



basic education

Department:
Basic Education
REPUBLIC OF SOUTH AFRICA

NATIONAL SENIOR CERTIFICATE

IGREYIDI 12

ISINDEBELE ILIMI LEKHAYA (HL)

IPHEPHA LOKUTHOMA (P1)

EXEMPLAR 2014

IMITLOMELO: 70

ISIKHATHI: ama-iri ama-2

Iphepheli linamakhasi ali-12.

YELELA

1. Iphepheli LINEENGABA EZINTATHU: ISIGABA A, B kanye NESIGABA-C.

ISIGABA A: Ukufunda nokuzwisia	(30)
ISIGABA B: Ukurhunyeza	(10)
ISIGABA C: Izakhi nemithetjhwana yokusetjenziswa kwelimi	(30)
2. Phendula YOKE imibuzo.
3. Funda yoke imiyalo onikelwe yona ngokuyeleta okukhulu.
4. Thoma isigaba ESINYE NESINYE ekhiasi ELITJHA.
5. Thalela ngemva kokuphendula imibuzo yesigaba ngasinye.
6. Tlola iinomboro zemibuzo njengombana zinjalo ephepheni lemibuzo.
7. Tjhiya umuda OWODWA ngemva kwaleylo naleyo pendulo.
8. Tlola kuhle nangesandla esibonakalako.
9. Yeleta kobana upelede amagama ngendlela efaneleko bewutlole nemitjho ezwakalako.
10. Isikhathi esiphakanyisweko sokutlola isigaba ngasinye:

ISIGABA A: pheze imizuzu ema-45	
ISIGABA B: pheze imizuzu ema-30	
ISIGABA C: pheze imizuzu ema-45	

ISIGABA A: UKUFUNDA NOKUZWISISA**UMBUZO 1**

Phendula imibuzo engaphasi kwetheksti eku-1.1 nengaphasi kwenithombe esiku-1.2.

- 1.1 Funda itheksti engenzasi bese uphendula imibuzo.

ABONOBANGELA NOBUNGOZI BOKUBA NOMZIMBA OMKHULU

Ukunona nokuba nobudisi bomzimba obudluleleko kuyingozi ekulu epilweni yomuntu. Ubujamobu bungezelela amathuba amanengi wokobana umuntu afumane amalwele ahlukahlukene. Kungebangelo umNyango wezamaPhilo ukhuthaza abantu bona bagcine imizimba yabo isebujameni obuncani, obuhle nobulawulekako. Ukuze sigcine imizimba yethu isebujameni obufunekako kufanele sizitjheje.

Zinengi izinto ezingaba bonobangela bomzimba omkhulu okufaka hlangana isithako sefuso esisemzimbeni ('genes'). Abadala baqinisile nabathi ihabhula aliweli kude nomuthalo. Kanengi kuvamile bona ababelethi nabanomzimba omkhulu nabantwabobo babe nemizimba emikhulu. Lokhu kuyenzeka bona kudlulele neenzukulwaneni. Kokhunye kuyenzeka ukunona kubangwe kukhula kwamahomoni womzimba womuntu, kungabi kukobana akhula ngokwefuzo kodwana azikhulela wona nje.

Ezinye iinhlahla esizinkelwa bodorhodera ngomnqopho wokulapha amalwele athileko zinomthelela ekunoniseni imizimbethu. Kuneenhlahla esithi nasiziselako bese ziylambisa, zisikhuthaze bona sidle ngokudluleleko. Abanye abantu badla ngokudluleleko nabanesizungunofana nabakwatileko. Ukudla khulu kuzimukisa umzimba bekungezelela namathuba wokunona. Kanti-ke nalokha umuntu nakathoma ukuluphala imisiphakhe ithoma ukugedla, ingasaba namandla wokutjhisa amafutha bese umuntu uthoma ukunona. Lokhu kuvamise khulu ebantwini bengubo. Amafutha la kanengi avamise ukunzinza magega namadini. Kesinye isikhathi, abanye abantu bengubo bathi nabasebantwini, badle khulu bese kuthi ngemva kokubeletha kube budisi bona babuyebe badle ngendlela ebegade bavele badla ngayo ngaphambi kokuzithwala. Nakho lokho kungokhunye okubanga bona bagcine sele baba nomzimba omkhulu.

Abanye abantu banoniswa kungazilolongi ngebangla lokungabi nesikhathi ngombana baqeda isikhathi esinengi basebenza ngamakhomphyutha emafisini. Ngebangla lokuthuthuka kwethekhnoloji, abasasebenzi imisebenzi efuna bona basebenzise amandla ukwenzela bona kulwisanwe namafutha asemizimbenabo. Nabatjhayisako bakhamba ngeenkoloyi ukuya emakhaya, abakhambi ngeenyawo kanti nalokha umuntu nakafika ekhaya uhlalela umabonakude ama-iri amanengi bekufike isikhathi sokulala. Nakwenzakeleko wavakatjhelwa bangani baqeda isikhathi esinengi bahlezi phasi emasofeni kudliwa bekuselwa.

Umzimba nawuthoma ukuzimuka ungezelela amathuba wokusahlelwa bulwele behliziyo. Nawuthoma ukuthela ngomzimba kuba khona ikghomu ebizwa bona yi-'plaque' eyenziwa mafutha akhelela ngaphakathi kwemithambo ekhambisa iingazi eziya ehliziyweni. Lokha ikghomu le nasele ikghamathele ngaphakathi kwemithambo le yenza bona iingazi zingasakhamba lula bese lokho kubangela iinhlungu esifubeni nezicina zibangele ubulwele bokusahlelwa yihliziyo. Ubulwelobu benza bona ihliziyo ibhalelwe kupompa iingazi ezanele iindingo zomzimbakho. Nakungenzeka ikghomu le yakhelele kangangokuthi ivimba iingazi bona zingasakghona ukukhamba ngaphakathi kwemithambo, imithambo iyadabuka bese kwakheka igiqa leengazi elivimba i-oksijini bona ifikelele ebuqotjheni. Ukungafiki kwe-oksijini ebuqotjheni kubanga ubulwele bokufa kwehlangothi.

Kunekhemikhali etholakala eengazini nemafutheni womzimba womuntu ebizwa bona yikholesteroli. Ikholesteroli le inesilinganiso esithileko esilungele imizimbethu. Umuntu onomzimba omkhulu kunamathuba amanengi wokobana ikholesteroli le ingangezeleleka beyifike lapho iba sesilinganisweni esiphezulu khulu nesingezelela amathuba wokuphathwa bulwele behliziyo obungambangela ukufa kwehlangothi.

Ukunona khulu kungezelela amathuba wokuphathwa mihlobo ehlukahlukeneko yekankere. Ukutshwenya madolo nomgogodlha ngezinye izinto ezitshwenya abantu abanomzimba khulu. Umzimba nawumkhulu usuke udisibeze amathambo kangangokuthi angasakghona ukuwuthwala. Kungebangelo abantu abanemizimba emikhulu bangeze bakghona ukukhamba ibanga elide kanti begodu bahlale balila ngeenhlungu zomzimba. Ubuahlungobu basuke babuzwe khulu lapha kuLangana khona amathambo. Kanengi umuntu uthi asese mutjha umthole sele akhamba ngedondolo ukwenzela bona obunye ubudisi bomzimbakhe buthwalwe lidondolwelo.

Kunobunye godu ubulwele obubangelwa kunona khulu obubizwa bona yi-Sleep Apnea. Ubulwelobu nawunabo uzwakala ngokuqunteka nawuphefumulakonofana ngokuphefumula sakukghameka. Lokhu kusuke kubangelwa mafutha amanengi azungeleze intamo, avala umrholo wommoya bese kubabudisi ukuphefumula.

Kuqakathekile bona sizame ngamandlethu woke bona ukunona sikubalekela ngendlela esingakghona ngakho ngombana lokho kuzokuphungula amagulo bekungezelele nepilo. UNgqongqotjhe wezamaPhilo uhlongoza bona abantu abasebenzise iindlela zeemvelo zokulwisana nemizimba emikhulu balise ukusela amapilisi neenhlahla ukulwisana nokunona kwemizimba.

(IrhujuIulwe ku-www.nhlbi.nih.gov/health-topics, yatjhugululelwesiNdebeleni)

1.1.1 Kubayini kungakafaneli bona nawumumuntu ube nomzimba omkhulu? Ipendulwakho ayibe mumutjho OWODWA. (2)

1.1.2 Tlola abonobangela bokunona ABABILI umuntu angakghona ukubabalekela nange angafuni ukunona. (2)

- 1.1.3 Ngokutjho kwendatjana le kuthiya kubangelwa yini bona umuntu nakathoma ukuluphala bese uthoma nokuthela umzimba. (2)
- 1.1.4 Tlola ngokurhunyeziweko indlela ubulwele behliziyo budaleka ngayo emzimbeni womuntu. (2)
- 1.1.5 Hlathulula umqondo omumethwe yikulumo ethi; 'ihabhula aliweli kude nomthaloo'. (2)
- 1.1.6 Nangabe kuneenhlahla esizinikelwa bodorhodere ezitjhugulula ubujamo bemizimbethu, ucabanga bona ngikuphi okufanele kwenziwe ngibo ukuqinisekisa bona imitjhogabo ayibi nemithelela emimbi emizimbenethu? (2)
- 1.1.7 Ucabanga bona ngisiphi isiyeliso udorhodere angasinikela isiguli lokha nakasinikela iinhlahla ezinciphisa ubukhulu bomzimba. (2)
- 1.1.8 Khetha ipendulo ocabanga bona iqedelela isitatimende esilandelako kezingenzasi.
- Umuntu othi nakakwatileko adle khulu usuke anqophe ...
- A ukuba namandla wokulwa.
 B ukuzilibazisa.
 C ukukhamba isikhathi eside angakalambi.
 D ukususa ubuhlungu abuzwako. (2)
- 1.1.9 Hlathulula bona ikulumo kangqongqotjhe engenzasi le ingabasiza nofana angeze yabasiza abantu ekwehliseni imizimbabo na? Sekela ipendulwakho uveze amazizwakho. **'Sebenzisani iindlela zeemvelo zokulwisana nemizimba emikhulu nilise ukusela amapilisi neenhlahla.'** (2)
- 1.1.10 Ngewakho umbono ucabanga bona ihlelo lokukhambahamba nofana lokugijima lilungele WOKE umuntu onomzimba omkhulu na? (2)

TJHEJA: YEQA IMIDA EMITHATHU NGAPHAMBI KOKUPHENDULA UMBUZO 1.2.

- 1.2 Qalisisa iinthombe ezingenzasi bese uphendula imibuzo elandelako.



- 1.2.1 Qalisisa abantu abaseenthombeni ngasinye kezingehla bese utlola iphuzu elilodwa elibenxa bafane ngokwamabumbekwabo. (1)
- 1.2.2 Tlola izinto EZIMBILI ezibonakala zibonobangela bobujamo abantwaba abakibo. (2)
- 1.2.3 Tlola isigaba sabantu abavezwe eenthombeni ezingehla. (1)
- 1.2.4 Phendula isitativende esingenzasi ngo**LIQINISO** nofana **AKUSILO IQINISO** bese usekela ipendulwakho ngesiquinto osithathako.
linthombezi zisilethela umqondo wokobana ukuba nomzimba omkhulu kuya ngokuthi umuntu umhlobo bani. (2)
- 1.2.5 Ubujamo obubonakala ngehlobu yinto yamalangana la. Kade kwakungakavami bona abentwana bangazithola banjengalaba abaseenthombeni. Hlathulula bona kubayini kunje amalangana la. (2)
- 1.2.6 Hlathulula bona ngiliphi igadango ongalithatha ukukhuthaza umuntu osebujameni obufana nobungehlobu bonyana angazihloboki. (2)

IMITLOMELO YESIGABA A: **30**

TJHEJA: THOMA ISIGABA B EPHEPHENI ELITJHA.**ISIGABA B: UKURHUNYEZA****UMBUZO 2**

Funda itheksti engenzasi bese uyayirhunyeza ngokwemiyalo elandelako.

IMIYALO:

1. Ngamagama angadluli kwama-70, rhunyeza uveze amaphuzu ali-7nofana indima **ngabonobangela bokungaphumeleli nokulisa phakathi** kwabafundi emazikweni aphakamileko wefundo.
2. Nangabe utole imitjho, inombore imitjhwako kusukela kowoku-1 bekufike kewe-7. Umutjho owutlolako awube nomqondo OWODWA.
3. Tlola ngelimi elitsengileko ngombana uzokwabelwa imitlomelo emi-3.
4. Sebenzisa amagamakho, ungabuyeleti utole njengombana kutloliwe endatjaneni.
5. Tlola inani lamagama owasebenzisileko ekupheleni kwesirhunyezo sakho.

**ABONOBANGELA BOKULISA PHAKATHI KWABAFUNDI EMAZIKWENI
APHAKAMILEKO WEZEFUNDO**

Ngemva kweminyaka eli-12 yefundo kulibhudango lananyana ngiwuphi umfundu bona azibone asezikweni lezefundo ephakemeko, kungaba seyunivesithi, ekholiji nanyana ethekhnikhoni, ukufezekisa ibhudango lakhe. Ngehlelo lakanhulumende leKhetha sekulula bona abafundi baragisele phambili iimfundu zabo emazikweni la. Umraro usuke uvele nasele umfundu amukelwe. Ngokwamarhubhululo kuyavela bona imiraro eyenza abafundi babhalelw kumphumeleisa iimfiso zabo nasele basemazikweni la ziintjhijilo abazibangela bona ngokwabo kanti ezinye kuba ngilezo ezingaphezu kwamandlabo.

Abaundi abanengi bathi nasele bamukelwe emazikweni la batlhoge igcugcuzeleko elifanele limile ngaphakathi kwabo bese lokho kubenza balahlekelwe likareko lokuya netlasini ngebanga lokuzilawula. Lokho kwenza umfundu angenzi ama-asayinimente, imisebenzi yekhaya neminye imisetjenzana asuke aphiwe yona. Kesinye isikhathi umfundu uyagcugcuzeleka kodwana kufumaniseke bona ilekhtjhara yona iyabhalelw kufundisa nokubakhombisa indlela umsebenzi ekufanele wenziwe ngayo. Lokho kubangele umfundu angaphumeleli. Abafundi abanengi abaphumeleli ngebanga lokungazithembu kanye nokuzithathela phasi. Lokhu kuba nomthelela omkhulu wokobana bangaphumeleli. Ukungaphumeleli kwabanye abafundi kubangelwa kukobana basuke bavela emindenini lapha kungakhange kubanelunga lomndeni elifunde labe lafika ezikweni eliphakemeko lefundo. Ukuphuma emndenini organamali kunomthelela omkhulu ekutheni abafundi bangarageli phambili neemfundo zabo.

Amalanga la abafundi abanengi bazinikela isikhathi esinengi sokucocisana ngeensetjenziswa zokuthintana ('social media') sokunokobana bafunde iincwadi zabo. Indlela abafundi laba bazinikele ngayo ekucocisaneni ngeensetjenziswa zokuthintanezi bagcina bangazinikeli isikhathi esaneleko sokulala baphumule begodu lokho kubabangela iingqondo zabo zihlale zidiniwe, zingasakghona ukulalela. Ubuvila nabo bungunobangela omkhulu wokobana umfundsi agcine angakaphumelelinofana abuyele ekhaya angakafezi ibhudango aliyele ezikweni lezefundo eliphakemeko. Ukutlhoga ikghono lokubekezelela iintjhijilo umfundsi angahlangabezana nazo kesinye isikhathi zimenza agcine abuyele ekhaya.

Amaziko amanengi wezefundo ephakemeko aneemfuneko ekufuze bona abafundi bazifikelele ngaphambi kobana bamukelwe. Ukwamukelwa komfundsi ezikweni elithileko vane kutjho khona bona usuke ahlangabezene neemfuneko zezikwelo, ye-ke kuyarara ukubona umfundsi sele abuyela ekhaya ngebanga lokwehla kwezinga lakhe lefundsi nelibangela bona angasavunyelwa ukuragela phambili neemfundsi zakhe.

[Ithethwe ku-Roldens Pauly nice's Facebook yatjhugululelwesiNdebeleni]

IMITLOMELO YESIGABA B: 10

TJHEJA: THOMA ISIGABA C EPHEPHENI ELITJHA.

ISIGABA C: IHLELO NOKUSETJENZISWA KWELIMI

UMBUZO 3

ISIKHANGISO

UMNYANYA WELANGA LAMAGUGU

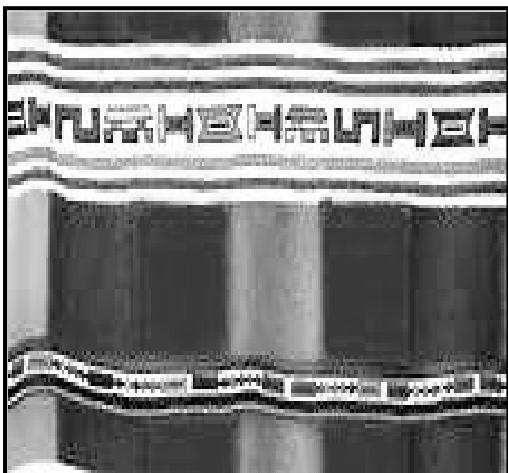
RHABA! UZOZITHUMBELA IVUNULO OYITHANDAKO!

Inyoni efika maqangi izikhethela esinonileko!

**BUYELANI EMARUBHINI!
BUYELANI NGAKWAGOGO!**

MABUSABESALA CULTURAL VILLAGE

Isithombe 1



Isithombe 2



Isithombe 3



Isithombe 4



Umuntu kukwazi umrabhu wakhe

Aba-2 abazokufika maqangi bazozithumbela ivunulo abayithandako!

- 3.1 Tlola bonyana imihlobo yevunulo evezwe esithombeni sesi-2 nesesi-3 ngamunye imbathwa nakwenzenjani. (2)
- 3.2 Esikhangisweni esingehla dzubhula igama eligandelela bona abantu abangakholwa masikwabo. (1)
- 3.3 Tlola igama lengubo yesikhumba eyembethwe bobaba abasesithombeni sesi-2. (1)
- 3.4 Hlathulula umqondo olethwa libinzana lamagama athi, inyoni efika maqangi izikhethela esinonileko. (2)
- 3.5 Ucabanga bona uyini umnqopho wokusetjenziswa kweenthombe esikhangisweni esingehlesi? (2)
- 3.6 Ngelihlo elihlabako akhe uveze bona okutjhiwo sisaga esivezwe esikhangisweni nomnqopho wombandela osetjenziswe ngehla kuthintana njani. (2)
[10]

TJHEJA: THOMA UMBUZO 4 EPHEPHENI ELITJHA.**UMBUZO 4**

Qalisia ikhathuni engenzasi bese uphendula imibuzo elandelako.

IKHATHUNI

- 4.1 Tlola umthombo okuthethwe kiwo ikhathuni le. (1)
 - 4.2 Ngokurhunyeziweko tlola ubujamo babantu abasekhathunini le ngamunye uveze okutjhiwo bujamo bomzimbabo. (2)
 - 4.3 Dzubhula ibinzana elisetjenziswe ekhathunini eliveza umqondo wokuthukwa. (1)
 - 4.4 Ingabe amagama womsana lo athi, 'Langifaka endumisweni' asivezela muphi umqondo ngokwekhathuni le. (2)
 - 4.5 Thatha igama elithi, 'Baba-ke!' elisetjenziswe ekhathunini engehla uzakhele wakho umutjho ubabaze isehlakalo esisekhathunini le. (2)
 - 4.6 Ucabanga bona okutjhiwo msana ophethe iphepha lo kuyakhohlweka na? (Kokukhohlwa kwebizo lakhe.) Sekela isiqunto osithathako. (2)
- [10]**

TJHEJA: THOMA UMBUZO 5 EPHEPHENI ELITJHA.**UMBUZO 5**

Funda itheksti engenzasi bese uphendula imibuzo.

linrhatjhi zisiyelelisa ngakho koke okwenzeka ephasini mazombe. Sineenrhatjhi ezifana nemirhatjho ezilalelw khulu amalanga la. Vane kubemnandi nasilalele umrhatjhi onguPhrofesa umswa kaBhorholo. Usithakgha tle lomswa, umona phasi madoda. Wabe anebhudango lokubamrhatjhi asese mncani, ngetjhudu elihle vele laphumelela. Ukuthanda kumbi ukurhatjha kanti bewunehliziyo ehle kwamambala, uthi nakahlekako kube sengathi kungakhithika iponde ngamazinywakhe amhlophe twa sabisi. Ukurhatjhokhu wakufunda ngokulingisa umkhwenyabo owabe amrhatjhi odumileko emrhatjhweni ukukhamba kancani kufana nokugijima weKwekwezi. Ipumelelo yakhe kezokurhatjha asingabazi bonyana ingambeka ethuben i lokobana simbone sele angusaziwako kezemidlalo kamabonakude ngombana phele sizwe abadala basithi. Unebhudango lokobana ngelinye lamalanga azibone arhatjha imidlalo yeamerika. Simfisela ikusasa elihle nelinepumelelo ngebhudango lakheli. Amaphephandaba nawo aziinrhatjhi ezithandwa khulu asilethela iindaba zisatjhisa. Abantu ngobunengi bathanda elibizwa bona yi-Daily Sun. Iphephandabeli lona lidume ngokurhubhulula iindaba eziphathelene nokuphathaphatha nezingezithandwa babantu khulu.

- | | | |
|-----|---|-----|
| 5.1 | Tlola bona igama elithi <u>lona</u> elisetjenziswe etheksthini engehla lisikhkhe bani sekulomo. | (1) |
| 5.2 | Tlola isirhunyezo sebizo elithi, <u>Phrofesa</u> elisetjenziswe ngehla. | (1) |
| 5.3 | Ngokuyeleta imithetho yokutlolwa nokupeledwa kwamabizo weendawo tlola ibizo 'yeamerika' elisetjenziswe etheksthini engehla ngendlela efaneleko. | (2) |
| 5.4 | Tlola umutjho ngebizosenzo 'ukuphathaphatha' utjengise bona lingaba nenyi ihlathululo ngaphandle kwale esetjenziswe etheksthini. | (2) |
| 5.5 | Thatha igama eliphikisana nelithi <u>isithakgha</u> ulisebenzise emutjhweni ozakhele wona. | (2) |
| 5.6 | Thatha ibinzana lamagama elithalelwko uzakhele wakho umutjho kuvele bonyana uyayazi ihlathululo yalo. | (2) |
- [10]**

IMITLOMELO YESIGABA C:	30
INANI LOKE:	70