

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.

Please turn over

SECTION A

QUESTION 1

1.1 **Multiple-choice questions** B√√ 1.1.1 C√√ 1.1.2 A✓✓ 1.1.3 C√√ 1.1.4 D√√ 1.1.5 D√√ 1.1.6 C√√ 1.1.7 A√√ 1.1.8 A√√ 1.1.9 1.1.10 D√√ (10 x 2) (20)1.2 Matching items 1.2.1 E√√ F√√ 1.2.2 1.2.3 | √ √ 1.2.4 C√√ 1.2.5 G√√ 1.2.6 L√✓ J√√ 1.2.7 B√√ 1.2.8 D√√ 1.2.9 K√√ 1.2.10 (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 ✓ Infrastructure ✓ 1.3.5 (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 \checkmark

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 ✓

2.1.3 Correct cultivation method and reason

Method A ✓

AND

OR

- Reduce the flow of water ✓
- And give the water more time to infiltrate the soil ✓
- Reduced erosion ✓
- By reducing the speed that the water flow \checkmark (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)

(3)

(3)

(1)

2.2.2 Calculate the maximum number of the animals on the farm

• Max number of animals $=\frac{2\ 000\ ha}{4\ I\ SU/ha}$

$$= 500$$
 animals \checkmark

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 /Correction 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 ✓ 		(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 that 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)

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(1)

(1)

(Any 1)

2.6 **Budget**

2.6.1 **Comparable Statement**

- Cash flow statement ✓
 - Income statement ✓

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 \checkmark (2)

2.6.3 **ONE item influenced by inflation and explain**

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

AND

• Inflation will increase prices of these items and lower the profit \checkmark (1)

2.6.4 Item affected by labour legislation

Wages ✓

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 \checkmark
- 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 ✓

2.7.3 Policies

- Legislation can make it impossible to use certain methods \checkmark
- Policies can limit the use of the different resources ✓

2.8 **Credit as high-risk action**

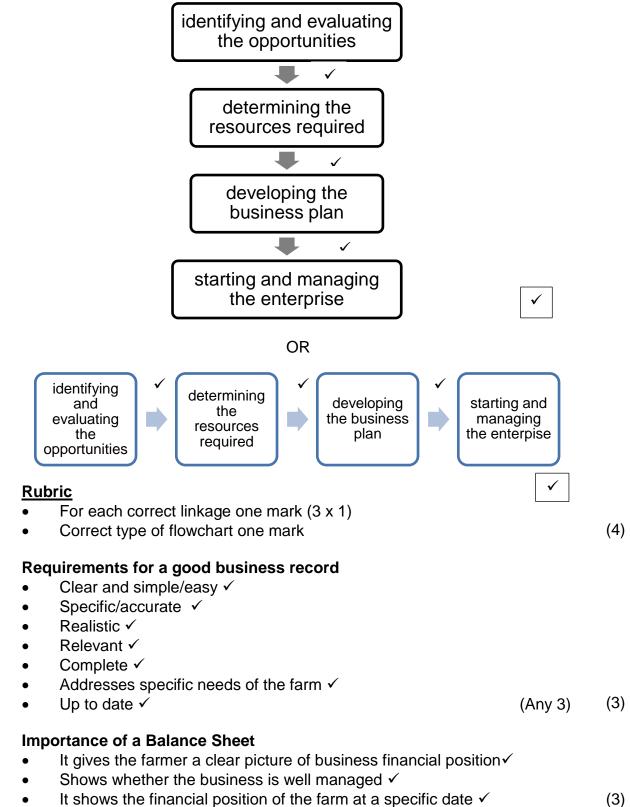
- Sudden changes in interest rate can have a negative effect on the liability of the farm or make repayments difficult ✓
- Different climate or market factors can have a negative effect on the number of products sold or the price of the products that will negatively affect the profitability of the farm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

(2)

QUESTION 3: ENTREPRENEURSHIP, RECORDING, MARKETING, BUSINESS PLANNING AND ORGANISED AGRICULTURE

Business plan		
Marketing plan ✓		(1)
Production plan ✓		(1)
Human resources plan/Labour plan ✓		(1)
SWOT analysis ✓		(1)
 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 ✓ 	(Any 5)	(5)
 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)
	 Marketing plan ✓ Production plan ✓ Human resources plan/Labour plan ✓ SWOT analysis ✓ 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 a successful manager Knowledge of the enterprise ✓ Contacts/Networking ✓ Financial skills ✓ Managerial skills ✓/Leadership ✓ 	Marketing plan ✓ Production plan ✓ Human resources plan/Labour plan ✓ SWOT analysis ✓ 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 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) Factors that contribute to a successful manager Knowledge of the enterprise ✓ Contacts/Networking ✓ Managerial skills ✓/Leadership ✓ Human relation skills ✓





It shows the financial position of the farm at a specific date \checkmark

3.4

3.5

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 \checkmark
- 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 \checkmark (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 \checkmark
- The higher the income of consumers the higher the demand for a product \checkmark
- 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 \checkmark (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 ✓

3.10.2 Name for the point marked D

• Break-even point ✓

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 \checkmark
- After the point marked **D**, the business will be operating at a profit \checkmark

(3) **[50]**

(3)

(1)

(Any 5)

(5)

10 NSC – Marking Guidelines

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 ✓

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 \checkmark
- 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/CerealsRraw 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 ✓

4.5 **Favourable growth conditions under which micro-organisms can thrive**

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

(5)

(Any 5)

(3)

(1)

(1)

(Any 2)

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 ✓

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 \checkmark (1)

4.7.3 Auctions ✓

4.7.4 Fresh produce markets ✓

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 \checkmark (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 \checkmark

4.10.1 Agritourism

4.10.1 Type of enterprise

Agritourism •

4.10.2 Agritourism

Rubric:

The flyer must have the following information:

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

(6) [50]

TOTAL SECTION B: 150

GRAND TOTAL: 200

(1)