



basic education

Department:
Basic Education
REPUBLIC OF SOUTH AFRICA

**NATIONAL
SENIOR CERTIFICATE**

GRADE 12

AGRICULTURAL MANAGEMENT PRACTICES

NOVEMBER 2022

MARKING GUIDELINES

MARKS: 200

These marking guidelines consist of 15 pages.

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

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

(10 x 2) (20)

1.2 Matching items

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

(10 x 2) (20)

1.3 Agricultural terms

- 1.3.1 Processing ✓
- 1.3.2 Insurance ✓
- 1.3.3 Control ✓
- 1.3.4 Capital ✓
- 1.3.5 Farm-gate ✓

(5 x 1) (5)

1.4 Underlined words

- 1.4.1 Records ✓
- 1.4.2 Labour / Workers ✓
- 1.4.3 Planters / Seed drill ✓
- 1.4.4 Financial records ✓
- 1.4.5 Target market ✓

(5 x 1) (5)

TOTAL SECTION A: 50

QUESTION 2: PHYSICAL FARM PLANNING**2.1 Effect of Covid-19 on productivity of farm workers**

- The productivity decreases ✓
because:
 - Absence from work due to illness ✓
 - Time off from work to treat the illness ✓
 - Time off from work due to exposure to the disease (quarantine) ✓
 - Low labour effectiveness because of low energy levels ✓
 - Healthy workers must work overtime ✓
- (Any 2) (3)

2.2 Capital**2.2.1 Acquire practical experience**

- Work at a farm that produces the product ✓
 - Volunteer at a farm that produces the product ✓
 - Attend training courses ✓
 - Use consultants to help on first time bases ✓
- (Any 1) (1)

2.2.2 TWO sources of finance and disadvantages

SOURCE OF FINANCE	DISADVANTAGE
Personal funds: investments ✓	Limited availability ✓ If investment is used, future value decreases ✓
Loan from relatives and friends ✓	Possible misunderstanding regarding the reason for the loan / Challenges in repaying ✓ Unhappiness or discomfort between family and/or friends ✓
Money from investors (shareholders) ✓	Limited freedom to use as you please ✓
Money loaned from bank (overdraft facility) ✓	Can only be borrowed against certain goods ✓ OR Interest rate can be high ✓
Credit against goods (production) ✓	Project can fail, forcing farmer into debt ✓
Allowances/grants ✓	Can be stopped at any time or may not pay out on a regular basis ✓ Inadequate to expand business ✓

(Any 2 x 2) (4)

2.2.3 THREE advantages of agritourism for the farmer

- Offers higher marketing value for the farmer's products ✓
 - Improve cash flow / High income ✓
 - Provides diversification on the farm ✓
 - Establishment of additional facilities increases the value of the farm ✓
 - Can use parts of the farm that has never been productive, mountainsides,
rivers, etc. ✓
- (Any 3) (3)

2.3 THREE elements that can be found on a soil map

- Chemical elements ✓ that describes the mineral composition of the soil, pH and soil reaction ✓
 - Physical elements ✓ that describes the texture, structure, colour, depth of the soil and water content ✓
 - Morphological elements ✓ describe the landform, soil profile and underlying rock ✓
 - Topographical elements ✓ describe the slope and height above sea level ✓
- (Any 3 x 2) (6)

2.4 Soil erosion preventative measures

- 2.4.1 Contour ridges ✓ (1)
- 2.4.2 Windbreakers ✓ (1)
- 2.4.3 Cover crop ✓ (1)
- 2.4.4 Zero-cultivation ✓ (1)
- 2.4.5 Terraces ✓ (1)

2.5 Soil reaction

2.5.1 Type of soil at pH 10

- Brackish soil/Alkaline (Base) soils ✓ (1)

2.5.2 pH value at which most nutrients are available to plants

- 6 ✓ (1)

2.5.3 Influence of low pH and high pH on the availability of plant nutrients

- In slightly acidic soils, nutrients are more available for plant use ✓
- In slightly alkaline soils, nutrients are less available ✓
- In very high or very low pH very little nutrients are available ✓ (Any 2) (2)

2.5.4 Substance a farmer adds when the soil has high pH

- Gypsum/Calcium sulphate (CaSO_4) ✓ (1)

2.5.5 Substance a farmer adds when the soil pH is low

- Agricultural lime/Calcium carbonate (CaCO_3) ✓
- Dolomitic lime ✓
- Calcitic lime ✓ (Any 1) (1)

2.6 Daily feed intake

- Daily feed intake = animal mass x 2,3%
= 650 kg x 2,3% ✓ **OR** 650 kg x 0,023
OR 650 kg x (2,3÷100)
= 14,95 kg
= 15 kg ✓ (2)

2.7 Consequences of cultivating an uncovered, fine seedbed

- The production ability decreases ✓
because:
 - Soil temperatures are much higher ✓
 - Wind erosion can take place ✓
 - Water erosion can take place ✓
 - Reduce water infiltration ✓
 - Soil water less available ✓
 - Soil carbon is lost to the atmosphere as CO₂ ✓
- (Any 2) (3)

2.8 Distinguish between subsistence farming and commercial farming

	SUBSISTENCE FARMING	COMMERCIAL FARMING
Risk	High / Low ✓	Low / High ✓
Capital investment	Small / Low ✓	Large / High ✓
Management skill	Small / Low ✓	Large / High ✓

(6)

2.9 Farming technique**2.9.1 Identification of farming technique**

- Precision farming ✓
- (1)

2.9.2 Precision-farming devices in the scenario

- GPS device ✓
 - VRT device ✓
- (Any 1) (1)

2.9.3 FOUR advantages of precision farming

- Compare yield information from different areas after harvesting ✓
 - Identify poor spots in field ✓
 - Prevent wastage of inputs ✓
 - Differential fertilisation/irrigation ✓
 - Monitoring of production while crops are being harvested ✓
 - Lower input costs / Higher profit ✓
- (Any 4) (4)

2.9.4 Other precision farming devices not in scenario

- GIS maps ✓
 - Yield monitors ✓
 - Drone ✓
 - Computerized equipment/programs ✓
 - Multi-spectrum cameras ✓
- (Any 2) (2)

2.10 Agritourism**2.10.1 The production enterprise from scenario**

- Agritourism ✓ (1)

2.10.2 Obtain information

- Orally ✓
 - Questionnaire ✓
 - Rating on electronic media (Facebook; cell phone) ✓
 - Comment/complain book/box ✓ (Any 2) (2)
- [50]**

**QUESTION 3: BUSINESS PLANNING, ENTREPRENEURSHIP, MARKETING,
PRICE DETERMINATION AND THE MANAGEMENT PROCESS****3.1 Advantages of good planning**

- Planning focus on aims and objectives ✓
 - Efficiency increases ✓
 - Change is quickly observed ✓
 - Guarantee smoothly running of the farm ✓
 - Necessary norms and standards are established and maintained ✓
 - Farmer's insight improved ✓
 - Tasks on the farm can be coordinated ✓
 - Becomes easier to identify and delegate group tasks ✓
- (Any 3) (3)

3.2 Human relationship skills of an entrepreneur

- Negotiation skills ✓
 - Communication skills ✓
 - Interpersonal skills ✓
 - Maintains good human relations ✓
 - Good leadership ✓
 - Good management skills ✓
- (Any 2) (2)

3.3 Business plan**3.3.1 Components of the business plan that must be altered**

- Product description ✓
 - Market analysis ✓
 - Financial plan ✓
 - Operational plan / Management plan ✓
 - SWOT-analysis ✓
 - Risk-analysis ✓
 - Infrastructure analysis ✓
 - Appendixes / Addendums ✓
- (Any 4) (4)

3.3.2 Discuss factors to consider when starting the new enterprise

- The ease of incorporating the new enterprise into the existing enterprise ✓
 - The profit margin of the new product ✓
 - The availability of resources ✓
 - The management skills of the farmer ✓
 - The marketing possibilities of the new product ✓
 - The training of workers ✓
 - The risks starting a business ✓
- (Any 3) (3)

3.4 Marketing**3.4.1 Marketing chain**

- Marketing chain/Agri-business chain ✓
- (1)

3.4.2 TWO factors that may hamper the marketing of the product at stage D

- Spoilage ✓
- Perishability ✓
- Lack of storage facilities ✓
- Inadequate transport methods ✓
- Accidents ✓
- Theft ✓
- Price ✓

(Any 2) (2)

3.4.3 TWO actions to improve the marketing chain

- Improving access to market information ✓
- Improving road infrastructure ✓
- Providing storage facilities to prevent oversupply ✓
- Provision of access to finance ✓
- Use of refrigerated transport to prevent spoilage ✓

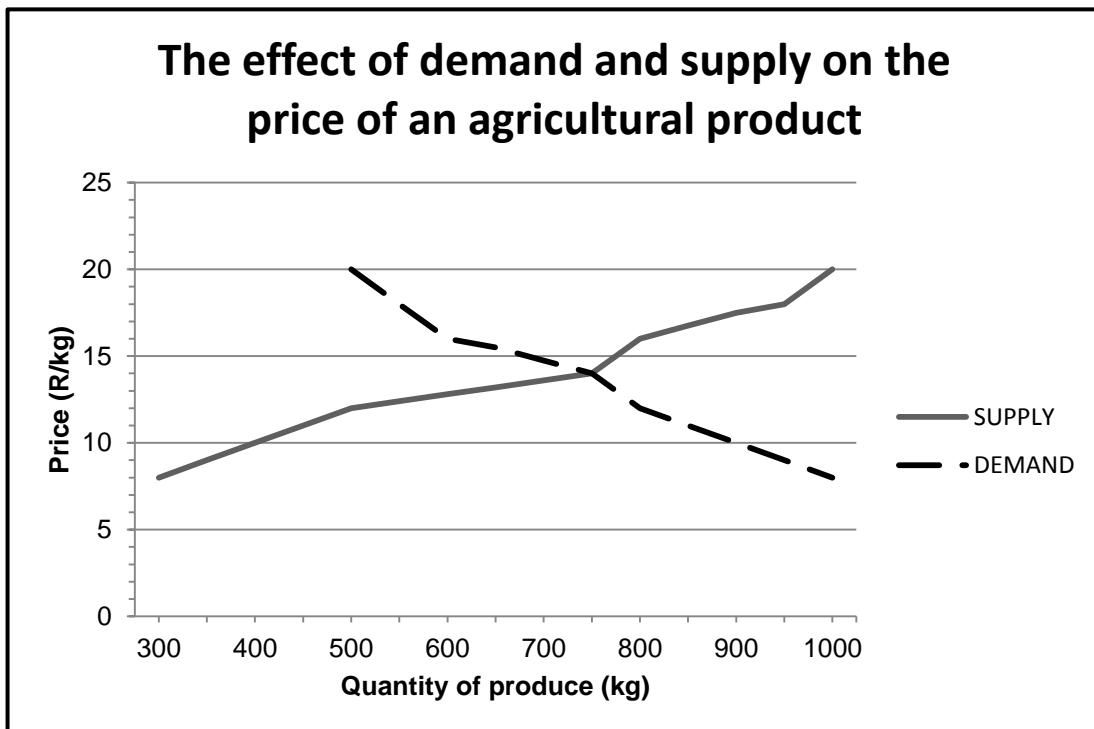
(Any 2) (2)

3.5 FOUR marketing functions

- Transport ✓
- Storage ✓
- Packaging ✓
- Preservation and food safety ✓
- Marketing information ✓
- Processing ✓
- Financing and risk taking ✓
- Selling ✓
- Standardization and grading ✓

(Any 4) (4)

3.6 Produce supply and demand
3.6.1 Supply and demand for an agricultural product



Marking rubric

- Correct heading ✓
 - X-axis (Quantity kg), Y-axis (Price R/kg) – labelled and correct calibration ✓
 - DEMAND accuracy starting point ✓ following of values end of graph ✓
 - SUPPLY accuracy starting point ✓ following of values end of graph ✓
- (6)

3.6.2 Equilibrium price for the product

- R14,00 ✓
- (1)

3.6.3 Deduction on availability and price of product

- Demand doubles at price R18,00:
Demand = previous demand x 2
= 550 x 2
= 1 100 kg ✓
- Supply increases by 20% at price R18,00:
- Supply increase:
Increase = % x number
= 20/100 x 950 kg **OR** 20% x 950 kg **OR** 0,2 x 950 kg
= 190 kg ✓

Supply at R 18,00 + 20% increase:
Total supply = 950 kg + 190 kg
= 1 140 kg ✓

OR

- Supply at R18,00 + 20% increase:
Total = % x amount + number
= (20/100 x 950 kg) ✓ + 950 kg = 1 140 kg ✓ **OR**
= (20% x 950 kg) ✓ + 950 kg = 1 140 kg ✓ **OR**
= (0,2 x 950 kg) ✓ + 950 kg = 190 kg + 950 kg = 1 140 kg ✓
(Any 1 x 2)

Availability

- There will be a small over-supply of the product ✓
- Supply outstrips demand ✓ (Any 1)

○ **Price**

- The price will decrease slightly ✓ (5)

3.7 Marketing system**3.7.1 The marketing system shown in the diagram**

- Free-marketing system ✓ (1)

3.7.2 Comparison of the free marketing system to cooperative marketing

- Free-market system – less price stability ✓
- Co-operative marketing – more stable prices ✓ (2)

3.7.3 Influence of the Consumer Protection Act (Act 68 of 2008)

- It promotes a fair, accessible, and sustainable marketplace ✓
- for consumer products and services ✓ (2)

3.8 Farm management**3.8.1 Definition of farm management**

- The effective combination/coordination of resources ✓ to achieve a specific goal/maximise profit ✓ (2)

3.8.2 Steps to achieve effective control of workers

- Setting standards ✓
- Measuring achievements ✓
- Evaluating achievements ✓
- Corrective measures ✓ (Any 2) (2)

3.9 Employment contract**3.9.1 Basic conditions of Employment Act (Act 75 of 1997)**

- Working hours ✓
- Conditions for termination of service ✓
- Wages/salaries ✓ (Any 1) (1)

3.9.2 Labour Relations Act (Act 66 of 1995)

- Promotes the peace and democracy in the workplace ✓
- Promotes economic development and social justice ✓
- Affiliation to trade unions and right to strike ✓ (Any 1) (1)

3.9.3 Skills Development Act (Act 97 of 1998)

- Intended to develop the skills of the workforce ✓
- Thereby developing work prospects and quality of life ✓ (Any 1) (1)

3.9.4 Extension of Security of Tenure Act (Act 62 of 1997)

- Provides for legal process through which a landowner can issue an eviction order against an employee ✓
- The farmer can be prosecuted if the employee has been illegally evicted from the farm ✓
- Security of resident farm workers ✓ (Any 1) (1)

3.10 Motivation through communication

- Communicate the aims and objectives to the workers and make sure that they understand them ✓
- Communicate the qualitative and quantitative standards of work expected ✓
- Communicate goals and objectives by setting a personal example with regards to behaviour and training ✓
- Communicate that the workers are fully responsible for their actions ✓ (Any 2) (2)

3.11 Main purpose of farm product advertising

- Inform people about new products ✓
- Persuade people to buy the product ✓
- Inform people about special offers ✓ (Any 2) (2)

[50]

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

- 4.1 **Type of budget**
- 4.1.1 **Add processing unit**
- Capital budget ✓
 - Extension budget ✓
 - Development budget ✓
- (Any 1) (1)
- 4.1.2 **Seasonal workers**
- Labour budget ✓
- (1)
- 4.1.3 **Flow of money**
- Cash flow/Cash budget ✓
- (1)
- 4.1.4 **Combined processing units**
- Whole farm budget ✓
- (1)
- 4.2 **THREE main features of a cash-flow budget**
- Indicate the flow of money in and out of an account ✓
 - Income and expenses are recorded in the actual month in which they occur, as opposed to the different activities ✓
 - The time slot in which cash is received or issued will affect the bank balance ✓
 - It is usually set for a season or one year ✓
- (Any 3) (3)
- 4.3 **Payslip farm worker**
- 4.3.1 **PAYSLIP - Permanently employed or a casual worker**
- Permanently employed ✓
- Reasons:**
- Date employed is 2015-08-01 ✓
 - Pay period is a full month ✓
 - Worker receives overtime ✓
 - Worker gets a salary not a wage ✓
- (Any 2) (3)
- 4.3.2 **PAYSLIP - Benefits from the deduction of UIF**
- In the event of losing his/her salary ✓ the farm worker can claim from the UIF-fund of the government ✓
- (2)

4.3.3 **PAYSLIP - Overtime earned**

- Overtime = hours worked x rate/hour x double time for public holiday
= (8 hours x R61,08/hour) ✓ x 2 ✓ = R977,28 ✓

OR 16 hours ✓ x R61,08/hour ✓ = R977,28 ✓

OR R122,16 ✓ x 8 ✓ = R977,28 ✓

OR R61,08 x 2 ✓ = R122,16 ✓ R122,16 x 8 = R977,28 ✓

OR R61,08 x 8 = R488,64 ✓ R488,64 x 2 ✓ = R977,28 ✓ (3)

4.3.4 **PAYSLIP - Gross earnings**

- Gross earnings = Basic salary + Overtime
= R10 750,00 ✓ + R 977,28 ✓ (CA)
= R11 727,28 ✓

(3)

4.4 **Record keeping**

	HANDWRITTEN NOTES	COMPUTER
Amount of data	small / less ✓	large / more ✓
Precision farming	not possible / difficult ✓	possible / easy ✓
Access to information	difficult / slow ✓	easy / fast ✓

(6)

4.5 **THREE disadvantages of mechanical harvesting**

- Expensive ✓
- Specialised ✓
- Requires maintenance ✓
- Capital intensive ✓
- Job losses ✓
- Skilled labourers needed ✓
- Selective harvesting not possible ✓
- May cause damage to produce ✓

(Any 3) (3)

4.6 **Labelling of processed agricultural product**

4.6.1 **THREE aspects that proves product adheres to the labelling law.**

- The brand name ✓
- Description of content ✓
- Serving suggestions ✓
- Name and street address of manufacturer ✓
- List of ingredients ✓
- Best before date ✓

(Any 3) (3)

4.6.2 **ONE aspect not on the label**

- Nutritional information ✓
- Amount of the product ✓
- Warning for allergies ✓
- Preservatives used ✓
- Date expire / Date manufacture ✓

(Any 1) (1)

4.6.3 Meaning of the BEST BEFORE END date

- The flavour and texture of the food might not be good after this date ✓
- The BEST BEFORE END date is about quality and not safety ✓
- The food will be safe to eat after this date but may not be at its best ✓

(Any 2) (2)

4.6.4 Profitable to add a society's logo to the label of a product

- People belonging to these societies or approving of these societies believes will have confidence in the product and buy ✓ it without hesitation, thus increased sales, and increased profit ✓
- It is a good marketing ✓ strategy and will therefore increase sales and thus increase profit ✓

(Any 1 x 2) (2)

4.7 Packaging material

4.7.1 TWO containers that will be difficult to decompose

- Plastic punnet ✓
- Woven nylon bag ✓

(2)

4.7.2 Describe to decrease the negative environmental impact of packaging materials

- Replace plastic with carton ✓
- Consumer brings own packaging ✓
- Use packaging that is made from recycled material ✓
- Print instruction about the correct disposal/reuse of the packing material on the packaging ✓

(Any 3) (3)

4.8 Differences between pasteurisation and sterilisation

	PASTEURISATION	STERILISATION
Elimination of microbes	Partial / Less ✓	Total / More ✓
Impact on nutritional qualities	Low ✓	High ✓
Storage	Low temperature (refrigeration) ✓ Less suitable on the long term ✓	Room temperature (pantry) ✓ More suitable on the long term ✓

(6)

4.9 Purpose of drying food

- Is to lower their moisture content ✓ to a particular level
- that will inhibit the growth of micro-organisms ✓
- To extend shelf life ✓

(Any 2) (2)

4.10 **TWO other advantages of blanching**

- Helps to stabilise the colour, flavour and texture ✓
- It softens vegetables and makes them
 - quicker to cook ✓
 - easier to pack ✓
- To extend shelf life ✓

(Any 2) (2)
[50]

TOTAL SECTION B: 150
GRAND TOTAL: 200