MARKS:  200

This memorandum consists of 13 pages.
SECTION A

QUESTION 1: SHORT QUESTIONS

1.1 Multiple Choice

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

1.2 Matching items

1.2.1 D ✓✓
1.2.2 I ✓✓
1.2.3 E ✓✓
1.2.4 A ✓✓
1.2.5 H ✓✓
1.2.6 K ✓✓
1.2.7 B ✓✓
1.2.8 J ✓✓
1.2.9 F ✓✓
1.2.10 L ✓✓ (10 x 2)  (20)
1.3 **Term/Word(s)**

1.3.1 Water-holding capacity

1.3.2 Intensive farming

1.3.3 Rainfall

1.3.4 Business plan

1.3.5 Source document

1.3.6 Free marketing

1.3.7 Skilled/schooled/qualified labourer

1.3.8 Loan/credit

1.3.9 Filtration

1.3.10 Control

(10 x 1)

(10)

[50]

**TOTAL SECTION A:** 50
SECTION B

QUESTION 2: FARM PLANNING

2.1 FOUR types of leave
- Annual leave/holiday leave ✓
- Maternity leave ✓
- Urgent personal matters ✓
- Family responsibility leave ✓
- Sick leave ✓
- Special leave ✓
- Occupational accident leave ✓
- Unpaid leave ✓ (Any 4) (4)

2.2 2.2.1 Definition of erosion
- It is the removal of soil from the surface ✓
- By means of wind and runoff ✓ (2)

2.2.2 Description of contour ploughing
- It is the farming practice of ploughing across or against the slope/ 90° degree angle to the general land slope ✓ (1)

2.2.3 Advantages of contours
- Reduces run off and erosion ✓
  o Cross-slope farming with other conservation practices meet the goal of conservation ✓
- Overland water flow is reduced ✓
  o The higher the ridge height, the more overland water will be slowed down ✓
  o Control water flow into waterway ✓
- Reduces nutrient loss ✓
  o Contour ploughing combined with mulch cultivation prevents leaching of nutrients ✓
  o Nutrient loss due to loss of soil is prevented ✓ (Any 6) (6)

2.3 2.3.1 Steps in decision-making process to acquire implements
- Identify the need for the implement ✓
- Gather information on the different implements available ✓
- Evaluate the advantages and disadvantages of each implement ✓
- Link productivity to the price of the implement ✓
- Make a choice and verify decision ✓ (5)
2.3.2 Disadvantages of using implements
- Implements are expensive ✓
- Use of implements needs a higher skilled labourer ✓
- Implements can destroy certain properties of soils ✓
- No market if not in use anymore ✓
- Depreciation of implements ✓
- Breakage ✓
- Can lead to unemployment ✓
(Any 2) (2)

2.4 THREE reasons for signing a contract
- Requirement of labour act ✓
- To have a legal agreement between the employer and the employee ✓
- To protect the rights of both parties ✓
- To formally define the conditions of employment and the employer-employee relationship ✓
- To refer to the contract in case of disputes ✓
- To define what is clearly requested from the employee/Job description ✓
(Any 3)

2.5 Comparison between conventional commercial and precision farming

2.5.1 Prerequisite information

<table>
<thead>
<tr>
<th>Precision farming</th>
<th>Conventional commercial farming</th>
</tr>
</thead>
<tbody>
<tr>
<td>• More detailed information of agricultural practices ✓</td>
<td>• Less detailed information of agricultural practices ✓</td>
</tr>
</tbody>
</table>

(2)

2.5.2 Technical level of equipment used

<table>
<thead>
<tr>
<th>Precision farming</th>
<th>Conventional commercial farming</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Needs more technically advanced equipment ✓</td>
<td>• Equipment don’t rely on advanced technical equipment/more mechanical equipment ✓</td>
</tr>
</tbody>
</table>

(2)

2.6 2.6.1 Slope with higher growth rate
- North-facing slope ✓

Two reasons
- The sun reaches the slope more directly ✓
- Plants grow in a higher average temperature environment ✓

(3)

2.6.2 Importance of daylight length on animals and plants
- It influences reproduction cycles ✓
- Influences plant and animal growth ✓
- Responsible for photosynthesis ✓
- Responsible for ripening of fruit ✓

(4)
2.7  2.7.1  Distinction between whole-farm budget and enterprise budget
- Whole-farm budget is a summary of the financial estimates of all the divisions of the entire farm business ✓
- Enterprise budget is a budget for a particular enterprise/production unit or section of the farm ✓

2.7.2  FIVE examples of production budgets
- Enterprise budget ✓
- Feed budget ✓
- Mechanisation/service budget ✓
- Investment budget ✓
- Financial budgets ✓
- Marketing budget ✓
- Cash flow budget ✓
- Fuel budget ✓
- Labour budget ✓

OR
- Any five enterprise budgets  (Any 5) (5)

2.8  2.8.1  Period of highest growth rate
- April – May ✓  (1)

2.8.2  Relationship between rainfall and temperature
- Rainfall and temperature together are conducive for plant growth ✓
- By itself rainfall or temperature is not necessarily favourable for growth ✓
- As observed during the period Jun–Jul ✓
- Where the temperature was too low for growth/too cold during winter ✓
- During the period Aug–Sept the growth was low despite average rainfall and temperatures ✓
- The reason can be that the humidity during the period was too high ✓
- Transpiration was low and therefore plants grow slowly ✓
- The combination of rainfall, temperature and humidity is important for growth to be at its optimum point ✓  (8) [50]
QUESTION 3: ENTREPRENEURSHIP, RECORDING, MARKETING AND BUSINESS PLANNING

3.1 Advantages of keeping records using a computer
- Easier to access information ✓
- A lot of information can be stored in less space ✓
- Comparisons can be made easier ✓
- Calculations can be done easier ✓
- Transfer of information is easier ✓
- There is quicker reproduction of information ✓
- Can make use of trusted and tested production and financial programmes ✓ (Any 4) (4)

3.2

3.2.1 Not transferable ✓/not negotiable✓/2 lines crossing✓ (1)
3.2.2 Any complete date ✓ (1)
3.2.3 Thirty nine thousand six hundred rand only/no cents✓ (1)
3.2.4 R39 600,00/R39 600 -- ✓ (1)

3.3 3.3.1 Depreciation
- Depreciation is the monetary value ✓ that non-current assets loses over time ✓ (2)

3.3.2 Calculation of depreciation
- Annual depreciation = \( \frac{R200 000 - R10 000}{10} \) ✓
- \( = \frac{R190 000}{10} \)
- \( = R19 000 ✓ \) (2)
3.4 3.4.1

INCOME STATEMENT FOR YEAR ENDING
31 December 2014

<table>
<thead>
<tr>
<th>EXPENDITURE</th>
<th>RAND</th>
<th>INCOME</th>
<th>RAND</th>
</tr>
</thead>
<tbody>
<tr>
<td>Land preparation</td>
<td>R10 000</td>
<td>Cucumbers</td>
<td>R11 500</td>
</tr>
<tr>
<td>Planting</td>
<td>R 6 000</td>
<td>Beetroot</td>
<td>R28 000</td>
</tr>
<tr>
<td>Casual labour</td>
<td>R 8 000</td>
<td>Tomatoes</td>
<td>R20 000</td>
</tr>
<tr>
<td>Seed</td>
<td>R 6 500</td>
<td>Cabbages</td>
<td>R 9 400</td>
</tr>
<tr>
<td>Fuel and lubricants</td>
<td>R10 000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fertiliser</td>
<td>R10 000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Disease, pest and weed control</td>
<td>R10 000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Repair and maintenance</td>
<td>R 5 500</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Packaging and marketing</td>
<td>R 4 000</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>R70 000</strong></td>
<td><strong>TOTAL</strong></td>
<td><strong>R68 900</strong></td>
</tr>
</tbody>
</table>

Rubric
- Correct entries in expenses ✓
- Correct entries in income ✓
- Correct calculation of expenses ✓
- Correct calculation of income ✓
- Drawing of table with labels ✓ (5)

3.4.2 Determination of profit/loss and substantiate
- It is a loss ✓
- Profit/loss = R68 900 – R70 000 ✓
- = – R 1 100 or (R1 100) ✓ (3)

(Mark positively with statement values)

3.4.3 Three possible solutions
- Plan better to save fuel costs ✓
- Make use of biological control methods to reduce costs on poisons ✓
- Make use of compost/organic material to save fertiliser costs ✓
- Servicing/replacing implements to reduce maintenance costs ✓
- Fewer casual labourers ✓
- Make better use of mechanisation ✓ (Any 3) (3)
3.5

3.5.1  Land (at cost) R100 000 ✓

3.5.2  Second-hand tractor R50 000 ✓

3.5.3  Debtors R13 000 ✓

3.5.4  Cash R2 000 ✓

3.5.5  Creditors R10 000 ✓

(Order of answer to 3.5.4 and 3.5.5 can swop around)

(1)

3.5.6  R260 000 ✓

(Mark positively)

(1)

3.6  

Steps in preparing a business plan

• Decide on the kind of business you want to start ✓

• Collect information about the chances of success and chances of failure/feasibility studies/opportunities (markets) and risks data (sources of capital/loans) ✓

• Focus and analyse the data/information collected so as to refine ideas on the business ✓

• Outline the specific requirements/inputs, management issues, anticipated returns ✓

• Test your plan/set goals and targets, make a detailed management plan ✓

(5)

3.7  

Differentiation between contract marketing and farm-gate marketing

<table>
<thead>
<tr>
<th>Contract marketing</th>
<th>Farm-gate marketing</th>
</tr>
</thead>
<tbody>
<tr>
<td>A signed contract between the producer and the consumer ✓</td>
<td>No contract signed ✓</td>
</tr>
<tr>
<td>Price is fixed ✓</td>
<td>Fluctuating prices ✓</td>
</tr>
<tr>
<td>Products are graded ✓</td>
<td>No grading ✓</td>
</tr>
<tr>
<td>Packaging is according to the regulation ✓</td>
<td>No regulation for packaging/no need for packaging ✓</td>
</tr>
<tr>
<td>Guaranteed income ✓</td>
<td>No guaranteed income ✓</td>
</tr>
<tr>
<td>Obligated to deliver to contract ✓ (Any 2)</td>
<td>Sell to any one ✓ (Any 2)</td>
</tr>
</tbody>
</table>

(4)

3.8  

3.8.1  Definition of fixed price

• It is when the price has been set for goods and services ✓

• With no bargaining permitted over the price ✓

OR

• The price is held constant ✓

• Regardless of the cost of production ✓

(2)
3.8.2 Three advantages of a fixed price
- Know the price that one will receive ✓
- Makes planning easier ✓
- More constant income/ﬂuctuations on the market has no effect ✓
- Set the right price at the first time ✓ (Any 3) (3)

3.8.3 FOUR marketing strategies
- Plan initial promotion/local radio station ✓
- Set up a website/social media ✓
- Set up a free listing for your business in search engine local directories ✓
- Set up your business proﬁle or page on chat sites ✓
- Print the business cards and business stationery/flyers ✓
- Contact all the persons from whom you can buy products or services and provide them with your business card ✓
- Produce high quality product ✓ (Any 4) (4)

3.9 Discussion of diversiﬁcation as business survival strategy
- Have more than one production unit/value adding ✓
- To protect the farmer from ﬁnancial risk ✓
- If one enterprise experience disaster/market price plunging ✓ (3) [50]
QUESTION 4: HARVESTING, PROCESSING AND MANAGEMENT

4.1 Chronological steps in the decision making process
- Define and analyse the problem ✓
- Develop alternative solutions ✓
- Evaluation of alternative solutions ✓
- Select the best solution ✓
- Implementation of decision ✓
- Follow implementation up and evaluate ✓ (6)

4.2 Tasks of a manager
- Control ✓
- Planning ✓
- Motivation ✓
- Communication ✓
- Decision making ✓ (5)

4.3 4.3.1 Definition of harvesting
- It is the collection of the crop ✓
- When the crop is ready to pick/at matured stage ✓ (2)

4.3.2 Steps that crop will follow

| Step 1 | Harvesting ✓ |
| Step 2 | Transporting to the pack house ✓ |
| Step 3 | Storing of ungraded product ✓ |
| Step 4 | Grading and sorting ✓ |
| Step 5 | Packaging ✓ |
| Step 6 | Storing of graded product ✓ |
| Step 7 | Distributing/Transport ✓ |

(Any 6 in correct order) (6)

4.4 4.4.1 Fermentation as method of preservation
- Sugar fermentation ✓
- Through yeasts/bacteria for production of beer/bread/wine ✓
- Oxidation of alcohol to form vinegar ✓
- Lactose fermented ✓
- Into lactic acid ✓
- That causes milk to coagulate to make cheese ✓ (Any 4) (4)
4.4.2 Comparison of value of processed food to that of the raw food products

<table>
<thead>
<tr>
<th></th>
<th>Raw food product</th>
<th>Processed product</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shelf life</td>
<td>Short ✓</td>
<td>Long ✓</td>
</tr>
<tr>
<td>Packaging and distribution</td>
<td>Difficult and costly ✓</td>
<td>Simple and less costly ✓</td>
</tr>
</tbody>
</table>

4.5 FOUR good hygienic practices in the food processing industry

- Wear clean overalls/laboratory coats ✓
- Wear clean boots/protected shoes ✓
- Protect your head/hair ✓
- Put on the mouth and nose guards ✓
- Clean and disinfect the floor regularly ✓
- Sterilize the equipment used often ✓
- Wash hands regularly with a disinfectant ✓
- Smoke free environment ✓

(Any 4) 4

4.6 4.6.1 FOUR advantages of packaging food products

- To protect against microbiological contamination, dirt, insects, moisture, light, odours and colours ✓
- To facilitate the easy handling of food ✓
- To convey information ✓
- To identify the product ✓
- Attractiveness of product ✓
- Add value to the product ✓
- Longer shell life ✓

(Any 4) 4

4.6.2 Ways of packaging

<table>
<thead>
<tr>
<th>Ways of packaging</th>
<th>Example of material used</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rigid packaging ✓</td>
<td>Metal cans/glass jars/bottles/laminated containers ✓</td>
</tr>
<tr>
<td>Semi-rigid packaging ✓</td>
<td>Aluminium containers/cartons/polystyrene ✓</td>
</tr>
<tr>
<td>Flexible packaging ✓</td>
<td>Types of plastic film/paper/aluminium foil ✓</td>
</tr>
</tbody>
</table>

(6)
4.7  4.7.1 **Main group of tourists**
- Domestic/local tourists ✓
- International tourists ✓

4.7.2 **Types of tourists**

<table>
<thead>
<tr>
<th>Types of tourists</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Educational tourists</td>
<td>People visit places to do research ✓</td>
</tr>
<tr>
<td>Adventure tourists</td>
<td>People want to do exciting things while on holidays ✓</td>
</tr>
<tr>
<td>Cultural tourists</td>
<td>People travel to do cultural events/interests ✓</td>
</tr>
<tr>
<td>Product routes tourists</td>
<td>It is associated with countryside/tourists follow routes to see agricultural products produced/processed ✓</td>
</tr>
</tbody>
</table>

4.7.3 **Awareness for successful agritourism**
- Be environmental sensitive/preserve indigenous plants and animals ✓
- Investigate the possibilities of developing land for agritourism purposes ✓
- Contract local tourist operations to sell goods ✓
- Make the destination a friendly area ✓

(Any 3)  (3)

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