new planning regarding products produced. ✓
- Risks and uncertainties✓ – Review is a continual process, some aspects are beyond the farmers control and requires review. ✓ (Any 3 x 2) (6)

4.1.2 Steps in the planning process

- Formulate objectives and goals. ✓
- Collect information. ✓
- Analyse information. ✓
- Develop alternatives✓
- Choose between alternatives. ✓
- Implementation and evaluation✓. (6)

4.2 Reasons for employer/employee contract

- It is a legal requirement✓
- Establish legal agreement✓
- Protects the right of both parties✓
- Formally defines terms of employment✓
- It can be referred to if a dispute arises✓
- Defines what is expected (job description) ✓
- Contains the basic conditions of employment✓ (Any 5) (5)

4.3 Storage of agricultural products**4.3.1 Temperature**

- Must be cool /suitable temperature ✓ (1)

4.3.2 Ventilation

- Must be sufficient air circulation/enough oxygen/low carbon dioxide levels ✓ (1)

4.4 Food processing**4.4.1 Aim of processing food**

- To bring high quality food / Prevent spoiling or decay/longer shelf-life ✓✓
- Value adding / Higher prices ✓✓ (2)

4.4.2 Discuss THREE disadvantages of processing

- Difficult to acquire capital to start new venture ✓
- New products compete with established products ✓
- Lack of expertise by the farmer in a competitive market ✓
- Change in physical appearances and taste ✓ (Any 3) (3)

- 4.4.3 **THREE requirements of Ideal packaging material**
- Light weight ✓
 - Transparent ✓
 - Easily opened and closed ✓
 - Non-toxic ✓
 - Hygienic ✓
 - Adjustable with food ✓
 - Protection of the product ✓
 - Tamperproof ✓
 - Easy to print or labelling ✓
 - Resistant to mechanical and thermal damage ✓
 - Environmentally friendly ✓
 - Cost effective ✓
 - Easily disposable ✓
- (Any 3) (3)
- 4.4.4 **Types of packaging material**
- Rigid ✓
 - Semi-rigid ✓
 - Flexible ✓
- (Any 2) (2)
- 4.5 **Food safety**
- 4.5.1 **Food handling strategies**
- Regular monitoring and surveillance by health authority ✓
 - Management of food handling process ✓
- (Any 1) (1)
- 4.5.2 **Principles of health in food handling**
- Education and training ✓
 - Reporting of illness/health interviews ✓
 - Management commitment ✓
- (Any 2) (2)
- 4.6 **Value adding methods**
- 4.6.1 Meat – graded, ✓ cuts, ✓ dried ✓ and packed ✓ (4)
- 4.6.2 Wool – sheared, ✓ graded, ✓ packed ✓ (3)
- 4.6.3 Grains – graded, ✓ milled, ✓ packed, ✓ baked ✓ (4)

4.7 Agritourism**4.7.1 Reasons behind the positive increase in the agritourism**

- People are looking for new experiences/adventure/recreation/ uncomplicated life/less technology. ✓
- It is local therefore people can spend more money because travelling costs are reduced. ✓
- Parents want children to experience the country life/get educated in farm life. ✓
- Farmers diversify- reducing risks ✓
 - increase income ✓
 - optimize use of resources ✓
- Farmers can enjoy sharing farm lifestyle with other people/meet interesting people/socialize more. ✓

(Any 4) (4)

4.7.2 Agritourism contributes to the economic objectives of the country

- Jobs are created /increase employment ✓
- Training is provided and people are empowered. ✓
- Communities benefit from the development/living conditions are improved/ transport services/vegetable gardens/ entrepreneurial possibilities ✓
- Conservation of resources takes place ✓
- Increasing revenue of the area and/or country ✓

(Any 3) (3)

[50]

TOTAL SECTION B: 150
GRAND TOTAL: 200