These marking guidelines consist of 10 pages.
### SECTION A

#### QUESTION 1

1.1 1.1.1 A ✓ ✓  
1.1.2 C ✓ ✓  
1.1.3 D ✓ ✓  
1.1.4 B ✓ ✓  
1.1.5 D ✓ ✓  
1.1.6 B ✓ ✓  
1.1.7 A ✓ ✓  
1.1.8 C ✓ ✓  
1.1.9 D ✓ ✓  
1.1.10 A ✓ ✓  

(10 x 2) (20)

1.2 1.2.1 G ✓ ✓  
1.2.2 A ✓ ✓  
1.2.3 C ✓ ✓  
1.2.4 D ✓ ✓  
1.2.5 H ✓ ✓  

(5 x 2) (10)

1.3 1.3.1 Innovation/creativity ✓ ✓  
1.3.2 Budget ✓ ✓  
1.3.3 Multiple alleles ✓ ✓  
1.3.4 Family selection ✓ ✓  
1.3.5 Genetic modification/engineering/manipulation ✓ ✓  

(5 x 2) (10)

1.4 1.4.1 Co-operative ✓  
1.4.2 Occupational Health and Safety ✓  
1.4.3 Species crossing ✓  
1.4.4 Heterozygosity ✓  
1.4.5 Gene ✓  

(5 x 1) (5)

**TOTAL SECTION A: 45**
SECTION B

QUESTION 2: AGRICULTURAL MANAGEMENT AND MARKETING

2.1 Table on marketing

2.1.1 Marketing system used
Farmer A - Free marketing ✓  
Farmer B - Controlled marketing ✓ (1)

2.1.2 Reason for the system used by farmer B
Price is determined/controlled by the government ✓ (1)

2.1.3 Justification for mass marketing
Farmer B is reaching a wide range of consumers (larger markets) via the internet ✓ (1)

2.1.4 TWO ways to facilitate marketing in rural areas
- Improve roads/infrastructure ✓
- Improve market information through technology ✓
- Transportation of produce in vehicles with cooling facilities. ✓
- Cold storage depots ✓
- Market collectively by combining loads ✓ (Any 2) (2)

2.2 TWO roles of legislation in ensuring effective marketing
- Ensures increased market access to all participants ✓ (2)
- Makes provision for quality control over imports and exports of products ✓

2.3 Component of a business plan

2.3.1 Title/cover page ✓ (1)

2.3.2 Human resource plan ✓ (1)

2.3.3 Financial plan ✓ (1)

2.4 THREE common mistakes when drawing a business plan
- Provision of unrealistic assumptions/over-ambitious ✓
- Not being able to identify the potential risks/hiding risks ✓
- Provision of too much unnecessary information/leaving gaps/being too vague ✓
- Committing budget and cash flow errors/incomplete financials ✓
- No information on competitors/not highlighting competition ✓
- Use of incorrect format/poor writing/incomplete plan ✓
- Inadequate/poor research ✓
- Insufficient technical details ✓ (Any 3) (3)
2.5 Supply and demand of peaches

2.5.1 Line graph showing the supply and demand of peaches

![Line graph showing the supply and demand of peaches](image)

**Criteria/rubric/marketing guidelines**
- Correct heading ✓
- X axis - correctly calibrated and labelled (Quantities) ✓
- Y axis - correctly calibrated and labelled (Price) ✓
- Correct unit (R and kg) ✓
- Line graph ✓
- Accuracy ✓

(6)

2.5.2 Determination of the equilibrium price

R2,50 ✓

(1)

2.5.3 Situation when price is below the equilibrium price

- The quantity demanded is high ✓ and the quantity supplied is low ✓
- OR
- Quantity supplied is low ✓ and quantity demanded is high ✓

(2)

2.6 Linking statements to factors hampering marketing of products

2.6.1 Perishability ✓

(1)

2.6.2 Political situation ✓

(1)

2.6.3 Lack of control over production ✓

(1)

2.6.4 Bulkiness ✓

(1)
2.7 **THREE requirements of a container for packaging**
- It must be clean/dry/undamaged ✓
- Not import any foreign taste/odour to the product ✓
- It must be free from signs of fungal growth ✓
- It must be strong/rigid ✓

(Any 3) (3)

2.8 **Type of consumers**
- 2.8.1 Retailers ✓
- 2.8.2 Food processing companies/factories ✓
- 2.8.3 Exporters ✓

(3)

2.9 **The law of demand**
- The higher the price ✓ the less the people/consumers will demand the product ✓
- OR
- The lesser the price ✓ the more the people/consumers will buy the product ✓

(2)

[35]

**QUESTION 3 : PRODUCTION FACTORS**

3.1 **Two groups of farmers**
- 3.1.1 **Factor of land addressed by the two scenarios**
  Land availability/ area of production ✓

(1)

- 3.1.2 **TWO benefits of the practices by Group B contributing to higher production**
  - Able to work on a large area faster ✓
  - Use of machinery is more effective ✓
  - More cost effective to produce ✓
  - Specialisation ✓

(Any 2) (2)

- 3.1.3 **TWO techniques for Group A that can improve production**
  - Use of scientific methods/technology ✓
  - Consolidation of small units ✓

(2)

- 3.1.4 **Economic characteristic negatively affected by monoculture and continuous cultivation**
  Production potential of the land ✓

(1)

- 3.1.5 **TWO functions of land as a production factor**
  - Provides food ✓
  - Provides raw materials ✓
  - Provides space ✓
  - Source of raw minerals ✓

(Any 2) (2)
3.2 Highly ethical and efficient work force

3.2.1 The type of permanent labour who operates an advanced tractor
    Skilled labour ✓

3.2.2 Indication of the expertise needed by the employee
    Technical/operational ✓

3.2.3 Act of misconduct
    Sleeping on duty ✓

3.2.4 Legislation that the employer would use to justify disciplinary steps
    Basic Conditions of Employment Act 75 of 1997 ✓

3.2.5 TWO problems related to farm labour
    - Social/HIV and AIDS ✓
    - Scarcity ✓
    - Employers’ concerns ✓
    - Competition from industries/economic migrants ✓
    - Lack of training/ education ✓
    - Poor labour management ✓
    - Safety ✓
    - Poor working conditions ✓

3.2.6 TWO actions an employer should take
    - Provide incentives ✓
    - Rewards for good work ✓
    - Provide training/education ✓
    - Improve working conditions ✓
    - Improved living conditions ✓
    - Mechanisation ✓
    - Labour management ✓

3.3 Management

3.3.1 Risk management strategy
    Diversification ✓

3.3.2 Reason for the management strategy
    There are a number of enterprises in one farm/agri-tourism ✓

3.3.3 TWO primary sources of risk in a farming business
    - Technical ✓
    - Market/price ✓
    - Financial ✓
    - Production ✓
    - Legal ✓
    - Human resources ✓

(Any 2)
3.3.4 General business management skills applied by the manager

(a) Co-ordination/organisational ✓ (1)
(b) Analytic skills ✓ (1)
(c) Interpersonal/communication ✓ (1)

3.3.5 Definition of strategic management
Management that allows the business to anticipate ✓ and adapt to changes in the future ✓

OR
The process of developing strategies that allow a business to achieve its vision, mission and objectives ✓ and adapt to changing conditions ✓ (2)

3.4 Capital

3.4.1 Fixed capital
Land ✓ (1)

3.4.2 TWO sources of capital
- Grant ✓
- Loan ✓ (2)

3.4.3 Problem of capital
Scarcity ✓ (1)

3.4.4 Term of repayment
Medium term/5 years ✓ (1)

3.4.5 Calculation of the profit made by the community in 5 years
- Turnover: R12 000 000 x 5 = R60 000 000 ✓
- Expenses: R4 000 000 x 5 = R20 000 000 ✓
  Interest: R2 000 000 x 5% = R100 000 ✓
- R2 000 000 + R100 000 = R2 100 000 ✓
- Turnover – expenses:
  R60 000 000 – R20 000 000 – R2 100 000 =
- Profit: R37 900 000 ✓ (5) [35]
QUESTION 4: BASIC AGRICULTURAL GENETICS

4.1 Heterozygous pea plant (G) and a pure breed pea plant (g)

4.1.1 Genotype of each parent in the first crossing
- Parent 1 - Gg ✓
- Parent 2 - gg ✓

4.1.2 Punnett square determining the possible genotype of the offspring in the first crossing

<table>
<thead>
<tr>
<th>Gametes</th>
<th>G</th>
<th>g  ✓</th>
</tr>
</thead>
<tbody>
<tr>
<td>g</td>
<td>Gg</td>
<td>gg  ✓</td>
</tr>
<tr>
<td>g</td>
<td>Gg</td>
<td>gg</td>
</tr>
</tbody>
</table>

Punnett square with gametes and offspring ✓

Marking Guideline
- Complete Punnett square with gametes and offspring ✓
- Correct gametes ✓
- Correct offspring ✓

4.1.3 Type of dominance in the cross
Complete dominance ✓

4.1.4 Reason for the type of dominance
50% of the seeds are yellow (G) ✓ and 50% of the seeds are green (g) ✓

OR
No intermediate/new colour ✓ as seeds resemble their parents ✓

4.1.5 Calculation of the percentage of heterozygous offspring
\[
\frac{2}{4} \times 100 = 50% \]

4.2 Identification of the breeding system

4.2.1 B ✓
4.2.2 A ✓
4.2.3 D ✓
4.2.4 C ✓
4.2.5 A ✓
4.3 Variation

4.3.1 TWO genetic processes causing variation
- Mutations ✔
- Meiosis/crossing over ✔
- Recombination of genes ✔
- Fertilisation ✔

(Any 2) (2)

4.3.2 TWO importance of variation
- Animals/plants with superior characteristics can be selected for breeding purposes ✔
- Helps to improve the progeny/offspring ✔
- Generate new varieties/ breeds/cultivars ✔
- Maintains biodiversity ✔

(Any 2) (2)

4.3.3 Distinction between
Continuous variation
- Displays a complete range of quantitative characteristics ✔

Discontinuous variation
- Qualitative characteristics have a few clear cut/distinct forms/with no intermediate forms in between ✔

(1)

4.4 Selection

4.4.1 Group of cattle to be selected
Group with a mass of 250 kg ✔

(1)

4.4.2 Reason
It has a higher average mass/average mass higher than the herd ✔

(1)

4.4.3 Identification of the type of selection method
Mass selection ✔

(1)

4.4.4 Explanation of this selection method
- Selection based on the individuals with superior characteristics ✔ within the group ✔

(2)

4.4.5 TWO other selection methods
- Family selection ✔
- Pedigree selection ✔
- Progeny selection ✔
- Breeding values/EBV/biometrics ✔

(Any 2) (2)

4.5 GM

4.5.1 Identification of the year
2012/2013 ✔

(1)

4.5.2 Reason
An increase in yield/from 10.6 – 12t/ha ✔

(1)
4.5.3 TWO advantages that Farmer B got from using GM maize
- Yields increased ✓
- Increase started from 2012 ✓

4.5.4 TWO important characteristics of GM maize crops
- Resistant to herbicides ✓
- Not affected by insecticides ✓
- Crops have lower water requirements ✓
- Better adapted to the environment/region ✓

(Any 2) (2)

4.5.5 Reason for the resistance against the use of GM’s
- Health risks ✓
- Environmental risks ✓
- Ethical/socio-economic concerns ✓

(Any 1) (1)

[35]

TOTAL SECTION B: 105
GRAND TOTAL: 150