These marking guidelines consist of 12 pages.
SECTION A

QUESTION 1

1.1 Multiple Choice

1.1.1 C ✓ ✓
1.1.2 B ✓ ✓
1.1.3 A ✓ ✓
1.1.4 A ✓ ✓
1.1.5 D ✓ ✓
1.1.6 D ✓ ✓
1.1.7 C ✓ ✓
1.1.8 B ✓ ✓
1.1.9 C ✓ ✓
1.1.10 C ✓ ✓ (10 x 2) (20)

1.2 Matching items

1.2.1 D ✓ ✓
1.2.2 H ✓ ✓
1.2.3 G ✓ ✓
1.2.4 E ✓ ✓
1.2.5 J ✓ ✓
1.2.6 C ✓ ✓
1.2.7 A ✓ ✓
1.2.8 B ✓ ✓
1.2.9 K ✓ ✓
1.2.10 F ✓ ✓ (10 x 2) (20)

1.3 Correct agricultural terms

1.3.1 Fixed capital ✓
1.3.2 Calibration / Calibrate ✓
1.3.3 Enterprise budget / Branch budget / Micro budget ✓
1.3.4 Sweet veld ✓
1.3.5 Entrepreneurship ✓
1.3.6 Time register / Time sheet ✓
1.3.7 Expiry date / sell by date / best before date / Expiring ✓
1.3.8 Planning ✓
1.3.9 Standardisation ✓
1.3.10 Invoice ✓ (10 x 1) (10)

TOTAL SECTION A: 50
SECTION B

QUESTION 2: PHYSICAL AND FINANCIAL PLANNING

2.1 Irrigation

2.1.1 THREE basic requirements of soil for irrigation purposes
- Adequate infiltration/absorption ✓
- Internal drainage/soil depth ✓
- Incline/slope/topography ✓
- Water holding capacity ✓ (Any 3) (3)

2.1.2 THREE methods to control water runoff
- Develop stable waterways ✓
- Apply contour ploughing ✓
- Develop contour ridges/terracing ✓
- Improve the plant coverage on the soils ✓
- Improve surface infiltration ✓ (Any 3) (3)

2.2 Physical effects of addition organic matter to soil

<table>
<thead>
<tr>
<th>PHYSICAL ASPECT</th>
<th>ORGANICALLY RICH SOILS</th>
<th>ORGANICALLY POOR SOILS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Soil temperature</td>
<td>More constant temperature/small effect on temperature ✓</td>
<td>Fluctuating temperature will tend to become more stable ✓</td>
</tr>
<tr>
<td>Soil erosion</td>
<td>Less soil erosion/the effect will be small ✓</td>
<td>Soil erosion will decrease drastically with addition of organic material ✓</td>
</tr>
</tbody>
</table>

(4)

2.3 Natural pastures

2.3.1 FOUR reasons for a camp system
- To make rotational grazing possible ✓
- To make regrowth possible during resting period ✓
- To divide livestock in different herds/separate different type of animals ✓
- To prevent overgrazing due to moving animals between camps ✓
- Different veld types with the same properties can be grouped together making it easier to manage ✓
- To adhere to the veld carrying capacity ✓
- Herd health management ✓
- To manage breeding systems easier ✓ (Any 4) (4)
2.3.2 **FOUR practices that lead to deterioration of veld**
- Over grazing ✓
- Incorrect burning of veld ✓
- Poor veld management/ ploughing of veld ✓
- Too many vehicle movement ✓
- Poor parasite (termite) control ✓
- Allowing invader species ✓
- Ill-considered use of herbicides ✓

(Any 4) (4)

2.4 **Define between the sources of capital**
2.4.1 **Own capital:**
- Money that the farmer has saved or from the farmers’ investments ✓
- Money obtained from inheritance, grants, sponsorships ✓

(Any 1) (1)

2.4.2 **Credit:**
- Money borrowed/loan obtained from a financial institution and paid back with interest ✓
- Account opened at different agricultural service suppliers or agricultural organisations ✓

(Any 1) (1)

2.4.3 **Production capital:**
- Money obtained from the selling of produced agricultural products ✓

(1)

2.5 **Graph on law of diminishing return**
2.5.1 **The economic characteristic of soil shown in the graph**
- Law of diminishing returns ✓

(1)

2.5.2 **Reason for the graph not starting at a yield of 0 ton/ha**
- Even if no fertiliser is added to the soil ✓
- The crop will still produce a yield ✓
- From the nutrients that is naturally in soils ✓

(3)

2.6 **FOUR methods to increase productivity and sustainable production on a specific land**
- Adapt production to scientific methods ✓
- Make use of technology ✓
- Irrigate the land ✓
- Increase nutrient level of the land ✓
- Choose the type of farming that suits the nature of the soil ✓
- Obtain information on effective production methods ✓
- Improve the physical characteristics of the soil ✓

(Any 4) (4)

2.7 **Labour**
2.7.1 **THREE functions of a hired employee**
- Physical labour functions ✓
- Supervisory functions ✓
- Management functions ✓

(3)
2.7.2 **FOUR methods of improving the conditions of health and safety**
- Workplace must be free of dangerous substances ✓
- Workplace must be organised in such a manner to prevent injuries ✓
- All dangerous zone must be indicated or marked ✓
- Provide training to the workers on the correct methods and use of equipment ✓
- Cover all dangerous moving parts on equipment ✓
- Indicate where safety equipment is situated ✓
- Provide a fully equipped first aid kit ✓
- Train workers on basic first aid ✓
- Provide contact number in case of emergency ✓

(Any 4) (4)

2.8 **Effect of incorrect calibration on degradation**
- Pollution of soil and water sources increases with too high concentration ✓
- Too high concentration can kill the natural enemies or beneficial insects ✓
- Too low concentration can increase competition amongst plants and weeds ✓
- Too high concentration destroys soil microbial population ✓
- Too high concentration can affect plant growth ✓

(Any 3) (3)

2.9 **Budget**

2.9.1 **Identify the type of budget**
- Whole farm budget/animal and crop enterprise budget ✓

**Motivation**
- It incorporates the budget of all enterprises on the farm/incorporates the budget for livestock and crops ✓

(2)

2.9.2 **TWO reasons for compiling a budget for a farm enterprise**
- Predict the expenses and revenues/predict the possible profit or loss ✓
- As a financial control measure/prevent over or under spending ✓
- To indicate areas/time of cost constrains ✓
- To determine credit needs ✓
- Use as an aid in management ✓

(Any 2) (2)

2.9.3 **Calculate of items from the data given in the budget**

(a) **Total costs of livestock enterprise**
- Total costs = R553 000 ✓

(1)

(b) **Total returns of livestock**
- Total returns = R1 016 000 ✓

(1)

(c) **Total costs for the crops enterprise**
- Total costs = R128 000 ✓

(1)

(d) **Total returns for crop enterprise**
- Total returns = R167 000 ✓

(1)
2.9.4 **Net profit or loss**

- Profit/loss = total income – total expenditure
  
  \[ R1 \, 016 \, 000 + R167 \, 000 - R553 \, 000 - R128 \, 000 \sqrt{/} \]
  
  or \( (R1 \, 016 \, 000 + R167 \, 000) - (R553 \, 000 + R128 \, 000) \)
  
  \[ = R502 \, 000 \sqrt{/} \]

- It is a profit \( \checkmark \)

**OR**

- Returns = R1 016 000 + R167 000
  \[ = R1 \, 183 \, 000 \]

- Costs = R553 000 + R128 000
  \[ = R681 \, 000 \]

- Profit/loss = total income – total expenditure
  
  \[ = R1 \, 183 \, 000 - R681\,000 \sqrt{/} \]
  
  \[ = R502 \, 000 \sqrt{/} \]

- It is a profit \( \checkmark \)

(NB: - Use values of 2.9.3 (a) – (d) for calculation of profit or loss)

- If cost or return is calculated wrongly only marks for profit or loss if calculated according to cost and return. \(3\) [50]
QUESTION 3: ENTREPRENEURSHIP, RECORDING, MARKETING, BUSINESS PLANNING AND ORGANISED AGRICULTURE

3.1 Entrepreneur

3.1.1 Definition of an entrepreneur

- A person who see an opportunity in the market ✓
- Take the risk in starting a new business ✓
- Using the resources available ✓
- To deliver a product or service ✓

(4)

3.1.2 FOUR criteria that should be considered

- The time it takes for the product to be ready for consumers. ✓
- The value of the product ✓
- The risk involved ✓
- The uniqueness of the product ✓
- Whether the business venture matches the personal skills and goals of the entrepreneur ✓
- Available resources ✓
- Markets available ✓
- The profits and returns to be made ✓

(Any 4) (4)

3.2 SWOT analyses and an example

<table>
<thead>
<tr>
<th>Components</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strengths ✓</td>
<td>Describe the strengths of a business using an example. ✓</td>
</tr>
<tr>
<td>Weaknesses ✓</td>
<td>Describe the weakness of a business using an example. ✓</td>
</tr>
<tr>
<td>Opportunities ✓</td>
<td>Describe the opportunities of a business using an example. ✓</td>
</tr>
<tr>
<td>Threats ✓</td>
<td>Describe the threats of a business using an example. ✓</td>
</tr>
</tbody>
</table>

(8)
3.3 **Product of choice - All activities should relate to product of choice**

**Rearrange activities with reason (e.g. Milk)**
- Harvesting ✓ and appropriate reason e.g. Cows being milked ✓
- Storage ✓ and appropriate reason e.g. Milk is stored in cooling tank ✓
- Grading ✓ and appropriate reason e.g. Sample is taken for grading ✓
- Specialised transport ✓ appropriate reason e.g. Cooling truck transport milk to processor ✓
- Processing ✓ appropriate reason e.g. Milk processed into various products ✓
- Packaging ✓ and appropriate reason e.g. After processing milk is bagged, bottled etc. ✓

(Any 5 in correct order for mentioned product)

**Note –**
- The first activity is harvesting
- Mark according to the product
- Reason must link to the product
- Storage position is the most likely to change
- Specialised transport indicates bulk, cold storage or specialised most likely to change

3.4 **TWO pricing objectives which are guiding the pricing decisions**
- To make profit ✓
- To have more stable prices ✓
- To maintaining sale volumes ✓
- To increase the market share ✓

(Any 2)

3.5 **Scenario on marketing costs**

3.5.1 **TWO main factors determining price**
- Demand ✓
- Supply ✓

(2)

3.5.2 **Calculate profit at Market A**
- Produce = total × risk
  = 2 000 × 70% ✓
  = 1 400 ✓
- Profit = income − expenditure
  = 1 400 × R40 ✓ − 50 km × R12,50 × 2 ✓
  = R56 000 − R1 250,00
  = R54 750 ✓

OR (profit calculation)
- Income = 1 400 × R40
  = R56 000 ✓
- Expenditure = 50 km × R12,50 × 2
  = R1 250 ✓
- Profit = income − expenditure
  = R56 000 − R1 250,00
  = R54 750 ✓
3.5.3 Calculate profit at Market B

- Profit = income – expenditure
  \[ = 2000 \times R30 - 70 \text{ km} \times R12,50 \times 2 \]
  \[ = R60000 - R1750,00 \]
  \[ = R58250 \quad \checkmark \]

OR

- Income = 2000 \times R30
  \[ = R60000 \quad \checkmark \]
- Expenditure = 70 \text{ km} \times 2 \times R12,50
  \[ = R1750,00 \quad \checkmark \]
- Profit = income – expenditure
  \[ = R60000 - R1750,00 \]
  \[ = R58250 \quad \checkmark \]

3.5.4 Recommendation to farmer

- Sell produce of week 3 at Market B if not stored/highly perishable \checkmark
- If possible store the produce of week 3 to week 4 \checkmark
- Sell produce of week 4 and stored produce at Market B to obtain the highest profit \checkmark

OR

- Sell produce of week 3 at Market B if not stored/highly perishable \checkmark
- Harvest everything in week 4 for a higher profit \checkmark

3.6 Balance sheet

3.6.1 ITEMS

<table>
<thead>
<tr>
<th>Current asset</th>
<th>Non-current assets</th>
<th>Current liabilities</th>
<th>Non-current liabilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inventory \checkmark</td>
<td>Property \checkmark</td>
<td>Creditors \checkmark</td>
<td>Mortgage bond \checkmark</td>
</tr>
<tr>
<td>Debtors \checkmark</td>
<td>Plants and equipment \checkmark</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

3.6.2 Type of a farm record prepared from assets and liabilities

- Balance sheet \checkmark

3.6.3 Net worth

- Net worth = Total value of assets – Total value of liabilities
  \[ = R2900000,00 - R1200000,00 \checkmark \]
  \[ = R1700000,00 \checkmark \]
QUESTION 4: HARVESTING, PROCESSING, MANAGEMENT AND AGRITOURISM

4.1 Food legislation

4.1.1 FIVE specifications regarding labelling regulations
- Trade mark ✓
- Description of the product content ✓
- Pictorial representation of the contents or serving suggestions ✓
- Contact details of the manufacturer of the product ✓
- List of ingredients ✓
- The nutritional information ✓
- Quantity of produce ✓
- Possible allergies not related to product ✓

(Any 5) (5)

4.1.2 FOUR important aspects of the National Health Act, 2003 (Act 61 of 2003)
- Minimum requirements for processing premises ✓
- Transportation and handling of food ✓
- Control and prevention of notifiable diseases (food poisoning) ✓
- Regulations concerning inspections and investigations ✓

(4)

4.2 Distinguish between fermentation and decomposition

4.2.1 Fermentation
- A process facilitated by man to produce value added products ✓
- Good microbes are activated/added ✓

(2)

4.2.2 Decomposition
- A process of food spoilage (food decay) ✓
- Unwanted microbes activated ✓

(2)

4.3 THREE examples of food processed through filtration
- Wine ✓
- Beer ✓
- Fruit juices ✓
- Gelatine ✓
- Vinegar ✓
- Oils ✓

(Any 3) (3)

4.4 Name and describe THREE factors influencing processing
- Perishability (shelf life) ✓ – the more perishable the product the quicker processing must take place ✓
- Mass or raw products ✓ – higher masses need more sophisticated equipment for processing ✓
- Distance from markets ✓ – the longer distance products must travel, the more preserved the product must be ✓
- Infrastructure ✓ – infrastructure on the farm will determine possibility of processing and/or type of processing ✓
- Cost of processing facilities ✓ – capital available for processing unit or credit needed to supplement available capital ✓
- Cost of processing method ✓ – additional costs and the corresponding profit to the higher input ✓

(Any 3 x 2) (6)
4.5 **A typical agricultural organogram structure**

![Organogram Structure]

**Rubric**
- If all four is mentioned in the correct order – 2 marks ✓✓
- All four mentioned in the correct order, directions and levels clearly visible with blocks but without line or arrows – 3 marks ✓✓✓
- Correct organogram/ correct order, direction and levels with arrows/lines – 4 marks ✓✓✓✓

4.6 **Control as a managerial principle**

4.6.1 **Definition**
- Supervision of activities ✓ according to present schedule/planning ✓ (2)

4.6.2 **Method**
- Regular inspections ✓
- To make sure activities are being undertaken as planned ✓ (2)

4.6.3 **Quality assurance**
- Compare to a set of standards ✓ (1)

4.7 **FOUR reasons for planning**
- Important in decision making ✓
- Important to quantify future risks and uncertainties such as changes in:
  - patterns the resources ✓
  - technological and biological relationship ✓
  - prices of inputs ✓
- Risks and uncertainties ✓ (Any 4) (4)
4.8 **THREE factors of decision making**
- The speed with which the decisions are made ✓
- The degree of accuracy with which the decisions are taken ✓
- The acceptability of the decisions for those who are affected by them ✓ (3)

4.9 **Name and describe TWO aspects of organisation**
- Organising the business ✓
  - Management activities like administration and financial aspects ✓
- Organising the farming activities ✓
  - Correct combination (mix) ✓
  - and application of resources ✓ (5)

4.10 **FIVE activities of agritourism**
- Place of interest for agricultural exposure ✓
- An agricultural or association enterprise farm ✓
- Point of sale of products /self-harvesting of products ✓
- Working holiday ✓
- Farm accommodation ✓
- Game drives/off road routes ✓
- Product routes ✓
- Hunting / Fishing/ Bird watching ✓
- Hiking trials ✓ (Any 5) (5)

4.11 **TWO roles of a farmer in agritourism.**
- To promote the enterprise and its product ✓
- To motivate youth and women not to abandon country side ✓ (Any 2) (2)
- Preserving nature ✓ (Any 2) (2)

TOTAL SECTION B: 150
GRAND TOTAL: 200