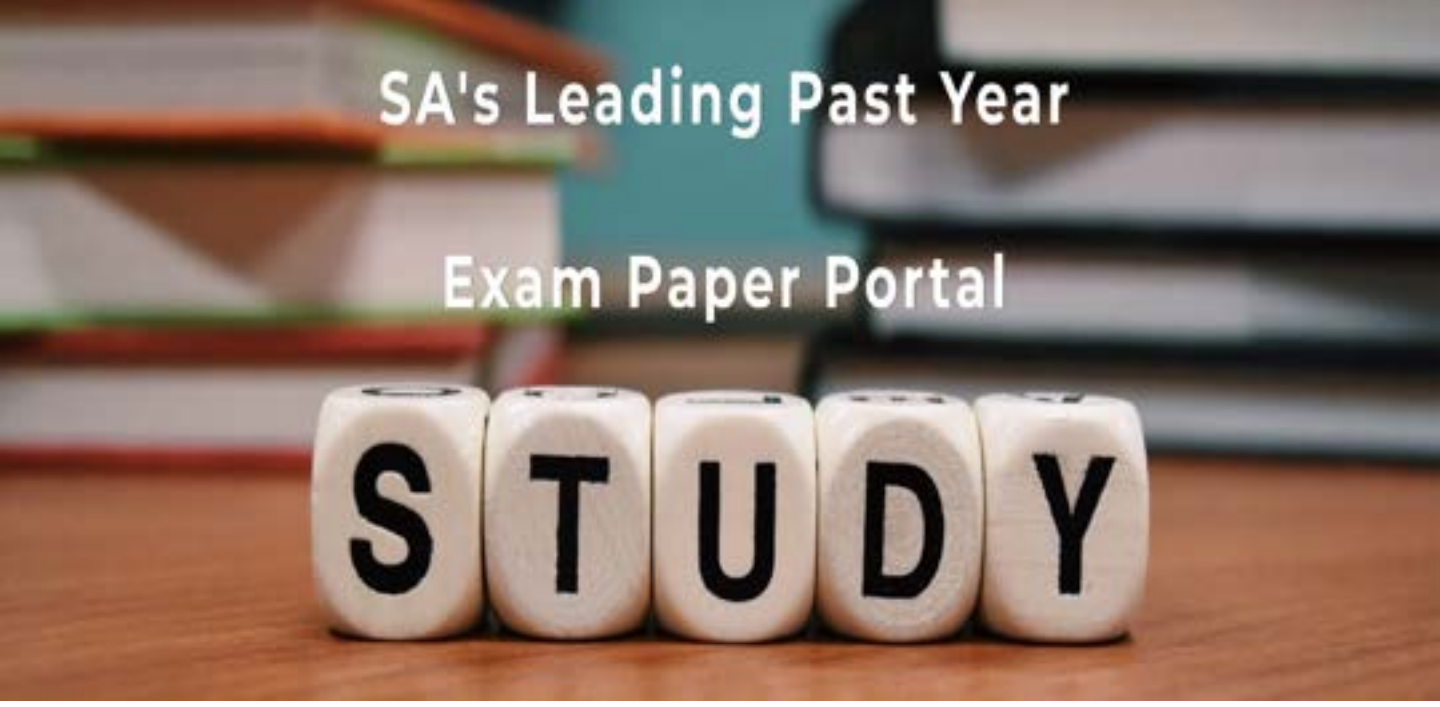


You have Downloaded, yet Another Great Resource to assist you with your Studies ☺

Thank You for Supporting SA Exam Papers

Your Leading Past Year Exam Paper Resource Portal

Visit us @ www.saexampapers.co.za

SA EXAM PAPERS

education

Department:
Education
REPUBLIC OF SOUTH AFRICA

NATIONAL SENIOR CERTIFICATE

GRADE 12

AGRICULTURAL MANAGEMENT PRACTICES

NOVEMBER 2009

MEMORANDUM

MARKS: 200

This memorandum consists of 11 pages.

SECTION A

QUESTION 1.1

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

(10 x 2) (20)

QUESTION 1.2

1.2.1	B✓
1.2.2	A✓
1.2.3	C✓
1.2.4	D✓H✓
1.2.5	I✓
1.2.6	H✓D✓
1.2.7	J✓
1.2.8	G✓
1.2.9	E✓
1.2.10	F✓

(10 x 2) (20)

QUESTION 1.3

1.3.1 Supply ✓✓

1.3.2 Management plan/Production plan
Physical plan/ year plan✓✓

1.3.3 Elasticity ✓✓

1.3.4 Profit/ surplus of goods ✓✓

1.3.5 Permanent / Full time✓✓

1.3.6 Commercial ✓✓

1.3.7 Loss ✓✓

1.3.8 Grading/ Classing ✓✓

1.3.9 Cash ✓✓

1.3.10 Price/ Equilibrium ✓✓

(10 x 1) (10)

TOTAL SECTION A: 50

SECTION B

QUESTION 2: ANIMAL AND CROP PRODUCTION

2.1 Type of irrigation ✓
Soil cultivation ✓/Type of implements✓
Fertilisation ✓/ Liming ✓
Type of crop ✓
Scheduling of irrigation ✓
Type of Animal✓
Rotational grazing/ rotational cropping
(Any 5) (5)

2.2 **Pastures**

2.2.1 Palatability/type of veld ✓
Nutritive value ✓
Ability to compete. ✓
Volume/amount of grass ✓
Resistance to grazing ✓
State of plant growth in relation to climax condition ✓
Vegetational / reproductive stage of the plant
Drought tolerance/Summer/Winter grower (Any 5) (5)

2.2.2 Keep animals out of pasture until the veld has recovered./ Erecting fences around the affected areas/ Correct grazing/pasture management✓
Correct cultivation✓
Mulching/ soil covering✓
Establish more plants by means of sowing/planting more grass. ✓
Make contours to reduce the down flow of water. ✓
Build ridges with stones, rocks or tyres in the dongas that have developed✓
Add fertiliser to stimulate growth in the affected areas✓ (Any 4) (4)
[9]

2.3 **Climatic Graph (Klipheuwel)**

2.3.1 Week 4✓ – cold temperature✓, high humidity✓, strong wind. ✓
Week 7✓ – high temperature✓, high humidity✓ (2)

2.3.2 Week 4 – raining (wet animals) ✓, wind (cool animals down) ✓, low temperature (cool animals down)✓ (Any 2)
Week 7 – raining (wet animals) ✓, low wind speed (animals less affected) ✓ higher temperature (animals not so cold) ✓ (Any 2) (4)

2.3.3 (a) Shelter✓, shade trees/shade netting✓/ adapted breeds✓/ cooling facilities like
ventilation fans✓ and mist sprayers✓ (Any 1) (1)
(b) Bring the animals indoors to avoid the effect of the wind. ✓
Erect a windbreak to reduce the effect of the wind. ✓ (Any 1) (1)
(c) Heating facilities✓, Housing (shelter) ✓, effective feeding ✓,
adapted breeds✓ (Any 1) (1)

2.3.4 Lower temperature✓– requires more heating, thus more units✓ of electricity is used
Animals need to be provided with more food to create their own energy to keep warm (2)
[11]

2.4 **Farm management**

2.4.1 Control. ✓ (1)

2.4.2 Provide transport✓
Provide accommodation✓
Disciplinary action✓
Implement a time-clock system that will control the labourer's arrival and departure. ✓
Attendance register✓ (2)

2.4.3 Control loading of the fertiliser spreader to ensure that no wasting took place. ✓
Control the number of fertiliser bags used by recording it every time the fertiliser spreader is loaded. ✓
Lock the fertiliser shed to prevent theft. ✓
Good recordkeeping✓
Better control over fertilisers✓
Update security✓
Control the calibration of the fertiliser spreader. ✓ (Any 3) (3)

2.4.4 Disciplinary action. ✓(Any relevant legal action showing to this) (1)
[7]

2.5 **Specialised farming enterprise**

2.5.1 Precision farming. ✓ (1)

2.5.2 Reducing cost of producing the product in the area. ✓
Reducing risk of contaminating the environment by means of injudicious application of agro-chemicals. ✓
More accurate crop yield estimation. ✓
Increased profit✓
Saving of time and labour✓
Information collected may lead to more accurate production inputs like plant density, fertilisation, and other inputs. ✓
Optimal and protective use of natural resources✓ (4)
[5]

2.6 **Farm labour**

2.6.1 A – Permanently employed labourers. ✓
B – Seasonal labourers. ✓/Temporary labourer
C – Contract/occasional labourer. ✓/ Casual labourer / Temporary labour ✓ (3)

2.6.2 A seasonal labourer is employed every year ✓at the same time/season to a specific task. ✓ (Any 2)
Contract/occasional labourers are employed to do a specific non-repeatable task✓ at a specific time. ✓ (Any 2) (4)

2.6.3 Financial incentives for good work. / bonus✓
Possible partnership deals✓
Planning of production processes. ✓
Daily planning. ✓
Supervision. ✓
Effective mechanisation. ✓
Better life circumstances. ✓
Training. ✓ (Any 3) (3)
[11]

2.7 **Farming system and sustainable food supply**

2.7.1 Subsistence farmer. ✓ (1)

2.7.2 Fence around the vegetable garden. ✓/ Providing grazing camps(fencing) ✓
Herding of animals
Make use of the communal grazing. ✓
Feedlot✓
Planting improved cultivars/ improving production✓ (Any 2) (2)
[3]
[50]

QUESTION 3: RECORDING, FINANCIAL STATEMENTS AND ENTREPRENEURSHIP

3.1 **INCOME AND EXPENSES STATEMENT**

Animal feed	R 15 000
Wages	R 10 000
Fuel	R 7 000
Electricity	R 4 000
Containers	R 870
Interest (medium-term capital)	R 650
TOTAL EXPENCES	R 37 520✓✓
Sold produce	R 36 000
Sold stock (animals)	R 29 600
TOTAL INCOME	R 65 600✓✓
	R 65 600
	R 37 520
GROSS MARGIN/ GROSS INCOME	R 28 080✓✓

(6)

3.2 **SUTHA AGRICULTURAL ENTERPRISES**

Current Assets		Current Liabilities	
Item	Rand	Item	Rand
Cash in the bank✓	R73 000	Tractor instalment due next month ✓	R10 000
Accounts retrievable ✓	R42 000	Labour expenses for the next month ✓	R22 000

Intermediate Assets		Intermediate Liabilities	
Item	Rand	Item	Rand
Seed (30 kg) ✓	R62 000	Yearly fertiliser contract ✓	R128 000
Tractors (2) ✓	R230 000		
Truck (1) ✓	R184 000		
Fence ✓	R89 000		
Implements✓	R120 000		

(10)

3.3 **Financial Analysis 31 March 2008 (Private Farm)**

3.3.1 R34 450 + R22 035 + R28 161 = R84 646 ✓ (1)

3.3.2 Ploughing, ✓
Harrowing, ✓
Construction of storm drains. ✓
Fertilisation✓
Irrigation✓ (3)

3.3.3 R14 000 + R3 000 = R17 000 ✓✓ (2)

3.3.4 Percentage gross profit on turnover = $\frac{\text{Gross Profit}}{\text{Turn over}}$ ✓

$= \frac{\text{R56 066}}{\text{R84 646}} \times \frac{100}{1}$ ✓ = 66,23% ✓ (3)

[9]

3.4 **Group of young farmers**

3.4.1 Soil preparation:
- Garden forks ✓
- Rakes ✓
- Hoe (2)

3.4.2 Weed and pest control:
- Knapsack sprayers ✓
- Hoe/Tiller ✓ (2)

3.4.3 Harvesting:
- Clippers ✓
- Picking bags✓ (2)

[6]

3.5 **Checklist for business plan:**

	Yes	No
Name of business	(1)	(0)
Description of business	(1)	(0)
Partnerships	(1)	(0)
Sources of income	(1)	(0)
Marketing	(1)	(0)
Budget	(1)	(0)
Sources of labour	(1)	(0)
Operational planning	(1)	(0)

(8)

3.6 **Budgeting (Farm Budget)**

3.6.1 A farm budget is a physical, financial plan✓ for the operation of the farm for some period of time.✓ /A predicted income /expenditure for the following year (Forecast) (2)

3.6.2 -Total farm budget✓/Complete budget/ Whole farm budget
Enterprise budget✓
-Partial budget✓
-Cash-flow budget✓
-Capital budget✓
-Break even budget✓ (Any 3) (3)
[5]

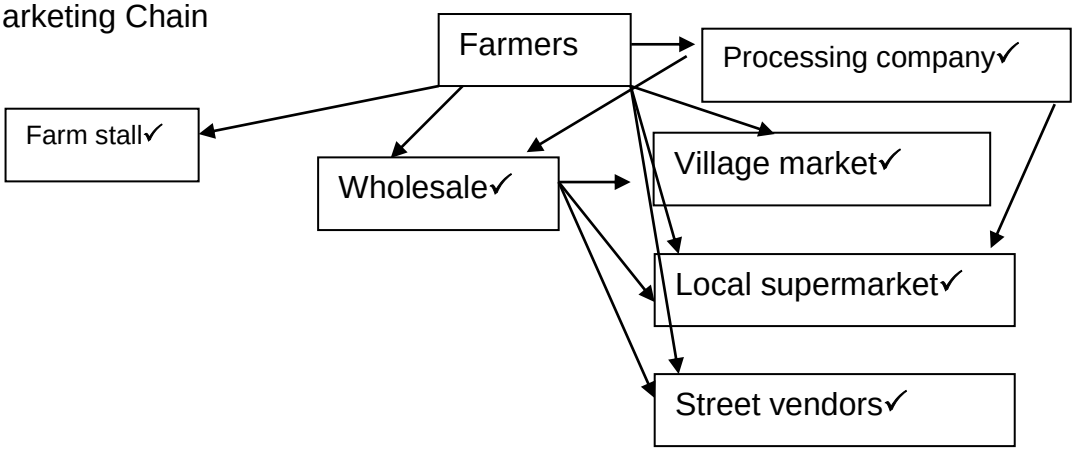
3.7

	Farmer A	Farmer B
3.7.1	Healthy animals✓ Outdated farm practices	Better production✓ Modern/updated farm practices
3.7.2	Does not change, irrespective of situation✓/ Poor economic responsibility✓	Decision-making skills, taking action etc.✓/ Good economic responsibility✓
3.7.3	Stays rigid, no creativity in actions✓/ Poor adaptation	Developing ideas, adaptation, reformulation of problems, find solutions✓/ good adaptation

(6)
[50]

QUESTION 4: HARVESTING, VALUE-ADDING, MARKETING, AGRI-TOURISM AND INDUSTRY

4.1 Marketing Chain



(Any 5) (5)

Deduct one mark for discussion only if no schematic representation

4.2 **Restrictions/Barriers for small-scale farmers to enter meat industry**

4.2.1 A lot of money is needed to buy the animal stock, equipment and to pay for marketing and processing costs. Loans may be difficult to obtain. Lack of collateral to banks. ✓✓ (2)

4.2.2 There must be enough buyers for the product and the buyers/customers must be convinced about the farm product and reliability of the farmer. Lack of transport of perishable products Lack of ability to compete✓✓ (2)

4.2.3 Consumers, government, the meat industry and legislation demand high quality meat in terms of hygiene, taste and appearance. Some breeds do not render good quality meat Animal nutrition/ management practices plays a role in the quality of the product✓✓ (2)

4.2.4 The farmer and the workers need skills and training in the handling and marketing of the product. Illiterate workers✓✓ (2)
[8]

4.3 **Small-scale farmers vs commercial farmers**

4.3.1 Small-scale farmers would use hand tools, manual labour ✓Large-scale farmers would use mechanisation✓ (2)

4.3.2 Small-scale farmers would harvest when the crop is ready✓(Use senses) Commercial farmers would harvest at the right time to preserve colour, quality and improve storage life. ✓ (2)
(Use technology)

4.3.3 The commercial farmer normally has access to technology ✓ to handle the product in bulk and preserve quality (transport trucks) whereas the small-scale farmer might have to sell in the area due to no proper transport facilities and handle their product manually✓ (2)

4.3.4
Commercial farmers make use of sophisticated storage spaces which is aimed at longer storage life and marketability. ✓ Small-scale farmer might store in a cool dark room to try and preserve quality or have complete lack of storing capability✓(Use indigenous knowledge when storing their products) (2)
[8]

4.4 **Options for processing**

4.4.1 He/she needs to look at price /profitability of processed crop above fresh crops. ✓
He/she needs to take into account the risks of delivering a processed product✓
He/she needs to look at his direct competition when deciding what to do with his crop✓/ Investigate the target market
There might be an oversupply of product on the market✓
Preservation is one of the key reasons for processing✓
Processing often adds value to a product✓
A processed product might fill a certain niche market that the fresh product would not ✓
Availability of facilities, labour and raw materials✓
Transport costs of a perishable product need to be taken into account
The quality of the product might indicate whether it could be marketed fresh or processed (Any 3) (3)

4.4.2 Sanitation/ hygiene /Clothing of workers✓
Cooling/Preservation methods✓
Safety/Good labour relationships✓
Covering/Vacuum packaging✓
Technically advanced machinery✓
Aeration and light✓
(Open ended question more responses possible) (Any 3) (3)

4.4.3 Packaging✓ (1)
[7]

4.5 **Demand Graph**

4.5.1 Demand curve.✓ (1)

4.5.2 Approximately 50 tons.✓(Between 50-55) (2)

4.5.3 (a) Quantity bought increases and the price per unit decreases. ✓✓

(b) Quantity bought decreases as the price per unit increases. ✓✓ (4)
[7]

4.6 **Agritourism**

- Canteen ✓ to buy refreshments✓
- Rooms for lodging ✓to provide accommodation✓
- Some wild animal species ✓for sight-seeing and ecological outings ✓
- Farm dam✓ for boating and swimming✓ (8)
- Security dogs✓✓

4.7 **Agricultural co-operatives**

4.7.1 Membership is voluntary, not forced on anyone. ✓
Membership is open to all. ✓
No gender, social, racial, political or religious discrimination.✓(Any 2) (2)

4.7.2 Democratic member control
Members control the organisation by taking part in decision-making and policy-making. ✓
Every member has an equal say in major decision-making. ✓ (Any 1) (1)

4.7.3 (a) Day-to-day management✓ of the activities of the cooperation✓/ Paid officials of the directive/ Control and monitoring (2)

(b) Represent the interest of members and stakeholders that make up the co-op✓. Appoint a manager✓ / not paid by the directive (Any 2) (2)
[7]
[50]

TOTAL SECTION B: 150

GRAND TOTAL: 200