



basic education

Department:
Basic Education
REPUBLIC OF SOUTH AFRICA

**NATIONAL
SENIOR CERTIFICATE**

GRADE 12

AGRICULTURAL MANAGEMENT PRACTICES

NOVEMBER 2018

MARKING GUIDELINES

MARKS: 200

These marking guidelines consist of 12 pages.

SECTION A**QUESTION 1****1.1 Multiple-choice questions**

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

1.2 Matching items

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

1.3 Agricultural terms

1.3.1	Insurance ✓		
1.3.2	Demand ✓		
1.3.3	Compensation for Occupational Injuries and Disease Act, 1993 (Act 130 of 1993) ✓		
1.3.4	Game farming/Game farm ✓		
1.3.5	Infrastructure ✓	(5 x 1)	(5)

1.4 Underlined words

1.4.1	Expenditure / Working capital/Floating capital ✓		
1.4.2	Debtors ✓		
1.4.3	Cash /Money ✓		
1.4.4	Receipts ✓		
1.4.5	Packaging ✓	(5 x 1)	(5)

TOTAL SECTION A: 50

SECTION B**QUESTION 2: PHYSICAL AND FINANCIAL PLANNING****2.1 Slope****2.1.1 Soil slope**

TOPOGRAPHICAL FACTOR	PRODUCTION POTENTIAL
Deep soil with few rocks, gentle slopes	Greater production potential more suited for crop production/ higher yield ✓
Shallow soil on moderate rocky slope	Less production potential more suitable for grazing ✓
Very steep slopes	Better suited for grazing, wild life and forestry ✓

(3)

2.1.2 Different methods that the farmer can use to prevent soil erosion

- A – Vegetation strips ✓
- B – Stone banks/Bunding ✓
- C – Contour banks/Ridges ✓

(3)

2.1.3 Correct cultivation method and reason

- Method A ✓

(1)

AND

- Reduce the flow of water ✓
- And give the water more time to infiltrate the soil ✓

OR

- Reduced erosion ✓
- By reducing the speed that the water flow ✓

(Any 1) (2)

2.2 Pastures**2.2.1 Complete the table and calculate the number of animals**

ANIMAL GROUP	NUMBER	USAGE FACTOR	TOTAL
Lactating cows	300	1,2	360
Calves 1 – 2 year	300	0,6	180 ✓
Replacement heifers	60	1,0	60 ✓
Bulls	10	1,3	13 ✓
Total animals on the farm	–	–	613 ✓

(4)

2.2.2 Calculate the maximum number of the animals on the farm

- Max number of animals = $\frac{2\,000\text{ ha}}{4\text{ LSU/ha}}$ ✓
= 500 animals ✓

(2)

2.2.3 Deduce sustainable production, reason and impact

- No, it is not sustainable ✓ or
- No there are too many animals (113 extra) on the farm ✓ (Any 1) (1)

Possible impacts

- Overgrazing of palatable grasses will take place ✓
- Veld will deteriorate/increase of unpalatable grasses ✓
- Soil erosion will occur ✓
- Carrying capacity will decrease ✓ (Any 3) (3)

2.2.4 Solutions for sustainability

- Reduce the number of animals/Correct carrying capacity /Correct stoking rate ✓
- Sell calves at a young age or at weaning ✓
- Make use of artificial pastures/Planting of artificial pastures ✓
- Planting of fodder crops as extra feed ✓
- Make use of a feedlot for the younger animals ✓
- Replace large livestock with small livestock ✓
- Fertilising/irrigation of veld ✓
- Obtain/buy/hire extra veld ✓ (Any 5) (5)

2.3 Farming systems (methods)

- Extensive ✓ – large farms with small capital inputs relative to size e.g. labour and fertiliser ✓
- Semi-intensive ✓ – combination between extensive and intensive systems (more management and labour intensive than extensive but less than intensive) ✓
- Intensive ✓ – High capital input relative to size of area ✓ (Any 3 x 2) (6)

2.4 TWO usages of animal traction

- Transport farm inputs, products and feed/licks ✓
- Spreading of fertilizers and composts ✓
- Cultivation and transport on difficult terrain ✓
- For weeding ✓ (Any 2) (2)

2.5 FOUR methods to ensure a productive workforce

- Appreciation and credit given for work done ✓
- Have a sincere interest in the worker as a person ✓
- Transfer responsibility to the worker ✓
- Fair remuneration ✓
- Training ✓
- Communication ✓
- Recreation facilities/Housing ✓ (Any 4) (4)

2.6 Budget**2.6.1 Comparable Statement**

- Cash flow statement ✓
- Income statement ✓ (Any 1) (1)

2.6.2 Item influenced by change in interest rate and reason

- Loan ✓
- The higher the interest rate the less the profit will be in the enterprise and vice versa ✓ (2)

2.6.3 ONE item influenced by inflation and explain

- Seed ✓
- Fertilizer ✓
- Wages ✓
- Pesticide ✓ (Any 1) (1)

AND

- Inflation will increase prices of these items and lower the profit ✓ (1)

2.6.4 Item affected by labour legislation

- Wages ✓ (1)

2.7 Choice of farming methods**2.7.1 Profitability**

- Higher profitability will make it more likely that a farmer will choose that particular method ✓
- Future market trends must also be considered in determination of profitability ✓ (2)

2.7.2 Markets

- Distance to the markets must be considered due to costs to the market ✓
- Value adding of product reduces risk of deterioration due to distance ✓
- Size of market can have a big influence on profitability due to prizes and selling volumes ✓
- Export markets can have higher costs but also higher income than local markets ✓ (Any 2) (2)

2.7.3 Policies

- Legislation can make it impossible to use certain methods ✓
- Policies can limit the use of the different resources ✓ (2)

2.8 Credit as high-risk action

- Sudden changes in interest rate can have a negative effect on the liability of the farm or make repayments difficult ✓
- Different climate or market factors can have a negative effect on the number of products sold or the price of the products that will negatively affect the profitability of the farm ✓ (2)

QUESTION 3: ENTREPRENEURSHIP, RECORDING, MARKETING, BUSINESS PLANNING AND ORGANISED AGRICULTURE**3.1 Business plan**

3.1.1 Marketing plan ✓ (1)

3.1.2 Production plan ✓ (1)

3.1.3 Human resources plan/Labour plan ✓ (1)

3.1.4 SWOT analysis ✓ (1)

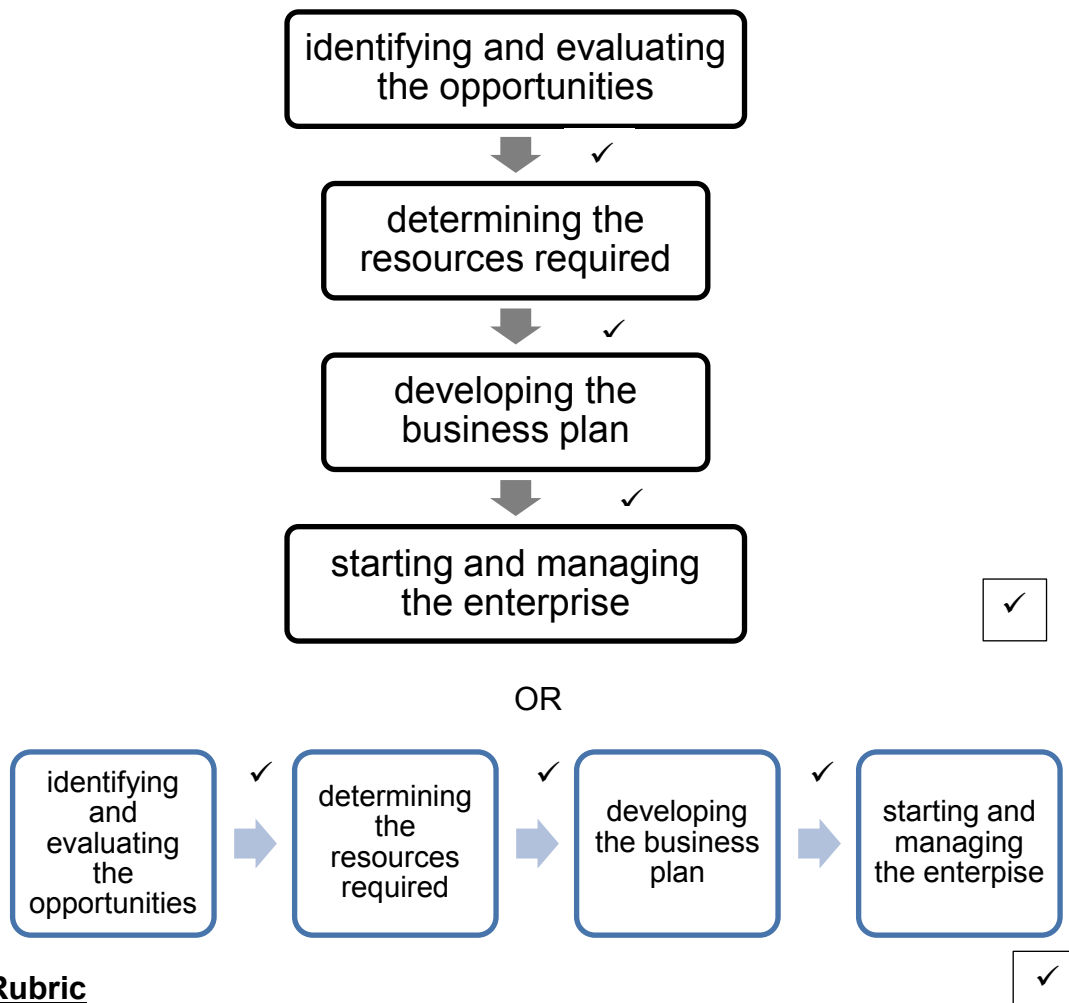
3.2 Advantages of business plan

- Provides clear strategies and goals ✓
 - Guides the business towards goal and objectives ✓
 - Ensures effective business management ✓
 - Helps to reposition the business ✓
 - Facilitates risk management ✓
 - Helps to compile set of priorities e.g. marketing plan ✓
 - Helps the farmer to determine competitive advantages ✓
 - Makes early detections of possible problems ✓
 - Helps in allocating funds according to priority ✓
 - Identifies beneficiary opportunities ✓
 - Helps to improve communication within the business ✓
 - Creates timetable to assist business in implementing ✓
- (Any 5) (5)

3.3.1 Factors that contribute to a successful manager

- Knowledge of the enterprise ✓
 - Contacts/Networking ✓
 - Financial skills ✓
 - Managerial skills ✓/Leadership ✓
 - Human relation skills ✓
 - Business skills ✓
- (Any 3) (3)

3.3.2 Phases of the entrepreneurial process



Rubric

- For each correct linkage one mark (3 x 1)
 - Correct type of flowchart one mark
- (4)

3.4 Requirements for a good business record

- Clear and simple/easy ✓
 - Specific/accurate ✓
 - Realistic ✓
 - Relevant ✓
 - Complete ✓
 - Addresses specific needs of the farm ✓
 - Up to date ✓
- (Any 3) (3)

3.5 Importance of a Balance Sheet

- It gives the farmer a clear picture of business financial position ✓
 - Shows whether the business is well managed ✓
 - It shows the financial position of the farm at a specific date ✓
- (3)

3.6 Distinguish between diversification and specialisation an example

3.6.1 Diversification

- Diversification is when a farmer has various production units that contribute to the total income of the farm ✓
- Example: any two or more enterprises (dairy + beef; sheep + goat; maize + sunflower etc.) ✓ (2)

3.6.2 Specialisation

- Specialisation is when a farmer focuses on one commodity by adapting the farming methods to producing that single product ✓
- Example: only ONE enterprise (maize; wool; dairy; meat; etc.) ✓ (2)

3.7 Product organisations

3.7.1 Name and discuss role of product organisations

- Business information services: ✓ – responsible for collecting and distributing production and market information to all role players ✓
- Market development and product promotion: ✓ – development of domestic and foreign markets through integrated promotion campaigns in collaboration with industry players ✓
- Research, development and technology transfer: ✓ – facilitates and manages research programmes for the benefit of all role players ✓ (3 x 2) (6)

3.7.2 Disadvantages of product organisations

- Limits the initiative of farmers ✓
- Marketing and negotiations are limited ✓
- Membership fees must be paid ✓
- Can lose control over his product ✓
- Too many organisations can have a negative effect ✓ (Any 2) (2)

3.8 Modern methods of advertising

- Online/online advertisement/webpages ✓
- Internet based services/Social media ✓
- Sponsorships at conventions/functions ✓
- Direct mail ✓
- Billboards ✓
- SMS ✓
- Company/product cell phone application (app) ✓ (Any 4) (4)

3.9 Factors that influence quantity of product consumer wants

- The lower the price of a product, the higher the demand for it will be **or** the higher the price of the product the lower the demand will be for that product. ✓
- If consumers prefer a particular product to competing products, the demand for the product that people prefer will be high ✓
- If consumers prefer a particular product, the more they tend to buy at higher prices ✓
- The more consumers there are, the greater the demand for a specific product ✓
- The higher the income of consumers the higher the demand for a product ✓
- If the price of a product that competes with other is noticeably lower, the demand for a certain product will be lower as consumers prefer to buy cheaper products ✓
- The bigger the range of products available, the smaller the demand for a particular product ✓
- Bigger range will increase the total demand for a product ✓ (Any 5) (5)

3.10 Relationship between income and cost**3.10.1 Label different graphs**

- Graph A – Fixed cost ✓
- Graph B – Total cost ✓
- Graph C – Variable cost ✓ (3)

3.10.2 Name for the point marked D

- Break-even point ✓ (1)

3.10.3 Economic importance of point D

- Point **D** indicate the number of products that must be sold so that the income is equal to the expenditure ✓
- Before the point marked **D**, the business will be operating at a loss ✓
- After the point marked **D**, the business will be operating at a profit ✓ (3)

[50]

QUESTION 4: HARVESTING, PROCESSING, MANAGEMENT AND AGRITOURISM**4.1 Factors to consider when doing pre-harvest planning**

- Readiness of crop ✓
 - Harvest equipment serviced ✓
 - Availability of harvest equipment
 - Availability of contractor ✓
 - Enough harvest containers ✓
 - Clean storage area ✓
 - Available transport ✓
 - Availability of labourers ✓
 - Availability of restroom facilities ✓
 - Availability of drinking water ✓
- (Any 5) (5)

4.2 Describe handling of agricultural products

- Correct disposal of waste – so that it does not contaminate produce ✓
 - Health of workers – to avoid transmitting diseases through products ✓
 - General hygiene – must be of high standard to minimise contamination of products ✓
 - Correct handling of produce – to reduce spoilage of produce ✓
 - Correct packaging and transport to maintain quality of produce ✓
- (5)

4.3 Storage methods for newly harvested agricultural products

- 4.3.1 Fruits or vegetables ✓ (1)
- 4.3.2 Meat ✓ (1)
- 4.3.3 Grain/Cereals/Raw oil seeds ✓ (1)
- 4.3.4 Milk ✓ (1)

4.4 FIVE advantages of bulk storage

- The area exposed to air is less per mass ✓
 - Pest is less due to deeper layers and exclusion of air ✓
 - Bulk handling is cheaper ✓
 - Bulk handling is easier ✓
 - It is faster to handle ✓
 - Less labour is required ✓
- (Any 5) (5)

4.5 Favourable growth conditions under which micro-organisms can thrive

- The correct food product ✓
 - Moisture ✓
 - Suitable temperature ✓
 - Suitable pH ✓
 - Air/oxygen ✓
- (Any 4) (4)

4.6 Packaging**4.6.1 Packaging material – polystyrene**

- It is suitable for meat products ✓

Reason

- It can be easily cleaned ✓
- Does not absorb odours ✓
- Light weight ✓
- Hygienic ✓
- Non-toxic ✓
- Impervious to gases and odours ✓
- Withstand moisture ✓

(Any 2) (3)

4.6.2 Packaging material – card board

- It is not suitable for meat products ✓

Reason

- Does not withstand moisture ✓
- Not easy to clean ✓
- Not impervious to gases and odours ✓
- Can be heavy/Not light weight ✓

(Any 2) (3)

4.7 Marketing channels**4.7.1 Contract marketing ✓**

(1)

4.7.2 Internet marketing ✓

(1)

4.7.3 Auctions ✓

(1)

4.7.4 Fresh produce markets ✓

(1)

4.8 Advantages of planning and co-ordination**4.8.1 Advantages of planning**

- Ensures that the farm runs smoothly and purposefully ✓
- Helps to anticipate change so adjustments can be made timeously ✓
- Helps to establish the goals and standards needed for control ✓

(3)

4.8.2 Advantages of coordination

- Duplication is eliminated ✓
- Better cooperation amongst the workers ✓
- Organisation in the workplace becomes easier and more functional ✓

(3)

4.9 Effect of motivation through encouragement and delegation

- Workers feel more appreciated ✓
- Builds self-confidence ✓
- Workers feel part of management ✓
- Leads to higher productivity ✓

(4)

4.10.1 Agritourism**4.10.1 Type of enterprise**

- Agritourism

(1)

4.10.2 Agritourism**Rubric:**

The flyer must have the following information:

- Location of the farm ✓
- Contact details of the farm ✓
- Facilities available e.g. overnight accommodation ✓
- Possible activities and experiences e.g. mountain climbing ✓ / hunting ✓ / bird viewing ✓ / fishing ✓ / canoeing ✓ (any 2 activities, maximum 2 marks)
- Design/Layout should not be more than half an A4-page ✓

(6)

[50]**TOTAL SECTION B: 150**
GRAND TOTAL: 200