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

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

(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 ✓

2.4.2 Windbreakers ✓

2.4.3 Cover crop ✓

2.4.4 Zero-cultivation ✓

2.4.5 Terraces ✓

2.5 **Soil reaction**

2.5.1 **Type of soil at pH 10**
- Brackish soil/Alkaline (Base) soils ✓

2.5.2 **pH value at which most nutrients are available to plants**
- 6 ✓

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 (CaSO₄) ✓

2.5.5 **Substance a farmer adds when the soil pH is low**
- Agricultural lime/Calcium carbonate (CaCO₃) ✓
- 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

<table>
<thead>
<tr>
<th></th>
<th>SUBSISTENCE FARMING</th>
<th>COMMERCIAL FARMING</th>
</tr>
</thead>
<tbody>
<tr>
<td>Risk</td>
<td>High / Low ✓</td>
<td>Low / High ✓</td>
</tr>
<tr>
<td>Capital investment</td>
<td>Small / Low ✓</td>
<td>Large / High ✓</td>
</tr>
<tr>
<td>Management skill</td>
<td>Small / Low ✓</td>
<td>Large / High ✓</td>
</tr>
</tbody>
</table>

(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 ✓

2.10.2 **Obtain information**
- Orally ✓
- Questionnaire ✓
- Rating on electronic media (Facebook; cell phone) ✓
- Comment/complain book/box ✓

(Any 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 ✓
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

The effect of demand and supply on the price of 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:**
  
  \[
  \text{Demand} = \text{previous demand} \times 2
  \]
  
  \[
  = 550 \times 2
  \]
  
  \[
  = 1100 \text{ kg} \checkmark
  \]

- **Supply increases by 20% at price R18,00:**

  o Supply increase:

  \[
  \text{Increase} = \% \times \text{number}
  \]
  
  \[
  = 20/100 \times 950 \text{ kg } \text{ OR } 20\% \times 950 \text{ kg } \text{ OR } 0,2 \times 950 \text{ kg}
  \]
  
  \[
  = 190 \text{ kg} \checkmark
  \]

  Supply at R 18,00 + 20% increase:

  Total supply \quad = 950 \text{ kg} + 190 \text{ kg}
  
  \[
  = 1140 \text{ kg} \checkmark
  \]

  OR

  o Supply at R18,00 + 20% increase:

  Total \quad = \% \times \text{amount} + \text{number}
  
  \[
  = (20/100 \times 950 \text{ kg}) \checkmark + 950 \text{ kg} = 1140 \text{ kg} \checkmark \text{ OR}
  \]
  
  \[
  = (20\% \times 950 \text{ kg}) \checkmark + 950 \text{ kg} = 1140 \text{ kg} \checkmark \text{ OR}
  \]
  
  \[
  = (0,2 \times 950 \text{ kg}) \checkmark + 950 \text{ kg} = 190 \text{ kg} + 950 \text{ kg} = 1140 \text{ kg} \checkmark
  \]

  (Any 1 x 2)

**Availability**

- There will be a small over-supply of the product \checkmark

- Supply outstrips demand \checkmark

(Any 1)

**Price**

- The price will decrease slightly \checkmark

(5)

3.7 Marketing system

3.7.1 The marketing system shown in the diagram

- Free-marketing system \checkmark

(1)

3.7.2 Comparison of the free marketing system to cooperative marketing

- Free-market system – less price stability \checkmark

- Co-operative marketing – more stable prices \checkmark

(2)

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

- It promotes a fair, accessible, and sustainable marketplace \checkmark

- for consumer products and services \checkmark

(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 ✓ (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
  \[= (8 \text{ hours} \times R61,08/\text{hour}) \times 2 \times 2 = R977,28 \]

  **OR**
  - 16 hours \(\times\) R61,08/\text{hour} \(\times\) 2 \(\times\) 2 = R977,28
  - R122,16 \(\times\) 8 \(\times\) 2 = R977,28
  - R61,08 \(\times\) 2 \(\times\) R122,16
  - R122,16 \(\times\) 8 = R977,28
  - R61,08 \(\times\) 2 \(\times\) R488,64
  - R488,64 \(\times\) 2 \(\times\) R977,28

4.3.4 **PAYSLIP - Gross earnings**
- Gross earnings = Basic salary + Overtime
  \[= R10\,750,00 \times R 977,28 \text{(CA)}\]
  \[= R11\,727,28 \text{ (CA)}\]

4.4 **Record keeping**

<table>
<thead>
<tr>
<th></th>
<th>HANDWRITTEN NOTES</th>
<th>COMPUTER</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amount of data</td>
<td>small / less ✓</td>
<td>large / more ✓</td>
</tr>
<tr>
<td>Precision farming</td>
<td>not possible / difficult ✓</td>
<td>possible / easy ✓</td>
</tr>
<tr>
<td>Access to information</td>
<td>difficult / slow ✓</td>
<td>easy / fast ✓</td>
</tr>
</tbody>
</table>

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 ✓

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 ✓

4.6.2 **ONE aspect not on the label**
- Nutritional information ✓
- Amount of the product ✓
- Warning for allergies ✓
- Preservatives used ✓
- Date expire / Date manufacture ✓
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**

<table>
<thead>
<tr>
<th></th>
<th>PASTEURISATION</th>
<th>STERILISATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elimination of microbes</td>
<td>Partial / Less ✓</td>
<td>Total / More ✓</td>
</tr>
<tr>
<td>Impact on nutritional qualities</td>
<td>Low ✓</td>
<td>High ✓</td>
</tr>
<tr>
<td>Storage</td>
<td>Low temperature (refrigeration) ✓</td>
<td>Room temperature (pantry) ✓</td>
</tr>
<tr>
<td></td>
<td>Less suitable on the long term ✓</td>
<td>More suitable on the long term ✓</td>
</tr>
</tbody>
</table>

(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