



Province of the
EASTERN CAPE
EDUCATION



**NATIONAL
SENIOR CERTIFICATE**

IBANGA 12

SEPTEMBER 2022

**ISAYENSI YEZOLIMO (AGRICULTURAL
SCIENCES) P2
ISIKHOKELO SOKUMAKISHA**

AMANQAKU: 150

Esi sikhokelo sokumakisha sinamaphepha asi-9.

ICANDELO A**UMBUZO 1**

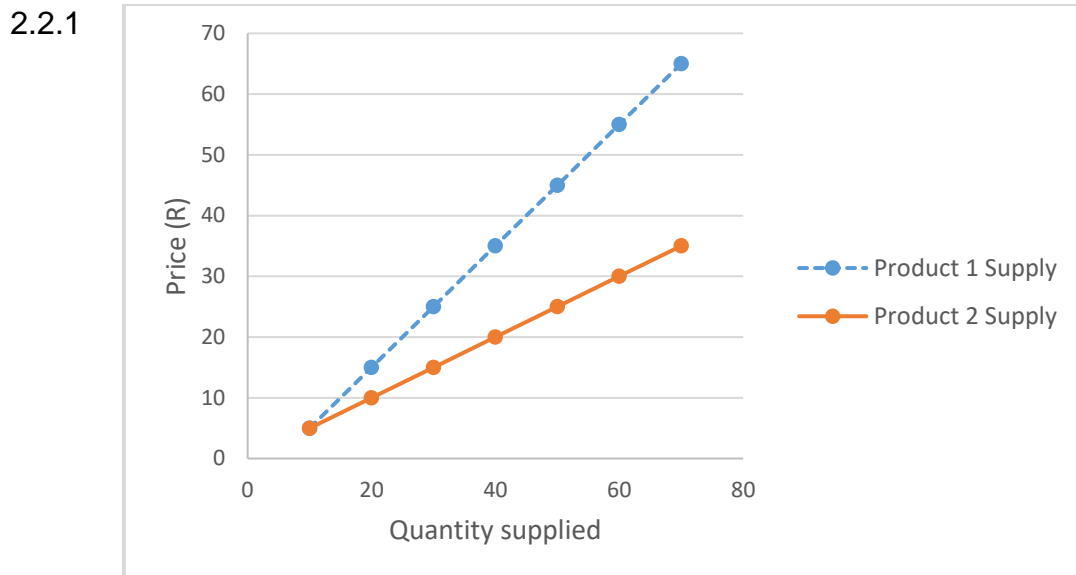
1.1	1.1.1	C ✓✓		
	1.1.2	A ✓✓		
	1.1.3	C ✓✓		
	1.1.4	D ✓✓		
	1.1.5	C ✓✓		
	1.1.6	C ✓✓		
	1.1.7	B ✓✓		
	1.1.8	B ✓✓		
	1.1.9	C ✓✓		
	1.1.10	D ✓✓	(10 x 2)	(20)
1.2	1.2.1	D ✓✓		
	1.2.2	G ✓✓		
	1.2.3	C ✓✓		
	1.2.4	B ✓✓		
	1.2.5	F ✓✓	(5 x 2)	(10)
1.3	1.3.1	Abasebenzi ✓✓		
	1.3.2	IEntrapreniyeship ✓✓		
	1.3.3	INitshi maketing ✓✓		
	1.3.4	IMuthajen ✓✓		
	1.3.5	IPrephotensi ✓✓	(5 x 2)	(10)
1.4	1.4.1	IMakething ✓		
	1.4.2	IOvahed ✓		
	1.4.3	IKhapital ✓		
	1.4.4	UMbono/IVishin ✓		
	1.4.5	IiPholijin ✓	(5 x 1)	(5)

AMANQAKU EWONKE ECANDELO A: 45

ICANDELO B

UMBUZO 2: IMANEYIJIMENT NE MAKETHING

- 2.1 2.1.1 **Ukuchongwa kwemisebenzi makething**
B – IProsesing ✓ (1)
C – IPhakheyijing ✓ (1)
 - 2.1.2 **Inxaxheba yomsebenzi ka makething B**
 - Idala imisebenzi ✓
 - Icutha intshiyekela/ovasaplayi ✓ (2)
 - 2.1.3 **Isikhokhelo seEnvayirometali sasteyinebli phakheyijing**
 - Iphakheyijing mayibe resayiklebli ✓
 - Iphakheyijingi mayibe bhayodigredebli ✓ (2)
 - 2.1.4 **Ukuthelokisa ixabiso lemveliso ka A no D**
Ku **A** imveliso inexabiso eliphantsi ✓ ku **D** inexabiso eliphezulu. ✓ (2)
- 2.2 **Unxibelelwano phakathi kwexabiso nesaplayi seprowudakthi 1 no 2.**



Itsheklisti

- korekthi ✓
 - *x*-axis Ikhaliybreyithwe korekthi neleyibhel (Ubungakanani besaplayi) ✓
 - *y*-axis Ikhaliybreyithwe korekthi neleyibhel (Ixabiso) ✓
 - Uhlobo lwegrafu (Layini grafu) ✓
 - Iiunithi ezikorekthi(R) ✓
 - Iaktyhuresi ✓ (6)
- 2.2.2 **Ukuchongwa kweprowudakthi eprayisi inelastikh**
IProdakthi 2 ✓ (1)
- 2.2.3 **Inkxaso yempendulo yoMBUZO 2.2.2**
Ukutshintsha kwe xabiso ✓ kukhokhelela kutshintsho oluncinane kwisaplayi. ✓ (2)

- 2.2.4 **Imisebenzi emiTHATHU yemakething kumfanekiso**
- Ixesha lokuvelisa imveliso yezolimo ithatha ixesha elide ✓
 - Iagrikhaltsharal prodakths zonakala msinya ✓
 - Ukuvunwa nokuthengiswa kwe agrikhaltsharal prodakthi kusizinali ✓
- (Zibe 2 x 1) (2)
- 2.3 2.3.1 **Ukuchongwa kwee makething sistim**
- A – Khontrold makething ✓
- B – Fri makething ✓
- (2)
- 2.3.2 **IMaketing sistim ekhokhelela kwi:**
- (a) A (1)
- (b) B (1)
- 2.3.3 **idisadvanteyijizi zemakething sistim A kubathengi**
- Ukubekwa emgangathweni (Standardisation) ✓
 - Amaxabiso azinziyelo (Stable prices) ✓
 - Iindawo zokuthengisa ezikhuselekileyo (Secure market outlets)
 - Ukuthengisa ngocwangco (Orderly marketing) (Zibe 2 x 1) (2)
- 2.3.4 **liMakething tshanel ezikhoyo zamafama**
- IFam geyithi makethi ✓
 - liFresh produzi makethi ✓
 - liStock seyile ✓
 - IDayirekthit makething ✓
 - Iintaneth makething ✓
- (Zibe 2 x 1) (2)
- 2.4 2.4.1 **Idotyhumenti echazwe kumhlathi**
- Bhizinesi plen ✓
- (1)
- 2.4.2 **Ukubaluleka kwedotyhumenti echazwe kumhlathi**
- Ukufumana imali ✓
 - Ukutsala iinvestazi ✓
 - Ikhokhela imisebenzi yosuku ✓
 - Icacisa indima noxanduva lwabantu abachaphazelekayo ✓
 - Icwangcisa iimfuno zekhaphitali ✓
- (Zibe 2 x 1) (2)
- 2.4.3 **Iimpazamo ezinokwenzeka xa kuyilwa idotyhumenti ecaciswe ngasentla**
- Iitkhnikhal ditheyili ezingaphelelanga ✓
 - Iifayinenshiyali ezingaphelelanga ✓
 - Uqikelelo olunganyanisekanga ✓
 - Ukuba veyigi ✓
 - Ukungazihoyi iiriski ✓
- (Zibe 2 x 1) (2)

2.4.4 Iatribhuthi ze-entrapreniye ebalaseleyo/ephumeleleyo

- Pheseviyerensi ✓
- Mothiveyishini ✓
- Lidashiph ✓
- khomithimenti ✓
- Hadi wekhingi ✓
- Inoveyithiv ✓
- Riski theyikhing ✓
- Phosithiv athityhudi ✓

(Zibe 3 x 1) (3)
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UMBUZO 3: IIPRODAKSHIN FEKTHA

- 3.1 3.1.1 **Ingcaciso ze-ekhomikh kharakteristik zomhlaba**
 A – IEbhenizeyishini icutha umhlaba okhoyo ✓ /we-agrikhaltsha ✓
 B – Ekuqaleni, ukonyuka kwe inphuthi kukhokhelela kukonyuka kwe awuthiputhi ngokufanayo ✓ kude kufikelele.apho ukonyuka kwe inphuthi kungenyusi awuthiputhi ✓ (4)
- 3.1.2 **Ii-ekhomikh fankshin zomhlaba**
 • Yenza ukuveliswa kokutya ✓
 • Inika ifizikhali speyisi sokuhlala abantu ✓
 • Inika ifizikhali speyisi senkqubo zolimo ✓
 • yi asethi engasetyenziswa njenge kholatheral ✓
 • Sisiseko seeminerali ✓ (Zibe 2 x 1) (2)
- 3.1.3 **IiMethodi ezinokusetyenziswa ukuphucula iprodakthivithi yomhlaba**
 (a) Imaneyijimenti yamanzi/ukunkcenceshela/ukukhongozela amanzi emvula ✓
 (b) Ukubuyisela Amandla omhlaba ✓ (2)
- 3.2 3.2.1 **Iklasifikheyishini yendidi zabasebenzi ngokwexesha lengqesho**
 A –Abasebenzi abaphemanent/abasisigxina ✓
 B –Abasebenzi abasizinal ✓
 C – Abasebenzi abakheshuwali/bethutyana ✓ (3)
- 3.2.2 **Idotyhumenti esayinwa phakathi komqashwa nomqeshi**
 Leyibha khontrakthi ✓ (1)
- 3.2.3 **Ukubaluleka kwe leyibha khontrakthi**
 • Ikhusele abasebenzi ekuxhatshazweni ✓
 • Ikhusele abaqashi ngokwenza umthetho wesimo/wesimilo ✓
 • Ithintela ingxubakaxaka phakathi komqashi nabaqeshwa bakhe ✓ (Zibe 2 x 1) (2)
- 3.2.4 **Imithetho yabasebenzi elawula kwimeko ngemeko**
 (a) Unemployment Insurance Fund / Act 63 of 2001 (1)
 (b) The Skills Development Act / Act 97 of 1998 (1)
 (c) Occupational Health and Safety Act / Act 85 of 1993 (1)
- 3.2.5 **Izitratheji eziBINI ezinokusetyenziswa ngumfama ukugcina abasebenzi**
 • Khuthaza abasebenzi ✓
 • Ukubanohlobo nenani labasebenzi olufanelekileyo ✓
 • Ukonyusa izakhono zabasebenzi ✓ (Zibe 2 x 1) (2)
- 3.3 3.3.1 **Ukuchongwa kwe fayinenshiyal rekhodi**
 Bhalansi shithi ✓ (1)
- 3.3.2 **Imizekelo yendidi zekhapitali:**
 (a) Umhlaba wasefama/Izakhiwo nophuculo ✓ (1)
 (b) Iinqwelo/limoto/Imatshini nezixhobo /Briding stokh ✓ (1)

- 3.3.3 **Iintlobo zekhapitali ezifunekayo zokufayinensa imizekelo yekhapitali kuMBUZO 3.3.2**
 Fiksd khapital – long them kredit ✓
 Movebli khapital – midiyam them kredit ✓ (2)
- 3.3.4 **Ukubalwa kwe net weth**
 INet weth = liAsset – liyabilithi ✓
 = (R100 000 + R80 000 + R600 000 + R1 200 000 + R150 000) ✓ – (R285 000 + R300 000) ✓
 = R2 130 000 – R585 000
 = R1 545 000 ✓ (4)
- 3.3.5 **Khomenta ngempumelelo ye-entaprayizi**
 lentaprayizi yimpumelelo ✓ kuba inesabstenshiyal net weth. ✓ (2)
- 3.4 **Ukuchongwa kwe riski maneyijigiment stratheji**
- 3.4.1 Dayivesifikheyishin ✓ (1)
- 3.4.2 Fleksibilithi ✓ (1)
- 3.4.3 Riski shering ✓ (1)
- 3.5 **Ukuchongwa kweprinsipli zemaneyijimenti**
- 3.5.1 Plening ✓ (1)
- 3.5.2 Implementeyishin ✓ (1)

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UMBUZO 4: IIBHEYISIKH AGRIKHALTSHARAL JENETHIKH

4.1 4.1.1 **iMekhanism ye inherithensi ebonakaliswe kumfanekiso**
Khodominensi ✓ (1)

4.1.2 **Inkxaso yempendulo yoMBUZO 4.1.1**
Iimpawu zabazali bobabini abahomozayigosi ✓ zibonakala
ngokugcweleyo kwifinotayiph yenzala eheterozayigosi. ✓ (2)

4.1.3 **IPunnet skwe efumanisa iF₂-jenereyishin jinotayiphu**

	C ^R	C ^W ✓
C ^R	C ^R C ^R	C ^R C ^W
C ^W ✓	C ^R C ^W	C ^W C ^W ✓

iRubrikh

IPunnet square eneegameyithi nee jinotayiphu ✓

Imeyili gameyithi ezikorekthi ✓

Ifimeyili gameyithi ezikorekthi ✓

Ijinotayiph zenzala ezikorekthi ✓ (4)

4.1.4 **Ifinotayipikh reyishiyo ka F₂**
1 Bomvu : 2 Bomvu no mhlophe : 1 mhlophe ✓ (1)

4.1.5 **IIPaten ze inherithensi ezikhokhelela kwi finotayiph ezohlukeneyo**

- Inkhomplithi dominensi ✓
- IiMaltipli alele ✓
- IiPholijini ✓
- Ephistasis ✓ (Zibe 2 x 1) (2)

4.2 4.2.1 **Ukuchazwa kwe varyiyeyishin**
Kukwahlukana ✓ Phakathi kweendividyuwali ze spesis esinye ✓ (2)

4.2.2 **Iiadvanteyiji zivariyeyishin kumhlathi**
Ivumela iadaptayishin yezinambuzane ne envayiromental stresazi ✓ (1)

4.2.3 **Iiexthenal khozi zivariyeyishin kwizityalo**

- Ilanga ✓
- Amanzi ✓
- Ithempritsha ✓
- Umhlaba/isoyili ✓
- Izinambuzane nezifo ✓ (Zibe 2 x 1) (2)

- 4.3 4.3.1 **Ukuchongwa kwendlela zesilekshin/zokukhetha**
 A – Natshural silekshin ✓
 B – Athifishiyal selekshin ✓ (2)
- 4.3.2 **liMethodi zohlobo lwe selekshin B**
 • Phedigri selekshin ✓
 • Mes selekshin ✓
 • Projeni selekshin / Phiyo layin selekshin ✓
 • Femeli selekshin ✓ (Zibe 2 x 1) (2)
- 4.3.3 **limfuno zempawu ezisetyenziswa kwiselekshin yohlobo B**
 • limpawu mazibe herithebli/mazifuzeke ✓
 • limpawu mazibaluleke ngokoqoqosho/ngokweikhonomi ✓
 • limpawu mazibe mesharebli ✓ (Zibe 2 x 1) (2)
- 4.4 **Ukuchongwa kwebriding methodi**
- 4.4.1 Khros bridging ✓ (1)
- 4.4.2 Upgreyiding ✓ (1)
- 4.4.3 Inbriding ✓ (1)
- 4.4.4 Spesis khrosing ✓ (1)
- 4.5 4.5.1 **Ukuchongwa kwetekhnikh yejenethik modifikheyishin**
 Elekthroporeyishin ✓ (1)
- 4.5.2 **Inkxaso yoMBUZO 4.5.1 ongentla**
 I-ilektrikh kharent isetyenziselwa ukudala iphozi kwi sel membreyini
 ✓ ukuze ijenethikh matheriyel ifikelele kwi nyukleyi ✓ (2)
- 4.5.3 **Isuthabhilithi yokuphuculwa kwezityalo zamaxesha angoku kumazwe aseAfrika**
 Azikho suthebli ✓ ngenxa yokuba amazwe aseAfrika awanalo ulwazi olutekhnikh / itekhnoloji iduru ✓ (2)
- 4.5.4 **Injongo zetekhnikh yejenethikh modifikheyishin**
 • Iphucula isivuno sezityalo ✓
 • Iphucula impawu zekhmeshiyali ✓
 • Inyusa inyutrishinal velu yezityalo ✓
 • Iprodyusa izityalo zefamasethikh ✓ (Zibe 2 x 1) (2)
- 4.5.5 **liphothenshiyal riski ezinxulunyaniswa neemethodi zokuphucula izityalo ezinje ngale ibonakaliswe ngasentla**
 • liriski zeseyifti yokutya ✓
 • liriski ze-envayiromenti ✓
 • liriski zeSoshio-ekhomomikh ✓ (3 x 1) (3)

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AMANQAKU EWONKE ECANDELO B: 105
AMANQAKU EWONKE: 150