



basic education

Department:
Basic Education
REPUBLIC OF SOUTH AFRICA

**NATIONAL
SENIOR CERTIFICATE**

GRADE 12

AGRICULTURAL MANAGEMENT PRACTICES

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MARKING GUIDELINES

MARKS: 200

These marking guidelines consist of 11 pages.

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

1.1.1 C ✓✓

1.1.2 B ✓✓

1.1.3 A ✓✓

1.1.4 B ✓✓

1.1.5 D ✓✓

1.1.6 A ✓✓

1.1.7 B ✓✓

1.1.8 D ✓✓

1.1.9 A ✓✓

1.1.10 B ✓✓

(10 x 2) (20)

1.2 Matching items

1.2.1 H ✓✓

1.2.2 L ✓✓

1.2.3 G ✓✓

1.2.4 A ✓✓

1.2.5 I ✓✓

1.2.6 D ✓✓

1.2.7 J ✓✓

1.2.8 K ✓✓

1.2.9 C ✓✓

1.2.10 B ✓✓

(10 x 2) (20)

1.3 Agricultural terms

1.3.1 Diversification ✓

1.3.2 Soil conservation ✓

1.3.3 Communication ✓

1.3.4 Liabilities ✓

1.3.5 Receipt ✓

(5 x 1) (5)

1.4 Underlined words

1.4.1 Deposit ✓

1.4.2 Design ✓

1.4.3 Processing ✓

1.4.4 Supply ✓

1.4.5 Smoking ✓

(5 x 1) (5)

TOTAL SECTION A 50

QUESTION 2: PHYSICAL FARM PLANNING**2.1 Resources – Water****2.1.1 Main source of water for farmer**

- Rainfall ✓ (1)

2.1.2 Factors that determine the effectiveness of rainfall

- Rainfall intensity/tempo of rainfall/how hard it rain ✓
- Tempo of evaporation ✓
- Seasonal distribution ✓
- Reliability during season ✓
- Soil condition ✓
- Topography (slope) ✓
- Soil type (structure & texture (sand/clay)) ✓
- Frequency of rainfall ✓
- Amount of rain ✓ (Any 4) (4)

2.2 Veld deterioration**2.2.1 Effect of trampling on feed available in a camp**

- Feed/grazing damage ✓ thus less feed/grazing will be available ✓
- Decreasing in the carrying capacity ✓ and less animals can be kept ✓
(Any combination of the above 2) (4)

2.2.2 Methods to overcome the feed factor during the calving season

- Give extra feed to animals ✓
- Reduce the number of breeding animals ✓
- Storing of feed ✓
- Remove animals earlier (wean calves while enough feed is available) ✓
(Any 2) (2)

2.3 Law of diminishing return**2.3.1 Agricultural term for the relationship illustrated on the graph**

- Law of diminishing return ✓ (1)

2.3.2 Description of the term marginal yield

- The profitable income obtained ✓
- Above the normal yield increase ✓
- For each of the extra input ✓ (3)

2.3.3 Implications of the point marked A on the graph

- Point where the amount of inputs ✓
Will result in no extra profitable income ✓
- From this point on, the farmer will start to lose money ✓
Even with higher/increased yields ✓ (4)

2.4 Planning utilization of camps

- 2.4.1 G ✓ (1)
- 2.4.2 C ✓ (1)
- 2.4.3 F ✓ (1)
- 2.4.4 A ✓ (1)

2.5 Resources – Capital

2.5.1 The main sources of capital for a farm business

- Production capital ✓ – capital quickly obtained ✓ when goods are sold ✓
- Savings ✓ – farming profits of previous seasons ✓ that accumulate in a bank and are used as capital ✓
- Credit ✓ – overdraft, loans or credit facility ✓ that must be paid back within a certain time ✓
- External sources ✓ – investors, inheritance, grants etc. ✓
(Any 2 + explanation) (6)

2.5.2 Problems related to capital as a production factor

- Capital is scarce ✓
- Capital is expensive, because of high interest rates ✓
- High risks involved ✓
- Over capitalisation can occur ✓
- Under capitalisation can occur ✓
- Insufficient collateral ✓
- Additional expenditure for capital ✓ (Any 3) (3)

2.6 Comparison of planters

| ASPECT | CONVENTIONAL PLANTER | NO-TILL PLANTER |
|-------------------|--|--------------------------------------|
| Cost of planter | Cheaper/Lower cost ✓ | Expensive/Higher cost ✓ |
| Cultivation costs | High cultivation costs ✓ | Lower cultivation costs ✓ |
| Traction required | Less traction/smaller tractor needed ✓ | Greater pull/bigger tractor needed ✓ |

(6)

2.7 Factors that influence drift of spray

- Droplet size ✓
- Pressure ✓
- Wind speed ✓
- Temperature ✓
- Humidity ✓
- Speed of implement ✓
- Applicator height from crop ✓ (Any 3) (3)

2.8 Challenges of agritourism in rural areas

- Low returns on high development cost ✓
- Low demand ✓
- Lack of essential skills ✓
- Dominance of mass tourism operators ✓
- Poor infrastructure ✓

(Any 3) (3)

2.9 Niche markets

- Small market segment ✓
- Target specific clients/customers ✓
- Higher price range ✓
- Specialised product ✓

(Any 3) (3)

2.10 Aspects to consider in buying used implements

- Price in relation to a new one ✓
- Condition of the implement ✓
- Cost to repair or maintain the implement ✓
- Possible expansion ✓
- Does it fit in with existing equipment/conditions ✓

(Any 3) (3)
[50]

QUESTION 3: BUSINESS PLANNING, ENTREPRENEURSHIP, MARKETING, PRICE DETERMINATION AND THE MANAGEMENT PROCESS**3.1 Main types of resources on business plan**

- Human resources ✓ (1)
The human resources available/needed in the new business venture should be mentioned ✓ (1)
- Financial resources ✓ (1)
 - Fixed capital/infrastructure needed/available ✓
 - Floating capital needed/available ✓
 - Own capital available to help you start your business ✓ (Any 1) (1)
- Natural resources ✓ (1)
Availability of water and land will determine the size of your enterprise ✓ (1)

3.2 Farming system and entrepreneurship

- Commercial farming ✓ (1)
- Reasons**
- Food productions need to be increased as the world population keep on increasing ✓✓
 - Ecological agriculture needs to be taken into account as resources need to be protected ✓✓
 - Precision production as more food need to be produced from a smaller area ✓✓
 - Diversification of production and products are important as it decrease the risk ✓✓
 - Greater global competition provides the opportunity to export products ✓✓ (Any 2) (4)

3.3 Production costs**3.3.1 Value of the break-even-point**

$$\begin{aligned} \text{BEP} &= \frac{\text{fixed cost}}{\text{price} - \text{variable cost}} \\ &= \frac{\text{R6 500}}{\text{R3 500} - \text{R1 000}} \checkmark \\ &= 2,6 \text{ ton/ha} \checkmark \end{aligned}$$

(2)

3.3.2 Break-even-point

- It is the number of units that must be sold at a given price ✓
- That the total income of the farm/enterprise is equal to the total expenditure of the farm/enterprise ✓
- If sales are higher than the break-even-point, the farm makes a profit ✓
- If sales are lower than the break-even-point, the farm makes a loss ✓
(Values of QUESTION 3.3.1 can be used in the explanation) (4)

3.3.3 Profit

- profit = (yield × price) – (BEP × price)
= (4 × R3 500)✓ – (2,6 × R3 500)✓
= R4 900/ha✓

OR

- selling = 4 × R3 500
= R14 000✓
- cost = 2,6 × R3 500
= R9 100✓
- profit = R14 000 – R9 100
= R4 900/ha✓

(CA)

(3)

3.4 Amount of product bought

- The price of the product ✓
- The need for the product ✓
- The preferences of consumers / quality of product ✓
- The buying power of consumers ✓
- The number of consumers ✓
- The range of products available to the consumer ✓
- The price of competitive products ✓
- External factors like pandemonium among consumers ✓

(Any 4)

(4)

3.5 Reasons for advertising

- To inform people about the product and services available/rendered ✓
- To persuade people to buy the product or use the services ✓
- To offer special offers ✓

(3)

3.6 Marketing strategies**3.6.1 Target market**

- The specific customers you intend to attract/target ✓✓

(2)

3.6.2 Competition

- Producers selling the same product / rendering the same service ✓✓

(2)

3.6.3 Distribution

- How to get the product from the producer to the customer marketing goals ✓✓
- Plan how far you intend to grow with regard to sales, profits and customer satisfaction ✓✓
- Give information on methods and timeframe of distribution ✓✓ (Any 1)

(2)

3.7 Distinguish between diversification and specialisation

| | DIVERSIFICATION | SPECIALIZATION |
|------------|---|---|
| Implements | More implements of different kinds needed More expenses to buy and maintain different implements ✓ | Less implements of different kinds needed Less expenses to buy and maintain different implements ✓ |
| Management | Difficult – knowledge of more than one production areas/Difficult to become an expert ✓ | Simple – knowledge of only one production area needed/Easy to be an expert ✓ |

(4)

3.8 Labour legislation**3.8.1 Worker conduct and action**

- Compensation for Occupational Injury and Diseases act ✓

(1)

3.8.2 Action taken against worker

- Disciplinary action ✓

(1)

3.8.3 THREE disciplinary steps

- Workers must know the actions to be taken against them ✓
- Must refer to the offence and not to the worker ✓
- Taken as soon as possible after the offence ✓
- Must always be consequent / consistent ✓
- Action must be related to the offence ✓
- Should not interfere with the working relationship ✓

(Any 3)

(3)

3.9 Achievements made through motivation of farm workers by the farm manager

- Leads to higher productivity ✓
- Builds self confidence ✓
- Promote feeling of well-being ✓
- Workers feel more appreciated ✓
- Workers feel part of the management team ✓

(Any 3)

(3)

3.10 Reasons for training farm workers

- It can lead to promotion / more tasks ✓
- Can do different/more tasks ✓
- To increase the knowledge and skills of the workers ✓
- Time saving as workers can do the required job quicker ✓
- Saves on repairs as workers know how to correctly use equipment ✓
- Leads to higher productivity/efficiency ✓

(Any 3)

(3)

3.11 Psychological needs of farm workers

- Acceptance by others ✓
- Being appreciated ✓
- Being acknowledged ✓
- Self-fulfilment ✓

(Any 2)

(2)

[50]

QUESTION 4: FINANCIAL PLANNING, RECORDING, HARVESTING, VALUE ADDING, AND PACKAGING**4.1 Draw-up a budget**

| EXPECTED EXPENSES | | | |
|--------------------------|-----------------|---------------------------|------------------------|
| ITEM | QUANTITY | PRICE PER UNIT (R) | TOTAL PRICE (R) |
| Seed | 2 kg | 400,00 | 800,00✓ |
| Fertilizer | 850 kg | 80,00/50 kg | 1 360,00✓ |
| Transport | 17 bags | 5,00/50 kg | 85,00✓ |
| Wages | 2 workers | 400,00 | 800,00✓ |
| Packaging material | 1 500 | 1,50 | 2 250,00✓ |
| Transport to market | 6 trips | 300,00 | 1 800,00✓ |
| Total expenses | | | 7 095,00✓ |

(CA)

| EXPECTED INCOME | | | |
|------------------------|-----------------|---------------------------|------------------------|
| ITEM | QUANTITY | PRICE PER UNIT (R) | TOTAL PRICE (R) |
| Product | 1 500 boxes | 15,00 | 22 500,00✓ |
| | | | |
| | | | |
| Total income | | | 22 500,00✓ |
| Expected profit | | | 15 405,00✓ |

(CA)
(CA)
(10)**4.2 Balance sheet****4.2.1 Terminology****(a) Fixed Assets**

- The assets purchased for long-term use ✓ and
- are not likely to be converted quickly into cash, ✓

(b) Depreciation

- A reduction in the value of an asset over time ✓
- due to usage or age ✓

(c) Creditor

- A person or company to whom the farm owes money ✓✓

(6)

4.2.2 Analysing income statement

- To determine if the business is profitable ✓
- To determine if the business runs at a loss ✓
- If it runs at a loss – determine why and try to rectify the situation ✓
- It runs at a profit – determine how the profit can be increased ✓
- To compare budgeted values and to make changes to the budget ✓

(Any 2) (2)

4.3 THREE reasons for buying processed products

- Have a longer shelf life ✓
- Ease of handling ✓
- Ease of transportation ✓
- Easier to prepare for eating ✓
- Available out of season ✓
- Consumer preference ✓

(Any 3) (3)

4.4 The importance of grading the products

- To add value to the product ✓
- To obtain better prices at the market ✓
- To prepare product of uniform quality ✓
- To gain trust from the consumers ✓
- To standardize quality ✓
- Consumer preference ✓

(Any 3) (3)

4.5 Risk management**4.5.1 Manage the risk**

- It extend the original product shelf life ✓
- Value is added to product ✓
- Less chances of damage to the original product ✓
- More profit could be obtained ✓

(Any 3) (3)

4.5.2 Amount of profit per bottle

- Profit = selling price – break-even point
= R116,00 – R82,00 ✓
= R34,00 ✓

(2)

4.5.3 Exporting of fruit juice

- value = R16 ✓ x €12 ✓
= R192,00 ✓

OR value = R16/€1 ✓ x €12 ✓
= R192,00 ✓

(3)

4.5.4 Influence of exchange rate on profit

- Because of a weaker Rand, the income will increase ✓
- With a higher income it becomes more possible to expand ✓
- Less risk financing the expansion ✓

(Any 2) (2)

4.6 Harvesting of crops**4.6.1 Harvesting**

- Is the process whereby the produced products are removed/cut ✓
- and collected from the field/animal ✓ (2)

4.6.2 Advantages of harvesting by hand

- Relatively cheap ✓
- Less maintenance ✓
- Less damage ✓
- Products can be selected, ripe vs. non ripe products ✓ (Any 3) (3)

4.6.3 Purposes for which crops are used for:

- For selling ✓
- Food for animals/people ✓
- Ingredients in ... (medicine/cosmetics/household product) ✓
- Manufacturing ✓
- Processing ✓ (Any 4) (4)

4.7 Aspects considered when designing packaging material for agricultural products

- Cost effective ✓
- Type of the material ✓
- Protection of the product ✓
- Provide information to the consumers ✓
- Features to make it easy to handle ✓
- Easy to print on ✓
- Attract people's attention (trademark/product recognition) ✓
- Characteristics of the product ✓ (Any 3) (3)

4.8 Main causes of food spoilage

- Living micro-organisms on the food ✓
- The presence of enzymes in the food ✓
- Damage caused by insects/rodents ✓
- Wrong handling and harvesting of the products ✓
- Inadequate storage facilities/temperature ✓
- Exposure to air (oxidation) ✓ (Any 4) (4)

TOTAL SECTION B: 150
GRAND TOTAL: 200