



Province of the  
**EASTERN CAPE**  
EDUCATION

**NATIONAL  
SENIOR CERTIFICATE**

**IBANGA 12**

**SEPTEMBER 2021**

**IZIFUNDO ZOLIMO P2  
ISIKHOKELO SOKUMAKISHA**

**AMANQAKU: 150**

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Esi sikhokelo sinamaphepha ali10.

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**ICANDELO A****UMBUZO 1**

1.1	1.1.1	C ✓✓		
	1.1.2	A ✓✓		
	1.1.3	B ✓✓		
	1.1.4	D ✓✓		
	1.1.5	A ✓✓		
	1.1.6	C ✓✓		
	1.1.7	D ✓✓		
	1.1.8	C ✓✓		
	1.1.9	C ✓✓		
	1.1.10	B ✓✓	(10 x 2)	(20)
1.2	1.2.1	D ✓✓		
	1.2.2	E ✓✓		
	1.2.3	A ✓✓		
	1.2.4	C ✓✓		
	1.2.5	F ✓✓	(5 x 2)	(10)
1.3	1.3.1	Codominance ✓✓		
	1.3.2	Atavism ✓✓		
	1.3.3	Imali ekhoyo ✓✓		
	1.3.4	Ukuzinziswa kwamaxabiso ✓✓		
	1.3.5	Uhlahlo-lwabiwo mali ✓✓	(5 x 2)	(10)
1.4	1.4.1	Variation ✓		
	1.4.2	Ukuthengisa ✓		
	1.4.3	Amaxesha athile onyaka (Seasonal) ✓		
	1.4.4	Balance sheet ✓		
	1.4.5	Capital ✓	(5 x 1)	(5)

**AMANQAKU EWONKE ECANDELO A: 45**

**ICANDELO B****UMBUZO 2: ULAWULO LWEZOLIMO NO SHISHINO**

2.1 2.1.1 **Xela imeko yoshishino kwi R5**  
Uzinzo loshishino ✓ (1)

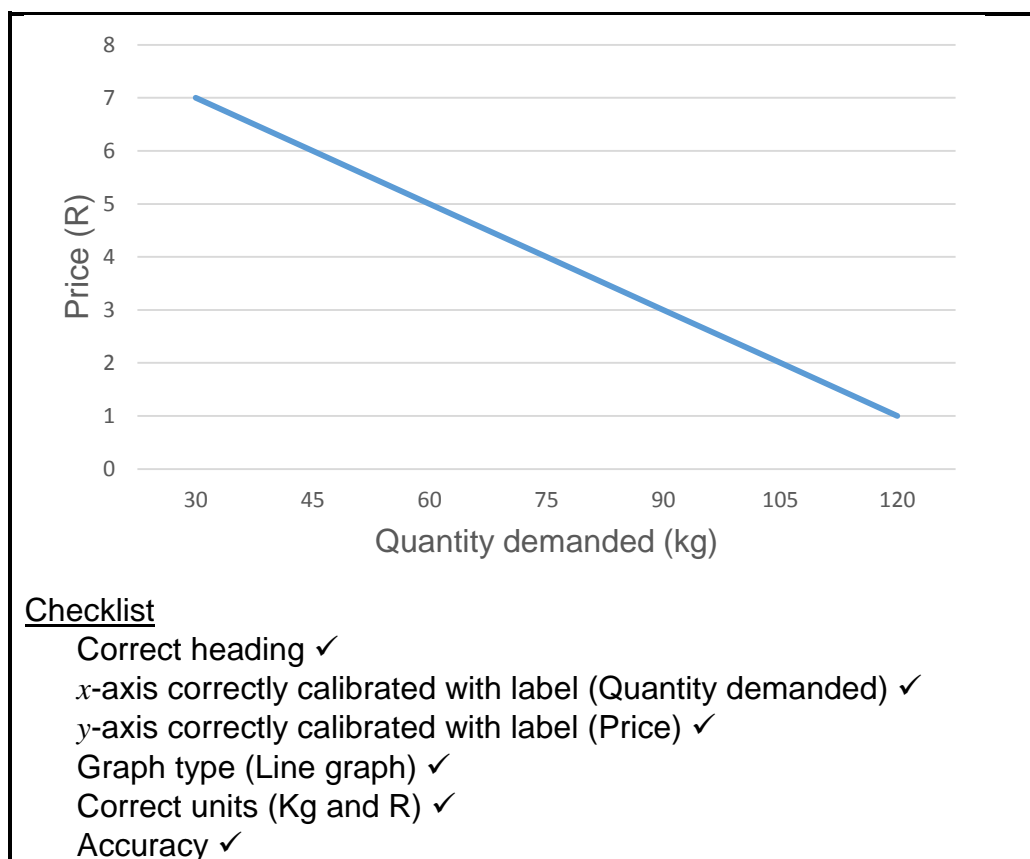
2.1.2 **Umthetho we supply**  
Okukhona ixabiso lisonyuka, ✓ okukhona nomyinge onikwayo (the higher the quantity supplied) ✓ (2)

2.1.3 **Ifekthazi zibe MBINI ezinokuchaphazela imfuno yeesesika**

- Utshintsho kwiimfuno (ukukhetha) zabathengi ✓
- Inani labathengi kwimalike ✓
- Ixesha leziyolo ✓
- Iimveliso ezixhasanayo (complementary products) ✓
- Availability of substitutes ✓

(Any 2 x 1) (2)

2.1.4 **Line grafu ebonisa iimfuno zeesesika**



2.2 2.2.1 **Isihloko somzobo**  
Marketing chain / Agri-business chain ✓ (1)

2.2.2 **Iileybhile zika A no B**  
A – Supply chain ✓  
B – Demand chain ✓ (2)

- 2.2.3 **Imisebenzi emiTHATHU yoshishino kumzobo**
- Uthutho ✓
  - Ugcino ✓
  - Uluhlalutywa (Processing) ✓ (3)
- 2.2.4 **TWO ways of streamlining the agri-business chain**
- Ukuphucula iindlela ✓
  - Ukuphucula ukufikelela kulwazi lwezeemalike ✓
  - Marketing collectively ✓
  - Ukucolwa/ukuhlalutywa kwemveliso kufuphi nalapho ziveliswa khona ✓
  - Ukusetyenziswa kwezakhiwo zezikhenkcezisi kunye neenqwelo ezinezikhenkcezisi ✓
  - Ukwahlulwa nokulinganiswa kweemveliso ✓ (Any 2 x 1) (2)
- 2.3 2.3.1 Exporters and importers ✓ (1)
- 2.3.2 Brokers ✓ (1)
- 2.3.3 Abathengi ✓ (1)
- 2.3.4 Iinkampani ezicola/zihlalutywe ukutya ✓ (1)
- 2.3.5 Abathengisi ✓ (1)
- 2.4 2.4.1 **Inkalo yentengiso ebonisiweyo**  
Ukuthengiswa kwemfuyo ✓ (1)
- 2.4.2 **Iindlela yokuthengisa eyayanyaniswa nalenkalo yentengiso**  
Ukuthengisa ngokukhululekileyo ✓ (1)
- 2.4.3 **Inkxaso yokusetyenziswa kwalenkalo ingentla ngamafama**
- Ukuhlawulwa kuqinisekisiwe ✓
  - Umthengisi uyakwazi ukufikelela kubathengi abaninzi kunabo basekuhlaleni ✓ (2)
- 2.4.4 **Iinkalo eziMBINI ezizezinye ezivuleleke kumafama**
- Ukuthengisa kwi Intanethi ✓
  - Ukuthengisa ngqo ✓
  - Ukuthengisa kumasango efama ✓
  - Ukuthengisa iimveliso zemifuno neziqhamo ✓ (Any 2 x 1) (2)
- 2.5 2.5.1 **Ingcaciso yebusiness plan**  
Luxwebhu ✓ oluchaza ishishini ofuna ukuluqala luchaze neenjongo zalo. ✓ (2)

**2.5.2 Izizathu eziMBINI zokubaluleka kwebusiness plan**

- Inxaso-mali ekhuselekileyo ✓
- Ukunqwanqwada imisetyenzana yemihla ngemihla ✓
- Ukufumanisa iimfuno zezimali ✓
- Ukuhlola impumelelo yengcamango yeshishini (feasibility of a business idea) ✓
- Ukuvumela usomashishini osakhasayo ukuba abone iingxaki ezinokumvelela ✓
- Ukucwangisa nokubeka ngokutsha ishishini ✓
- Ukufumana ulwazi ngcono ngamathuba entengiso kunye nokhuphisana nabo ✓
- Ukuqinisekisa impatho eyiyo yeshishini ✓
- Mapping out the objectives/goals of the enterprise ✓
- Ukunika ulwazi malunga nommandla ongaphandle/ongaphakathi weshishini ✓
- Ukunikezela ngamaxesha alindelekileyo (time frames) ✓

(Any 2 x 1) (2)

**2.5.3 Umzekelo oMNYE wempumelelo kasomashishini osakhasayo**

- Ubunkokheli ✓
- Risk-taking ✓
- Ukunyamezela ✓
- Ukukhuthaza ✓
- Market driven ✓

(Any 1 x 1) (1)

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**UMBUZO 3: IFEKTHAZI ZEMVELISO**

- 3.1 3.1.1 **Inkcazelo yegama umhlaba**  
Indawo esetyenziselwa ukufuya ✓ nokulima. ✓ (2)
- 3.1.2 **Ukusetyenziselwa ingeniso komhlaba njengoko kuboniswe ku diagram A kunye no B.**  
A – umhlaba unikezela ngendawo enokusetyenziselwa iprocesses zokuvelisa ✓  
B – umhlaba unikezela ngendawo apho umfama anokuvelisa iimveliso khona products. ✓ (2)
- 3.1.3 **Economic characteristics zomhlaba njenge factor ye mveliso zibe MBINI.**
- Land is limited. ✓
  - Ukukhula kweedolophu kunciphisa umhlaba onokusetyenziswa. ✓
  - Ixabiso lomhlaba liyonyuka emva kwethuba. ✓
  - Umhlaba u-indestructible. ✓
  - The production capacity of land varies widely. ✓
  - Land is subject to the law of diminishing returns. ✓ (Any 2 x 1) (2)
- 3.1.4 **Iindlela ezi MBINI umfama anokuzisebenzisa ukuphucula imveliso yomhlaba (land) ebonakaliswe ku B.**
- Ukuhlanganiswa kweefaa ezingenangeniso ✓
  - Ukusetyenziswa kweendlela zenzululwazi zokufama ✓
  - Ulawulo lwamanzi ✓
  - Ukusetyenziswa kweendlela zokufama ezilungele ummandla othile ✓ (Any 2 x 1) (2)
- 3.2 3.2.1 **Ingxaki enxulunyaniswa nabasebenzi ngokuchazwe kulomhlathi ungasentla.**  
HIV/AIDS ✓ (1)
- 3.2.2 **Iindlela zibe MBINI amafama anokuzisebenzisa ukuthomalalisa ingxaki echazwe ku MBUZO 3.2.1.**
- Amaphulo okuzisa ulwazi ✓
  - Ukunikezela ngecondoms ✓
  - Ukuqinisekisa ukufikeleleka konyango lwee (STI's) namachiza i anti-retroviral ezikhutshwa ngurhulumente. ✓
  - Amaqumrhu/iindawo ezibonelela ngesondlo ✓
  - Musa ukuba namaqabane amaninzi ✓
  - Amaqela enkxaso ✓ (Any 2 x 1) (2)
- 3.2.3 **Iingxaki ezi MBINI ezinxulunyaniswa nabasebenzi kwezolimo**
- Ukubiza ngokugqithisileyo kwengqesho ✓
  - Ukungabi namfundo ngokwaneleyo ✓
  - Ukufumaneka kwengqesho ✓
  - Ukuqhankqalaza ✓
  - Ukusetyenziswa gwenxa kotywala neziyobiso ✓ (Any 2 x 1) (2)

- 3.2.4 **linzame ezi MBINI ezinokusetyenziswa ngamafama ukuphucula imveliso yabasebenzi**
- Ukukhuthaza abasebenzi ✓
  - Ukuba nabasebenzi abawulungeleyo umsebenzi nenani elililo ✓
  - Ukuphucula/ukuqeqesha abasebenzi ✓
  - Ukubonelela ngeendawo ezaneleyo zokuhlala ✓ (Any 2 x 1) (2)
- 3.3 3.3.1 **Identification of budget**  
Enterprise budget ✓ (1)
- 3.3.2 **Umzekelo wenkcitho etshintsha-tshintshayo**
- Imbewu ✓
  - Umgquba ne lime ✓
  - Amafutha eenqwelo noomatshini ✓
  - lindleko zengqesho ✓
  - Ukuvuna ✓ (Any 1 x 1) (1)
- 3.3.3 **Ubungqina bempendulo ekuMBUZO 3.3.2**  
lindleko eziboniswe ngentla zonyuka ✓ nesigaba soveliso. ✓ (2)
- 3.3.4 **Ukubala ingeniso / ilahleko**  
inzuzo = ingeniso – inkcitho ✓  
**OKANYE**  
= R2 100 – (R100+R700+R100+ R600+R450+R100+  
R300+R200+R100) ✓  
= R2 100 – R2 650 ✓  
= - R550 ✓ **OKANYE** Ilahleko ye R550 (3)
- 3.3.5 **Ingcaciso yokuba le-enterprise inganempumelelo na**  
Le enterprise ayinampumelelo ✓ ngenxa yelahleko ✓ (2)
- 3.4 3.4.1 **Uhlobo lwerekhodi lasefama**  
Luludwe lwezixhobo ezisefama ✓ (1)
- 3.4.2 **Ukubaluleka kolu ludwe**  
Inceda umfama azazi izinto anazo ukwenzela i inshorensi ✓ okanye ukwazi ukuba zeziphi izixhobo ezifuna ukulungiswa ✓  
Ukugcina ulwazi malunga nezixhobo ezilahleke ngenxa yenatural disaster okanye ubusela. ✓ (Any 1 x 1) (1)
- 3.4.3 **Uhlobo lwe khapitali olukweli xwebhu**  
Movable capital ✓ (1)
- 3.4.4 **Ingxaki enomahluko enxulunyaniswa nolu hlobo lwecapital**  
Ukwehla kwexabiso (depreciation) ✓ (1)

3.4.5 **Iindlela ezi MBINI ezinokusetyenziswa ukudala ikhaphital**

- Savings ✓
  - Imveliso ✓
  - Credit/grants ✓
- (Any 2 x 1) (2)

3.5 3.5.1 **I-internal force ne-external force ezichaphazela inkampani kumhlathi ongasantla.**

Internal force – abasebenzi abanezakhono ✓ / ukuguga kwezixhobo ✓

External force – ukhuphiswano olongezelelekileyo ✓ (2)

3.5.2 **Uhlobo lwe riski ejongene nalo le nkampani**

Market and price risk ✓ (1)

3.5.3 **Inkcaza ngendlela i-internal force ne-external force ezikhokhelele ngayo kule riski ixelwe ku MBUZO 3.5.2.**

Ukhuphiswano olongezelelekileyo nezixhobo ezigugayo zingadala ukuba iimveliso zenkampani zibize kakhulu kunezo nkampani bakhuphisana nazo ✓ oku kungakhokelela kwintengiso asezantsi. ✓ (2)

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**UMBUZO 4: IGENETICS EZISISISEKO KWEZOLIMO**4.1 4.1.1 **Punnet square**

	R	r	✓
R	Rr	Rr	
r ✓	Rr	rr	✓

✓

Rubric

Punnet square with gametes and offspring genotypes ✓

Correct male gametes ✓

Correct female gametes ✓

Correct offspring genotype ✓

(4)

4.1.2 **Genotypic ratio**

3 Rr : 1 rr ✓

(1)

4.1.3 **Uqikelelo lwembewu engqukuva evelisiweyo.** $\frac{3}{4} \times 100$  ✓

75 ✓ % ✓

(3)

4.1.4 **Uhlobo lwedominance nesizathu**

Complete dominance ✓ Only one characteristic was expressed in heterozygote offspring ✓

(2)

4.1.5 **Deduction whether seed shape is qualitative or quantitative**

Qualitative ✓

(1)

4.1.6 **Motivation for answer to QUESTION 4.1.5.**

Uphawu lulawulwa yigene pair. ✓

(1)

4.2 4.2.1 **Identification of mutation type**

Chromosomal mutation ✓

(1)

4.2.2 **Identification of mutation types**

B – uphindaphindo ✓

C – ukuphendululeka ✓

D – Translocation ✓

(3)

4.2.3 **Ukubaluleka kwe variation**

• Kulapho ukukhetha kususela khona ✓

• Isetyenziselwa ukuphucula izityalo ezahlukeneyo nempahla (livestock breeds) ✓

(2)

4.2.4 **An example of a physical mutation agent**

Radiation/Gamma rays/X-rays/alpha particles ✓

(1)

- 4.3 4.3.1 **Inkcaza yeilwanyana esikuC**  
Meyile ✓ (1)
- 4.3.2 **Identification of breeding system**  
Species crossing ✓ (1)
- 4.3.3 **Inkxaso yependulo ku MBUZO 4.3.2 ngasentla**  
Involves mating of animals ✓ of different species ✓ (2)
- 4.3.4 **Chaza amaqithi-qithi/inzuzo (benefits) abe MABINI esilwanyana C kuno A.**  
Isilwanyana C asifane sigule somelele kunesilwanyana A ✓  
Isilwanyana C siyakwazi ukunyamezela/simelane nemo yentlalo kunesilwanyana A ✓ (2)
- 4.3.5 **Nika idisadvantages zibe MBINI ze breeding system**
- Ayibalulekanga kuba zibalwa izilwanyana ezikwaziyo ukwenziwa i-interbreeding ✓
  - Iziphumo zolu xubo aziqhamanga ✓ (2)
- 4.4 4.4.1 **Indlela yokuphucula izityalo**  
Genetic engineering/Genetic modification ✓ (1)
- 4.4.2 I-advanteyiji IBENYE yobubuchwephesha exelwa kulomhlathi ungasentla  
Incedisa ukwandisa imveliso yezityalo/food security ✓ (1)
- 4.4.3 **Idisadvantages zibe MBINI zendlela yokuphucula izityalo kunendlela zesintu (traditional methods).**
- Ziyakhawuleza ✓
  - Zichanekile ✓
  - Azipheleli kuhlobo lwazo kuphela ✓ (Any 2 x 1) (2)
- 4.4.4 **Intlobo EZIMBINI zalemihla obenziwa ngayo obu buchwephesha.**
- Izityalo ezingafane zihlaselwe zizifo ✓
  - Izityalo ezingaminxiselwayo lukhula ✓
  - Zihlala ixesha elide ✓
  - Zinesondlo ✓ (Any 2 x 1) (2)
- 4.4.5 **Imiceli-mngeni EMIBINI ye GMO kwimpilo yoluntu**
- Allergies ✓
  - Uchaphazeleko olungaziwayo kubomi babantu ✓
  - Ukukhuseleka kokutya ✓ (Any 2 x 1) (2)

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**AMANQAKU ECANDELO B: 105**  
**EWONKE: 150**