These marking guidelines consist of 11 pages.
SECTION A

QUESTION 1

1.1 1.1.1 B ✔✔
     1.1.2 A ✔✔
     1.1.3 B ✔✔
     1.1.4 C ✔✔
     1.1.5 A ✔✔
     1.1.6 A ✔✔
     1.1.7 C ✔✔
     1.1.8 B ✔✔
     1.1.9 D ✔✔
     1.1.10 D ✔✔
     (10 x 2) (20)

1.2 1.2.1 F ✔✔
     1.2.2 G ✔✔
     1.2.3 B ✔✔
     1.2.4 H ✔✔
     1.2.5 A ✔✔
     (5 x 2) (10)

1.3 1.3.1 Surplus/oversupply/overproduction ✔✔
     1.3.2 Price fluctuation ✔✔
     1.3.3 Genetics ✔✔
     1.3.4 Prepotency ✔✔
     1.3.5 Recessive gene ✔✔
     (5 x 2) (10)

1.4 1.4.1 Equilibrium ✔
     1.4.2 Land ✔
     1.4.3 Phenotype ✔
     1.4.4 Internal ✔
     1.4.5 Progeny ✔
     (5 x 1) (5)

TOTAL SECTION A: 45
SECTION B

QUESTION 2: AGRICULTURAL MANAGEMENT AND MARKETING

2.1 Marketing system

2.1.1 Identification of the marketing system

Co-operative ✓ (1)

2.1.2 Types of co-operative marketing system

• Services co-operatives ✓
• Financial co-operatives ✓
• Commercial/consumer co-operatives ✓
• Production co-operatives ✓
• Marketing co-operatives ✓
• Purchasing co-operatives ✓ (Any 2) (2)

2.1.3 Difference between Marketing

Long term strategy that involves all activities associated with production, pricing, promoting and distribution ✓ (1)

Selling - Exchanging goods for cash ✓ (1)

2.1.4 TWO problems hampering agricultural marketing chain of products

• Perishability/spoilage ✓
• Transportation ✓
• Storage ✓
• Poor infrastructure ✓
• Accidents ✓
• Lack of capital ✓
• Lack of control over production ✓
• Low value in relation to high volume ✓
• Wide distribution of products ✓
• Theft ✓
• Seasonal changes/fluctuation ✓
• Standardisation ✓
• Competition ✓
• Legislation ✓ (Any 2) (2)

2.2 Demand of products in relation to price

2.2.1 Identification of the graphs

(a) Graph B ✓ (1)
(b) Graph A ✓ (1)

2.2.2 Justification of the answers

(a) Graph B - A change in price resulted in no/little change in demand ✓ (1)
(b) Graph A - A change in price resulted in a huge change in demand ✓ (1)
2.2.3 **THREE other factors that may cause elasticity of demand**
- Nature of the produce ✓
- Availability of substitute products ✓
- Proportion of consumer's budget spent on the item ✓
- Time period ✓

(Any 3) (3)

2.3 **Fruit sold at different quantities and prices**

2.3.1 **Line graph**

![Graph showing quantities and price of fruit](image)

**Criteria/rubric/marketing guidelines**
- Correct heading ✓
- X-axis: Correctly calibrated with label (Quantities) ✓
- Y-axis: Correctly calibrated with label (Price) ✓
- Correct units (R and Pockets) ✓
- Line graph ✓
- Accuracy ✓

(6)

2.3.2 **Deduction of the relationship between the price and the quantity of fruit demanded**

The higher the price of the fruit ✓ the lower the quantities of fruit demanded ✓

**OR**

The lower the price of the fruit ✓ the higher the quantities of fruit demanded ✓

(Any 1) (2)
2.4 Business plan

2.4.1 TWO reasons for drawing up a business plan
- To test the feasibility of the business ✓
- To check the economic viability ✓
- To determine the financial needs ✓
- To secure funding ✓
- To guide operations/outlines roles and responsibilities ✓
- Provides time frames ✓
- Provides information regarding the external/internal business environment ✓
- Ensuring effective business management ✓
- To gain knowledge about marketing opportunities/competitors ✓
- To reposition the business to deal with market changes ✓
- To allow a farmer to foresee problems/risk ✓
- Helps to define goals ✓
- Provides direction and focus ✓

(Any 2)

2.4.2 THREE items included in a format of a good business plan
- Title/cover page ✓
- Summary of enterprise details/address/name ✓
- Summary of business plan/strategy/objectives ✓
- Overview/profile of the business/management team ✓
- Production plan ✓
- Management plan/time management plan ✓
- Sales and marketing plan ✓
- Financial plan ✓
- Reasons for success of business ✓
- Human resource plan ✓
- Organisational structure ✓
- SWOT analyses ✓
- Potential risks ✓

(Any 3)

2.4.3 TWO problems encountered when drawing up a business plan
- Insufficient research ✓
- Too generic ✓
- Gaps/incomplete/too much information/vague ✓
- Insufficient technical details ✓
- Unrealistic assumptions/projections ✓
- Incomplete plan/financials ✓
- Not highlighting potential competition ✓
- Hiding weaknesses and risks ✓
- Using the incorrect format ✓
- Errors/not authentic ✓

(Any 2)
2.5 Entrepreneurship

2.5.1 Identification of the THREE phases of the entrepreneurial process
- Identifying an opportunity ✓
- Research on what is needed/resource mobilisation ✓
- Production and profit making ✓  (3)

2.5.2 THREE personal characteristics of a successful entrepreneur
- Innovation/creativity ✓
- Confidence ✓
- Identify opportunity ✓
- Drive/passion/need for achievement ✓
- Perseverance ✓
- Leadership ✓
- Commitment ✓
- Hardworking ✓
- Motivation ✓
- Flexible ✓
- Market driven ✓
- Knowledgeable ✓
- Risk taker ✓
- Sound technical/operational knowledge ✓
- Interpersonal relations ✓
- Punctuality ✓

(Any 3)  (3)[35]  

QUESTION 3: PRODUCTION FACTORS

3.1 Land

3.1.1 Identification of the economic characteristic of land
Law of diminishing return ✓  (1)

3.1.2 The implication of the economic characteristic of land
When land reaches its maximum point of production ✓ it cannot produce beyond its production potential ✓  (2)

3.1.3 TWO ways a farmer can improve productivity of land
- Improve soil fertility ✓
- Water management ✓
- Change in cropping practices and farming systems ✓
- Restoring land potential ✓
- Farm land more efficient/consolidation of uneconomic units ✓
- Adapt to scientific methods/technology ✓  (Any 2)  (2)

3.1.4 THREE functions of land as a factor in agricultural production
- Source of raw materials ✓
- Provides space ✓
- Food security ✓
- Source of minerals ✓
- Can be used as a collateral ✓  (Any 3)  (3)
3.2 **Labour**

3.2.1 **TWO types of labourers employed on farms**
- Permanent/full time ✓
- Temporary/part time ✓

3.2.2 **TWO main reasons for the loss of farm labour**
- Poor working conditions ✓
- Long working hours ✓
- Exposure to harsh conditions ✓
- Lack of career opportunities/education and training ✓
- Physically demanding ✓
- Poor wages ✓
- Poor living conditions ✓
- Industrial competition ✓

(Any 2) (2)

3.2.3 **TWO ways in which farmers retain their labourers**
- Provision of better working conditions ✓
- Reasonable working hours ✓
- Provision of career opportunities/promotion ✓
- Better/living wages ✓
- Provision of education/training/skills development ✓
- Provision of proper housing ✓
- Health schemes/benefits ✓
- Bonuses ✓
- Recognition for good work done ✓

(Any 2) (2)

3.3 **Labour legislation**

3.3.1 Skills Development Act (97 of 1998) ✓

3.3.2 Occupational Health and Safety Act (85 of 1993) ✓

3.3.3 Compensation for Occupational Injuries and Diseases Act (130 of 1993) ✓

3.4 **Financial record of an enterprise**

3.4.1 **Identification of the record**
Enterprise budget/budget ✓

3.4.2 **Reason**
Showing estimates of the expected income and expenditure of the enterprise ✓

3.4.3 **Calculation of the net income for this enterprise (with formula)**
Net income = Income – Expenditure ✓
= R77 500 – (R143 564 ✓)
= – R 66 064 ✓

(4)

3.4.4 **Identification of the problem the enterprise could experience**
Loss/deficit/financial problems ✓

(1)
3.4.5 **TWO possible ways to make the enterprise viable**
- Reduce the costs ✓
- Change to an enterprise with a lower running costs ✓
- Sell at a higher price/better marketing ✓

(Any 2) (2)

3.5 **Risk in a farming business**

3.5.1 **THREE types of risk in the farming industry**
- Technical/production ✓
- Financial ✓
- Market and price ✓
- Political/policy risks ✓

(Any 3) (3)

3.5.2 **Skill the manager needs in identifying the risks**
- Conceptual ✓
- Analytical ✓

(Any 1) (1)

3.5.3 **TWO strategies to reduce the impact of risk**
- Insuring against risks ✓
- Risk sharing ✓
- Diversification ✓
- Processing/value adding ✓
- Flexibility ✓
- Future contracts/hedging ✓

(Any 2) (2)

3.5.4 **THREE main principles for successful management**
- Planning ✓
- Implementation ✓
- Organisation ✓
- Coordination ✓
- Decision making ✓
- Control ✓

(Any 3) (3)

**QUESTION 4: BASIC AGRICULTURAL GENETICS**

4.1 **Representation of the genotypes for different generations**

4.1.1 **Parent with red phenotype**
Female ✓

**REASON**
The parent with R for red colour/indicated by RR ✓

(1)

4.1.2 **Identification of the ratio’s and phenotype**
(a) 3 red : 1 black/3:1 ✓

(1)

(b) 1:2:1 ✓

(1)

(c) Red ✓

(1)
4.2 Di-hybrid crossing

4.2.1 Traits that are being investigated
- Hair colour ✓
- Length of hair ✓

4.2.2 Genotype of a bull
bb ✓ II ✓

4.3 Scenario on variation

4.3.1 Identification of the

(a) Genetic factor of variation - Genotype ✓

(b) Environmental factor of variation - Feeding/nutrition ✓

4.3.2 Relationship between feed restriction and average weight gain
The higher the level of feed restrictions ✓
the lower the average weight gain ✓
OR
The lower the level of feed restrictions ✓
the higher the average weight gain ✓ (Any 1)

4.3.3 Hypothesis of this investigation
There is no effect of genotype and feeding ✓
on growth performance ✓
OR
Genotype and feeding ✓ reduce growth performance ✓
OR
Genotype and feeding ✓ increase growth performance ✓ (Any 1)

4.4 Breeding systems applied in cattle farming

4.4.1 Identification of the breeding systems
A Crossbreeding ✓
B Inbreeding ✓

4.4.2 Breeding system that promotes heterosis
A ✓

4.4.3 TWO disadvantages of inbreeding
- Loss of vigour/performance/inbreeding depression ✓
- Loss of fertility ✓
- Genetic variation declines ✓
- Increase the lethal genes which can result in death ✓
- Reduced vitality ✓
- Fixation of undesired genes ✓
- Expert knowledge required ✓
- Less resistance to diseases ✓
- Poor adaptation to the environment ✓
- Undesirable characteristics can be bred into the offspring ✓
- Deformed animals ✓ (Any 2)
4.4.4 **Letter of the breeding system**

C ✓

(1)

4.5 **Selection**

4.5.1 **Definition of selection**

Process of choosing/identifying specific individuals ✓ for their desired characteristics/traits ✓

(2)

4.5.2 **Type of selection in nature**

Natural ✓

(1)

4.5.3 **THREE characteristics selected for in animal production**

- Growth ✓
- Health/disease resistance ✓
- Fertility ✓
- Body conformation ✓
- Production types ✓
- Breeding standards ✓

(Any 3) (3)

4.5.4 **Aspects to be improved through selection**

(a) Choosing animals with superior characteristics for breeding ✓
(b) Choosing animals that can adapt/produce in a specific area ✓

(1)

4.6 **Genetic modification**

4.6.1 **TWO techniques used in the genetic modification process**

- Micro-injection ✓
- Gene gun/Biolistics ✓
- Bacterial carriers/Agro-bacterium tumefaciens ✓
- Electroporation ✓
- Recombinant DNA ✓
- Calcium phosphate precipitation ✓
- Gene silencing ✓
- Gene splicing ✓
- Lipofection ✓
- Viral carriers ✓

(Any 2) (2)

4.6.2 **TWO disadvantages of genetically modified plants**

- Health concerns/allergies ✓
- Not enough research has been done ✓
- Expensive ✓
- Super weeds develop/reduced effectiveness of pesticides ✓
- Religious/ethical beliefs ✓
- Reduced biodiversity ✓
- Gene transfer to non-target species ✓
- Possibility of mutations ✓

(Any 2) (2)
4.6.3 **TWO advantages of genetically modifying plants**
- Resistance to herbicides/insects/pests ✓
- Resistance to harsh environmental conditions ✓
- Plants have a lower water requirement ✓
- Improved quality/taste/flavour/nutritional value ✓
- Shelf life ✓
- Increased yields ✓

(Any 2)  

[35]

**TOTAL SECTION B:** 105  
**GRAND TOTAL:** 150