



# basic education

---

Department:  
Basic Education  
**REPUBLIC OF SOUTH AFRICA**

## **SENIOR CERTIFICATE EXAMINATIONS**

**AGRICULTURAL MANAGEMENT PRACTICES**

**2018**

**MARKING GUIDELINES**

**MARKS: 200**

**These marking guidelines consist of 10 pages.**

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

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

(10 x 2) (20)

**1.2 Matching items**

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

(10 x 2) (20)

**1.3 Underlined words**

- 1.3.1 Soil data ✓
- 1.3.2 GPS ✓
- 1.3.3 Weakness ✓
- 1.3.4 Administrative ✓
- 1.3.5 Planning ✓
- 1.3.6 Partial ✓
- 1.3.7 Foreman ✓
- 1.3.8 Mechanisation ✓
- 1.3.9 Growth ✓
- 1.3.10 Current ✓

(10 x 1) (10)

**TOTAL SECTION A: 50**

**SECTION B****QUESTION 2: PHYSICAL AND FINANCIAL PLANNING****2.1 Mechanisation****2.1.1 FOUR factors for introducing machinery**

- Cost of equipment ✓
- Efficiency of equipment ✓
- Quality of the equipment ✓
- Time saving ✓
- Maintenance costs ✓
- Social factors ✓

(Any 4) (4)

**2.1.2 FOUR reasons for preferring the use of machinery**

- It simplifies supervision ✓
- Increases labour efficiency ✓
- Eliminate fatigue ✓
- Reduces the need for manual labour/decreases the number of workers ✓
- Less expensive over a longer period ✓
- Can cultivate larger areas ✓
- Quicker to complete the work ✓
- Not mostly dependant on weather conditions ✓

(Any 4) (4)

**2.2 Deduction between correction method and soil characteristic**

<b>CORRECTION METHOD</b>	<b>SOIL CHARACTERISTIC</b>
Breaking impermeable layers	Soil depth ✓
Vegetation strips	Soil slope ✓
Opening water ways	Soil drainage ✓
Apply gypsum	Soil reaction /soil pH ✓

(4)

**2.3 THREE factors influencing land use for grazing livestock**

- Palatability of the veld ✓
- Topography ✓
- Type of vegetation ✓
- Ability of soil to erode ✓
- Production status of the soil ✓
- Availability of water resources ✓

(Any 3) (3)

**2.4 Type of capital and finance period****2.4.1 Monthly veterinarian account**

- Working/floating capital ✓
- Short term credit ✓

(2)

**2.4.2 Production loan**

- Floating/working capital ✓
- Short term credit ✓

(2)

**2.4.3 Mortgage for land**

- Fixed capital ✓
- Long term credit ✓

(2)

- 2.4.4 **Equipment**
- Movable capital ✓
  - Medium term credit ✓
- (2)
- 2.5 **Budget**
- 2.5.1 **TWO most important elements of a farm business budget**
- Estimated/expected/probable income ✓
  - Estimated/expected/probable cost ✓
  - Distribution of funds over the period of the budget ✓
- (Any 2) (2)
- 2.5.2 **Budget for the farm enterprise of your choice**
- (a) Heading:
- Type of budget for the enterprise (e.g. crop or animal) ✓
  - Indicate timeframe (period) ✓
- (2)
- (b) Content:
- Each listed item and number ✓ x 4
  - Unit price and total price ✓ x 4
- (4)  
(4)
- 2.6 **Soil analysis**
- 2.6.1 **TWO methods to increase field water capacity**
- Add organic matter/compost/plant rests/organic fertiliser to soil ✓
  - Minimum tillage/no tillage ✓
  - Soil cover ✓
- (Any 2) (2)
- 2.6.2 **FOUR ways to improve soil reaction**
- Adding dolomite agricultural lime ✓
  - It contain calcium ✓
  - Increase the magnesium level in the soil ✓
  - To increase the pH level to 7 ✓
- (4)
- 2.7 **Discussion of the negative effect of excess use of herbicides**
- It causes environmental pollution ✓
    - Excess herbicides are washed away through irrigation, rain and ground water movement to rivers and underground water ✓
  - It enters the food chain ✓
    - Pesticides are absorbed into plants and people and animals health can be affected if they eat these plants too soon after application ✓
  - Kills micro-organism / beneficial organisms ✓
    - Many soil microbes are killed by excess herbicides that will affect the health of the soil and would lead to soil degradation ✓
- (6)
- 2.8 **Farming practice for continuously planting the same crop**
- Monoculture/monocropping ✓
  - Depleting nutrients - Same crop continuously using same soil nutrients ✓
  - Insects can build up resistance to pesticides ✓
- (3)

**[50]**

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

#### 3.1 Source document

- 3.1.1 Invoice ✓ (1)
- 3.1.2 Deposit slip ✓ (1)
- 3.1.3 Receipt ✓ (1)
- 3.1.4 Cash slip/till slip ✓ (1)

#### 3.2 Labour records

##### 3.2.1 Conditions of service

###### (a) Working hours per week

- Stipulate the normal working hours for a worker ✓
- In a 5 day (40 hour) or 6 day (45 hour) per week ✓
- Stipulate the maximum overtime per week ✓ (Any 2) (2)

###### (b) Overtime

- Limitations on overtime for a 5 day or 6 day week ✓
- Payment for overtime on normal working days is 1,5 times the daily salary ✓
- Payment on Sundays and public holidays is twice/double/2 times the daily salary ✓ (Any 2) (2)

##### 3.2.2 Daily records of labour

- Starting time ✓
- Departing time / knock-off time ✓
- Absentees / leave ✓
- Reason for absentees ✓
- Work done/productivity ✓
- Any labour related problems with labourer ✓
- Any injuries that happened on the farm at the specific day ✓ (Any 6) (6)

##### 3.3 Description of agricultural business plan

- A document for a certain agricultural enterprise or farm ✓
- Indicating the basic information on production ✓
- And subsequently financial aspects ✓
- As part of an economical viable enterprise ✓

**OR**

- What you want to do ✓
- How you want to do it ✓
- What you will use to do it ✓
- When you want to do it ✓
- Where you want to do it. ✓ (4)

### 3.4 Sources of information for market research (A source can only be used ONCE)

#### 3.4.1 Sources of primary research

- Interviews ✓
  - Questionnaires ✓
  - Observing competitors ✓
  - Producer organisations ✓
- (4)

#### 3.4.2 Sources of secondary research

- Magazines ✓
  - Newspapers ✓
- (2)

### 3.5 Balance sheet

#### 3.5.1 Aim of having a Balance sheet

- To determine the financial status/liquidity/viability of a farming business ✓
  - At a specific date/time
- (2)

#### 3.5.2 Calculate net worth using formula

- Net worth = total assets – total liabilities ✓  
= R930 000 ✓ – R670 000 ✓  
= R260 000 ✓
- (4)

#### 3.5.3 Viability and meaning

- The enterprise is viable ✓
- AND**
- The assets is higher than the liabilities ✓
  - It has a positive net worth ✓
- (Any 1) (2)

### 3.6 Income and expenditure

#### 3.6.1 Income and expenditure account

EXPENDITURE			INCOME		
DATE	ITEM	AMOUNT(R)	DATE	ITEM	AMOUNT(R)
14/6	Seed	680,00✓	14/10	Selling produce	23 600,00✓
22/6	Fertiliser	2 280,00✓	21/10	Selling produce	1 050,00✓
1/7	Pesticide	1 200,00✓			
22/10	Transport	720,00✓			
28/10	Labour	16 000,00✓			
	<b>TOTAL</b>	<b>20 880,00✓</b>		<b>TOTAL</b>	<b>24 650,00✓</b>

#### Rubric

6 correct entries ✓ (6)

Income total correct calculated ✓(1) CA

Expenditure total correct calculated ✓(1) CA

(8)

- 3.6.2 **Profit or loss** (CA from QUESTION 3.6.1)  
(If QUESTION 3.6.1 not answered – no marks)
- The farmer made a profit ✓
  - Profit/loss = income – expenditure  
= R 24 650,00 – R20 880,000 ✓  
= R 3 770,00 ✓ (3)
- 3.7 **Difference between a cash flow statement and an income statement**
- 3.7.1 **Cash flow statement**
- Indicate the movement of funds through (cash flow in and out) the businesses account for a specific period ✓
  - Comparing values to the budget for that month ✓ (2)
- 3.7.2 **Income statement**
- Is the record of financial transactions ✓
  - Indicating the profit or loss for and an enterprise/farm for that period ✓
  - Determine the credibility of farming enterprise ✓
  - determine income source of enterprise and expenditure made ✓
  - Indicate the amount of money spent on items ✓ (Any 3) (3)
- 3.8 **Climate records in decision making process**
- Determine the farming enterprise ✓
  - Determine corrective measures ✓
  - When to plant ✓
  - Which adjustments are suitable ✓ (Any 2) (2)
- [50]**

**QUESTION 4: HARVESTING, PROCESSING, MANAGEMENT AND AGRITOURISM****4.1 Storage****4.1.1 Effects of moisture and high temperature on stored plant products**

- Some of the products may start to germinate ✓
  - Encourages product to rot ✓
  - Moulding may occur ✓
  - Breeding of some post-harvest pests ✓
  - Deterioration in quality/shelf life/nutritional value ✓
- (Any 4) (4)

**4.1.2 Methods to minimize damage on stored plant products**

- Fumigation ✓
  - Increase ventilation with fans/blowers ✓
  - Store product in the correct manner according the product ✓
  - Packaging of the product before storage ✓
  - Prevent wetness ✓
  - Take measured control against rodents ✓
- (Any 3) (3)

**4.2 Identify correct preserving method**

4.2.1 Blanching ✓ (1)

4.2.2 Sterilisation ✓ (1)

4.2.3 Radiation ✓ (1)

4.2.4 Pasteurization ✓ (1)

4.2.5 Filtration ✓ (1)

**4.3 Legal requirements for people working at a processing plant**

- Wear protective clothing ✓
  - Provide First Aid kit ✓
  - Training (induction) of staff on safety rules applicable in the processing plant ✓
  - Training of staff on correct handling/operation of machinery ✓
  - Regularly health test for diseases than can be transmitted by food ✓
  - Constant consciences on safety practises ✓
  - Good hygienic practices ✓
- (Any 5) (5)



4.4 **Requirements of suitable wrapping material for perishable foods**

- Clean ✓
  - Strong ✓
  - Should seal effectively ✓
  - Non-toxic ✓
  - Transparent ✓
  - Resistant to mechanical and temperature damage ✓
- (Any 5) (5)

4.5 **Discuss FOUR motivation techniques**

- Making them shareholders of the farm business ✓
    - They will feel they are part of the business ✓
  - Create joint ventures with the workers ✓
    - Discuss any work issues that involves changes at labour level
  - Involve them in the economic planning of the farm activity ✓
    - Understanding economics will help preventing any losses ✓
  - Involve them in the physical planning of the farm activity ✓
    - Workers feel they are needed and can give some inputs in the planning ✓
  - Delegate some responsibilities/Encourage shared supervision ✓
    - Good work will pay off in the long run/ worker feel that advance in the working place ✓
- (Any 4 + correct description) (8)

4.6 **Marketing channels**

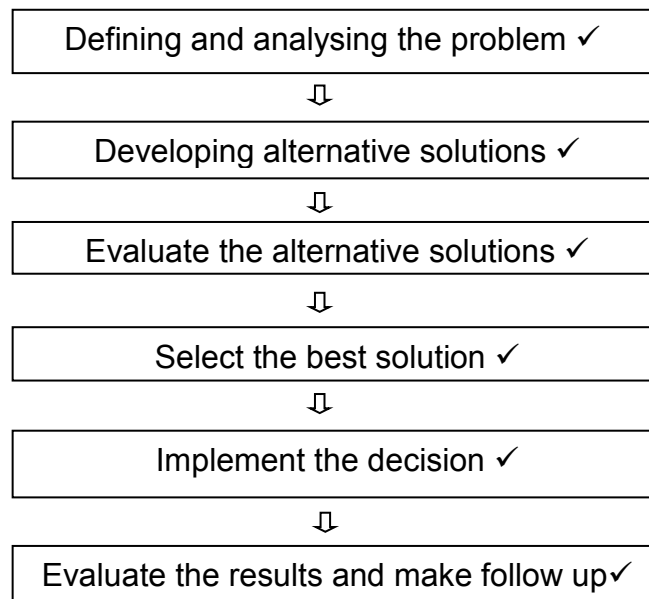
(Each channel can ONLY be used ONCE.)

Informal marketing channels	Formal marketing channels
<ul style="list-style-type: none"> <li>• Farm stalls ✓</li> <li>• Spaza shops ✓</li> <li>• Hawkers ✓</li> </ul>	<ul style="list-style-type: none"> <li>• Export markets ✓</li> <li>• Cooperatives ✓</li> <li>• Fresh produce market ✓</li> </ul>

(6)

4.7 **Reasons to use two different venues to market farm products**

- To increase sales volume by selling more produce / To have a bigger market share ✓
  - Lower prices at one market can be softened by higher prices at the other market ✓
  - If one market sales are lower the other market sales can be higher ✓
  - Easier access to the product by consumers in different markets can result in higher sales ✓
  - Socio - economic environment can differ, leading to different prices ✓
  - Income/profit can be manipulated by manipulating amount sent to each market ✓
- (Any 4) (4)

4.8 **A flow chart indicating SIX chronological steps of decision making.****Rubric**

- Each one at correct place/order ✓
- One mark for the correct version of a flow chart ✓
- For one is out of order, penalise and continue to mark the rest (7)

4.9 **Types of Agritourism**

- Product routes ✓
  - Game farm / farming trips / game farm visits / game watching ✓
  - Farm stays ✓
  - Eco tourism ✓
  - Adventurous activities ✓
  - Educational activities ✓
  - Leisure activities ✓
  - Farm activities ✓
- (Any 3) (3)  
**[50]**

**TOTAL SECTION B: 150**  
**GRAND TOTAL: 200**