



Province of the  
**EASTERN CAPE**  
EDUCATION



**NATIONAL  
SENIOR CERTIFICATE**

**KEREITI 12**

**LOETSE 2022**

**DISAENSE TSA TEMO (AGRICULTURAL  
SCIENCES) P2  
TATISO YA HO TSHWAYA**

**MATSHWAO: 150**

---

Tataiso ena ya ho tshwaya e na le maqephe a 9.

---

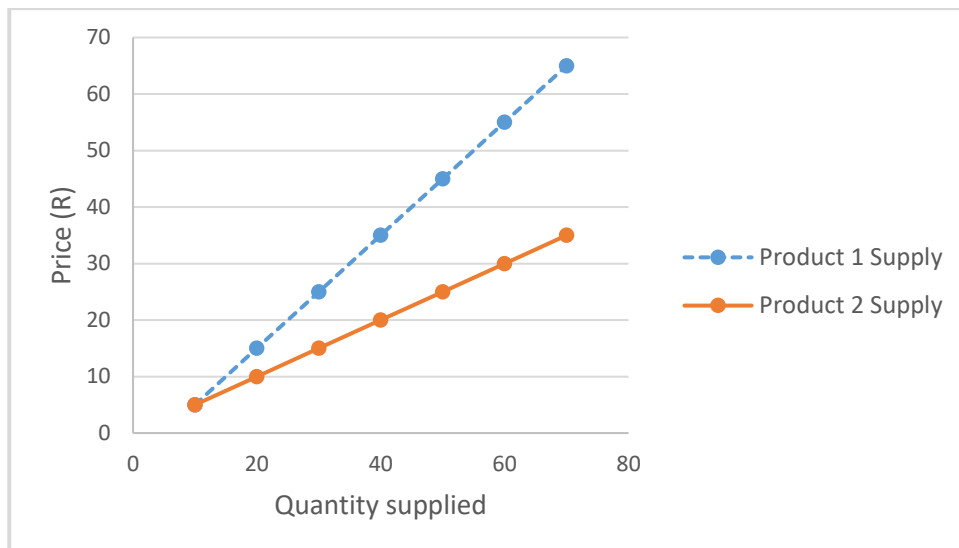
**KAROLO YA A****POTSO YA 1**

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	Laiba ✓✓		
	1.3.2	Entheprenyeshipo ✓✓		
	1.3.3	Niche makething ✓✓		
	1.3.4	Mutheishene ✓✓		
	1.3.5	Prephotensi ✓✓	(5 x 2)	(10)
1.4	1.4.1	Makething ✓		
	1.4.2	Ovahete ✓		
	1.4.3	Khapithale ✓		
	1.4.4	Dijine ✓		
	1.4.5	Pholigins ✓	(5 x 1)	(5)

**MATSHWAO KAOFELA A KAROLO YA A: 45**

**KAROLO YA B****POTSO YA 2: AKERIKHALETJHARALE MANEIJEMENTE LE MAKETHING**

- 2.1 2.1.1 **Ho qolla di makething fankshene**  
 B – Porosising ✓ (1)  
 C – Phakhejing ✓ (1)
- 2.1.2 **Mesebetsi ya makething fankshene B**  
 • Ho etsa mesebetsi ✓  
 • Ho fokotsa mesalla ✓ (2)
- 2.1.3 **Digaedelaene tse nepahetseng**  
 • Ntho tse phuthelang di tlameha ho ba resaekelebole ✓  
 • Ntho tse phuthelang di tlameha ho bola ✓ (2)
- 2.1.4 **Papiso ya boleng ba dihlaiswa ho poente A le D**  
 Ho poente **A** prodakethe e na le boleng bo tlase ✓ ho poentse **D**  
 prododakethe e na le boleng bo hodimo. ✓ (2)
- 2.2 **Releisheneshipi pakeng tsa poraese le saplae ya diprodakethe 1 le 2.**

**Ruburiki**

- Sehloho se nepahetseng ✓
  - $x$ -axis di leibeluwe mme tsa khalebareithwa ka ho nepahetseng (khuanthithi e sapolauweng) ✓
  - $y$ -axis di leibeluwe mme tsa khalebareithwa ka ho nepahetseng (Poraese) ✓
  - Mofura wa kerafo (kerafo ya laene) ✓
  - Diyunitsi tse nepahetseng. (R) ✓
  - Akhureisi ✓ (6)
- 2.2.2 **Ho qolla prodakethe e elastiki**  
 Prodakethe 2 ✓ (1)
- 2.2.3 **Ho mothiveitha Karabo ya POTSO 2.2.2**  
 Ho fetoha hwa poraese ✓ ho baka ho fetoha ho honyane hwa sapolae. ✓ (2)

- 2.2.4 **Makething fankshene tse THARO ho dayakeramo**
- Nako ya ho hlaisa dihlaiswa tsa akerekhaletjha e telele ✓
  - O bola hwa dihlaiswa tsa akerekhaletja ✓
  - Ho kotula le ho maeka diporodakethe tsa akerekhaletjha ka disezene. ✓ (Leha ele dife 2 x 1) (2)
- 2.3 2.3.1 **Ho Qolla dimaketing sisetemo**  
A – Maketing ekhonterolwang ✓  
B – Fori maketing ✓ (2)
- 2.3.2 **Maketing sisetemo e bakang:**
- (a) A (1)
- (b) B (1)
- 2.3.3 **Di diseatevantage tsa makethhing sisetomo A ho di bareki**
- Maemo a maemo (Standardisation) ✓
  - Litheko tse tsitsitseng (Stable prices) ✓
  - Libaka tse sireletsehileng tsa (Secure market outlets)
  - Thekiso e hlophisehileng (Orderly marketing) (Leha ele dife 2 x 1) (2)
- 2.3.4 **Dimakething sisetemo tse ka fumanehang ho bo rapolasi**
- Famo kaite makete ✓
  - Foreshe projuee makete ✓
  - Setoko seili ✓
  - Makete e daarekete ✓
  - Inthanete maketing ✓ (Leha ele dife 2 x 1) (2)
- 2.4 2.4.1 **Dokumente e hlalositweng seratswaneng**  
Bisinese plane ✓ (1)
- 2.4.2 **Bohlokwa ba dokumente e hlalositweng seratswaneng**
- Ho Fumana ditjhelete ✓
  - Ho hohela di invetara ✓
  - Ho tataisa mesebetsi ya letsatsi ka bong ✓
  - E hlalosa mesebetsi le boikarabelo ba motho ka mong a leng teng ✓
  - Ho polana chelate e tla hokeha ✓ (Leha ele dife 2 x 1) (2)
- 2.4.3 **Diphoso tse jwaelehleng ha o etsa dokumente e hlalositweng seratswaneng**
- Dintlha tse sa fellang ✓
  - Ditjhelete tse sa fellang ✓
  - Menahano eseng ya bonnete ✓
  - Ho se utlwahale ✓
  - Ho iphapanyetsa diriski ✓ (Leha ele dife 2 x 1) (2)

**2.4.4 Diateribute tse etsang enthaprinye e tswelletseng**

- Mamello ✓
- Mothiveishene ✓
- Boetapele ✓
- Boinehele ✓
- Ho sebetse ka thata ✓
- Ho ba inoveithivi ✓
- Ho Nka diriski ✓
- Athitjhute e posethivi ✓

(Leha ele dife 3 x 1) (3)  
**[35]**

**POTSO YA 3: DIPORODAKESHENE FEKETHARA**

- 3.1 3.1.1 **Thlaloso ya di ikhonomiki khareketharisitiki tsa lende**
- A Ebeniseishene e fokotsa amoune ya land ✓ e ka sebediswang ho akerikhaltjha ✓
- B Ha o eketsa di inphute o tla fumana autephute e eketsehileng ✓ hofihlela moo e bang keketso ya inphute e se e sa tlesi keketso ho di outephuti ✓ (4)
- 3.1.2 **Fankeshene ya lende e ikhonomiki.**
- E dumella porodakeshene ya dijo ✓
  - E refa sebaka sa humene setlelemente ✓
  - E refa sebaka sa ho etsa diekethifithi tsa akerikhaltjha ✓
  - Ke asete e ka sebediswang ele kholatherale ✓
  - Mohlodi wa di minerale ✓ (Leha ele dife 2 x 1) (2)
- 3.1.3 **Methote tse ka sebediswang ho ntlafatsa porokedathivithi ya lende**
- (a) Manejemente ya metsi/ho tshella/pokello ya metsi a pula ✓
- (b) Restoring the land's potential ✓ (2)
- 3.2 3.2.1 **Ho klasifaya basebetsi ho ya ka nako ya khiri**
- A – Basebetsi ba Phemanente ✓
- B – Basebetsi ba Sezenale ✓
- C – Basebetsi ba Kheshuale ✓ (3)
- 3.2.2 **Dokumente e saennweng pakeng tsa mosebetsi le mohiri**
- Konteraka ya basebetsi ✓ (1)
- 3.2.3 **Bohlokwa ba khonteraka ya basebetsi**
- E sireletsa basebetsi hore ba se ekesepoloithwe ✓
  - E sireletsa mohiri jwalo ka ha e reguleitha maitshwaro a basebetsi. ✓
  - E thibela dikgohlang pakeng tsa morebetsi le mohiri ✓ (Leha ele dife 2 x 1) (2)
- 3.2.4 **Melao e sebetsang tlasa maemo ana**
- (a) Anempoloemente Inshoresnse Fande / Act 63 of 2001 (UIF) (1)
- (b) Sekils Dvelopomente Act / Act 97 of 1998 (1)
- (c) Okhupheishenale Helthe Sefethi Act / Act 85 of 1993 (OHS) (1)
- 3.2.5 **Ditratgegi tse ka sebediswang ke rapolasi ho boloka basebetsi**
- Ho mothiveitha basebetsi ✓
  - Ho ba le nenane le mofuta o nepahetseng ✓
  - Ho aposekila basebetsi ba hao ✓ (Leha ele dife 2 x 1) (2)
- 3.3 3.3.1 **Ho hlwaya rekhote ya tjelete**
- Balanse shiti ✓ (1)
- 3.3.2 **Mehlala ya mefuta ya dikhapitale:**
- (a) Lende ya polasi/meaho le dintlafatso ✓ (1)
- (b) Dikoloi/Metjhini le equipimente/setoko sa ho borida ✓ (1)

**3.3.3 Mofuta wa kerediti ho POTSO 3.3.2**

Fikiset Khaphithale – Kerediti ya nako e telele ✓

Muvebole khaphithale – kerediti ya nako e mahareng ✓

(2)

**3.3.4 Ho khalekhuleita Nete wefe**

Nete Wefe = Diasete – diliebilithi ✓

= (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 Khomente ho vaebilithi ya enthaporaese**Enthaporaese e vaebile ✓ hobane e khona ho sasteina nete wethe  
ya yona ✓

(2)

**3.4 Ho hlwaya setrateji sa ho maneja riski**

3.4.1 Daevesifikheishene ✓

(1)

3.4.2 Folekesibilithi ✓

(1)

3.4.3 Riski shering ✓

(1)

**3.5 Ho qolla di porensipole tsa manejeleme**

3.5.1 Ho Plena ✓

(1)

3.5.2 Impolimentheishene ✓

(1)

**[35]**

**QUESTION 4: BEISIKI AKERIKHALTJHARALE JENETHIKS**

4.1 4.1.1 **Mekhenizemo ya lefutso e bontshitsweng ho dayakeramo**  
Khodominense ✓ (1)

4.1.2 **Mothiveitha Karabo ya POTSO 4.1.1**  
Dikhareketharisetiki tsa batswadi ba homozaegase ✓ di hlaile ho  
finothaepe ya ofosepring e heterozaegase ✓ (2)

4.1.3 **Punnet skwere e bontshang jinothaepe ya jenereishene ya Fs**

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

Roboriki

Punnet sekwere le digamete e nang le dijinothaepe tsa di ofosepring . ✓

Digamete tse nepahetseng tsa monna ✓

Gigamete tse nepahetseng tsa Mosadi ✓

Genothaepe e e nepahetseng ya ofosepring ✓ (4)

4.1.4 **Reshiyo ya F<sub>2</sub> Finothaepe**  
1 Kgubedu : 2 Kgubedu le Tshweu : 1 Tshweu ✓ (1)

4.1.5 **Dipathene tsa lefutso bakang difinothaepe tse sa tshwaneng**

- Incompoete dominense ✓
- Maltipole alele ✓
- Pholijini ✓
- Ephisetasese ✓ (Leha ele dife 2 x 1) (2)

4.2 4.2.1 **Tlhaloso ya varieishene**  
E bolela ho fapakana ho teng ✓ ho diphoofolo tsa sepishi sele seng ✓ (2)

4.2.2 **Atevanthege ya varieishene seratswaneng**  
E dumella adopshene ho di phetisaetse le di seteresase tsa tikoloho ✓ (1)

4.2.3 **Eksethenale khozese tsa varieishene dimeleng**

- Letsatsi ✓
- Metsi ✓
- Themphereitjhara ✓
- Mobu ✓
- Dikokwana le disiki ✓ (Leha ele dife 2 x 1) (2)

4.3 4.3.1 **Tlhwao ya mofuta wa selekeshene**  
A – Natjhurale selekeshene ✓  
B – Athifishiale silekeshene ✓ (2)



4.3.2 **Mefuta ya mekgwa ya selekeshene ho B**

- Phedikri silekeshene ✓
- Mese silekeshene ✓
- Porogeni silekeshene / Pure laene silekeshene ✓
- Femeli silekeshene ✓

(Leha ele dife 2 x 1) (2)

4.3.3 **Ditlhoko tsa dikhareketharisitiki tse sebedisitsweng karolong ya B**

- Dikharekitharisitiki di tlameha ho futseha ✓
- Dikharekitharisitiki di tlameha ho ba le boleng ba tjelete ✓
- Dikharekitharisitiki di tlameha ho kaleha ✓

(Leha ele dife 2 x 1) (2)

4.4 **Ho Hlwaya boriding sisetomo e sebedisitsweng**

4.4.1 Korose boriding ✓ (1)

4.4.2 Apokereiding ✓ (1)

4.4.3 Inboriding ✓ (1)

4.4.4 Sepisise korosing ✓ (1)

4.5 4.5.1 **Tlhaloso ya jenethiki modifikheishene e sebedisitsweng**  
Eleketerophoreishene ✓ (1)

4.5.2 **Tlalosoya ho fihlella karabong ya 4.5.1 kahodimo**

Kharente ya motlakase e sebediswa ho etsa masoba ho sele memboreini ✓ moo jenethiki matheriale e kgonang ho fihlella ho nyutlei ✓ (2)

4.5.3 **Ho loka hwa tshebediso ya dimela tse modifauweng naheng tsa Aforika**

Ha di ya loka ✓ hobane, naha tsa Aforika ha di na tsebo ✓/ tekgeniki ena e ya tura. ✓ (2)

4.5.4 **Tlhaloso ya sepheo sa mekgwa ya ho modifayadijini**

- Kotulo e eketsehileng ✓
- Dikhomesheale poropathisi tse eketsehileng ✓
- Boleng ba dinyutirientse tsa dimela bo eketsehileng ✓
- Tlhaiso ya dimela tse kentsweng meriana ✓ (Leha ele dife 2 x 1) (2)

4.5.5 **Ho Klasifaya bokotsi bo ka bakawng ke dimela**

- Bokotsi ba sekhhurithi ya dijo ✓
- Bokotsi ba tikoloho ✓
- Soshio-ekhonomic riski ✓

(3 x 1) (3)

[35]

**MATSHWAO A KAROLO YA B: 105**

**MATSHWAO KAOFELA: 150**