F2 TERM 2 OPENER ALL SUBJECTS

For Marking Schemes Call 0705525657

FORM TWO AGRICULTURE

TIME:2HOURS.

Answer All the Questions

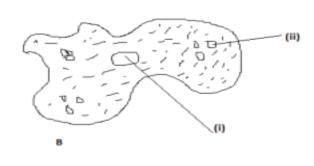
1.	List four characteristics of plantation farming	(4mks)
2.	Give four benefits of Agro forestry	(4mks)
3.	Differntaiate between soil structure and soil texture	(2mks)
4.	State four reasons for treating water in the farm	(4mks)
5.	State four disadvantages of using organic manure	(4mks)

6.	Name two species of camel	(2mks)
7.	State four control measures of tsetse flies	(4mks)
8.	What is meant by BosInducus?	(1mk)
9.	Name four dairy breeds of goat	(4mks)
10.	Why do we keep farm record	(1mk)

SECTION B(2MKS)

11. The diagram below illustrates some types of soil structure. Study and answer the question that follow





(a) Identify the type of soil structure illustrated by A

(2mks)

В		
(b) N	ame parts labeled (i) and (ii)	(2mks)
(c) St	rate two effects of soil structure A in crop production	(2mks)
12. Belov	v are farm tools	
Z-Z-Z-A		
(a) N	ame the tool above	(4mks)
A		
В		
C		
D		
b)	State use of each tool above	(4mks)
	A	
	В	
	C	
	D	
(c)	State two maintenance that can be carried to tool D	(2mk)

(d) Classify the following tools at their appropriate categories (4mks)

	Categories
A	
В	
С	
D	

SECTION C (40 MKS)

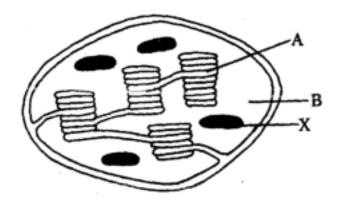
13.	(a)	State the importance of livestock in the farm	(4mks)
	(b)	Explain differences between BosIndicus and Bos Taurus breeds	(10mks)
	(c)	List six breeds of rabbit	(6mks)
14.	(a)	Describe the importance of livestock husbandly	(15mks)
	(b)	State four breeds of dairy cattles	(4mks)
	(c)	Which dairy breeds produce high butter fat content	
15	(a)	Discuss seven method by which soil is able to loss its fertility	(14mks)
	(b)	State six characteristic of a fertile soil	(6mks)

FORM 2 TERM 2 OPENER EXAMS

FORM TWO BIOLOGY

1. The diagram below represents a plant cell organelle

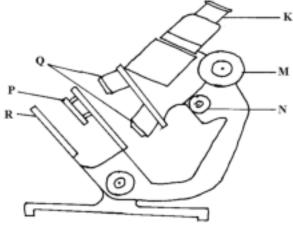
in darkness for 48 hours.



a)	Name the organelle.	(1mk)
b)	In which of the labelled parts does carbon (IV) Oxide fixation occur? (1mk)
c)	Name the parts labelled A and B and state how each is adapted to its function	ns. (4mks)
	A	
	В	
d)	Explain what would have happened to the structures labelled X had the plant	been kept

(2mks)

2. The diagram below shows some components of a light microscope.



a)Nam	ne the parts labeled	(2mrks)
	K	
	M	
a)	State the functions of	(2mrks)
	P	
	Q	
b)	A student was viewing a prepared slide of a plant cell und	er high power microscope. The
	features of the cell were blurred. Which one of the labelled	d parts of the microscope would
(i)	the student use to obtain:- a sharper outline of the features.	(1mrk)

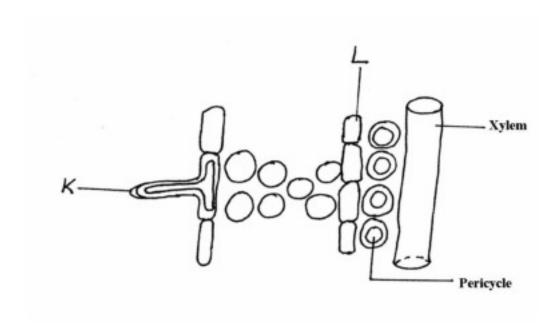
(ii) Give the formula used to calculate magnification in a light microscope.(1mrk)

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c)	A student was preparing a section of a plant cell to a reason for each of the following steps:-	be viewed on a light m	icroscope. Give
	(i)Cutting a very thin section		(1mrk)
	(ii)Staining the section		(1mrk)
(iii)Put	ting the section in water	(1mrk)	

3. The diagram below shows part of a longitudinal section of a root: -



	(a)	identify cells K and L :-	(2 mks)
		K	
		T.	
		L	
	•••••		
	(b)	State two adaptations of Cell K to its functions :-	(2 mks)
4.State three m	ain func	tions of the stomach in human beings:-	(3 mks)
5.Name the cel	l organe	lles responsible for :	
i)	Protein	synthesis	
ii)	Destroy	ring worn – out organells and cells	

6.a) piece lo	Lietego school biology student used a microscope with x40 objective lens and x5 ens which had 2mm radius. Calculate the area of the field of view in micrometers.	
b)	What is the average size of the cell in micrometers	(2mks)
	ne organelle shown below:- (1mk)	
	ne organelle you have identified in (a) above suited to its function(2mks) oroperties of the cell membrane (3mks	

9.a) What is the formula for calculating linear magnification of a specimen when using a
hand lens (1mk)
10.Distinguish between the following terms :-(4mks)
a) Magnification and resolution of a microscope
Mounting and staining of a specimen
11.Name the organelle that performs each of the following functions in a cell. (3mks)
(a) Transport of packaged glycoproteins
(b) Destruction of worn out cell organelles
(c) Synthesis of proteins
12. Why are the following procedures done when preparing sections to be observed under a light
microscope? (3mks)
(a) Making of thin sections
(b) Using a sharp blade to make the sections

c)Staining
13.State three physiological processes that are involved in movement of substances a cross the cell membrane (3mks)
14Name the diseases caused by deficiency of : (2mks) (a) lodine (b) Vitamin C
15. What are the two functions of bile salts during the process of digestion? (2mks)
16.State two adaptations of herbivores which enable them to digest cellulose(2mks)
17.State three factors that affect the rate of osmosis(3mks)
18.State three roles of light in photosynthesis(3mks)

19.Explain how saliva is important in digestion (2mks)			
20.Briefly explain the fate of the following products from the light stage of the process of			
Photosynthesis (3mks)			
(a) Oxygen			
b)Hydrogen			
(c) ATP			
21.State three ways by which plants compensate for lack of the ability to move from one place			
to another(3mks)			
21.State four difference between monosaccharide and polysaccharides(4mks)			

23.Describe how mammalian small intestine is adapted to its function (7mks

FORM 2 TERM 2 OPENER EXAMS

FORM TWO BUSINESS

TIME:2HOURSState FOUR roles of entrepreneurship in the society (4mks) 1. Classify the factors listed in the table below as either internal or external. (tick appropriately) factors Internal External (i) Employees (ii) Inflation (iii) Technology applied (iv) Invested funds (v) Cultural factors (vi) Tools (vii) Entrepreneur (viii) Political factors 2. State FOUR personal attributes that an office worker should possess. (4mks)

	iv)	
3.	State FOUR ways through which government control businesses.	(4mks)
	i)	
	ii)iii)	
	iv)	
4.	State FOUR factors that a consumer should consider in satisfying competing needs.	(4mks)
	i)	
	ii)iii)	
	iv)	
5.	State FOUR ways through which organizations can improve efficiency of their workers.	(4mks)
	i)	
	ii)iii)	
	iv)	
6.	State four FACTORS that can to the success of a business.	(4mks)
	i)	
	ii)iii)	
	iv)	
7.	State FOUR advantages of indirect production.	(4mks)
	i)	
	ii)iii)	
	iv)	
8.	Mention <u>FOUR</u> demerits of using middle-men in distribution of goods and services.	
	i)	

	ii)iii)	
	iv)	
9.	State <u>FOUR</u> advantages of buying goods on credit over hire purchase buying. i)	
	ii)	
	iv)	
10.	List <u>FOUR</u> factors to consider before choosing the type of business to start. i)	(4mks
	ii)iii)	
	iv)	
11.	State FOUR ways used by organizations to safeguard and protect its property.	•
	i)	
	ii)iii)	
	iv)	
12.	State <u>FOUR</u> macro-environment factors that affect business performance. i)	(4mks)
	ii)iii)	
	iv)	
13.	State any <u>FOUR</u> government initiated methods of consumer protection. i)	(4mks)
	ii)	
	iv)	

14.	Explain any FOUR circumstances a buyer may be required to pay cash with order.	(4mks)
	i)	
	ii)	
	iv)	
15.	State any FOUR limitations of consumer initiated methods of consumer protection.	
	ii)iii)	
	iv)	
16.	Give FOUR reasons why an office is necessary in an organization.	(4mks)
	i)	
	ii)iii)	
	iv)	
17.	State FOUR benefits of business ethics.	(4mks)
	i)	
	ii)iii)	
	iv)	
18.	Mention FOUR features of a sole trader.	(4mks)
	i)	
	ii)iii)	
	iv)	
19.	Highlight <u>FOUR</u> causes of business failure.	(4mks)
	i)	

	ii)iii)	
	iv)	
20.	. Give four reasons why a cheque may be dishonored by a bank. i)	(4mks)
	ii)iii)	
	iv)	
21.	A trader gives 20% trade discount on the value of goods bought above and also a cash disc 10% if payments are made within one week. Onyango bought goods from the trader on the credit worth 200,000 on 3 rd match 2013 and settled his debts on 8 th of the same month. Fire	e nd
22	•	(4mks) (4mks)
22.	i)	
	ii)iii)	
	iv)	•••••
23.	. Highlight FOUR circumstances where a trader may issue a credit note. (4mks)
	i)	•••••
	ii)iii)	
	ivl	

FORM 2 TERM 2 OPENER EXAMS

FORM TWO CHEMISTRY TIME:2HOURS

1((a). The table below shows some properties of chlorine, bromine and iodine.

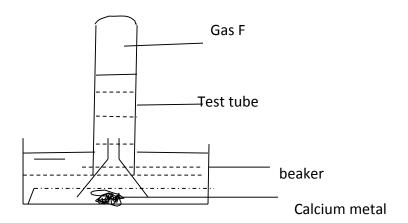
element	formula	Colour and state	Solubility in water
		room temperature	
Chlorine	Cl ₂	(i)	Soluble
Bromine	Br ₂	Brown liquid	(ii)
iodine	l ₂	(iii)	Slightly soluble

Complete the table by giving the missing information in (i), (ii) and (iii) above. (3mks)

- (b). Chlorine gas is prepared by reacting concentrated hydrochloric acid with either Manganese (IV) oxide or Potassium permanganate.
- (i). Write the equation for the reaction between concentrated hydrochloric acid and Manganese (IV) oxide. (1mk)
- (ii). What is the role of manganese (iv) oxide in this reaction? (1mk)
- (iii). When potassium permanganate is used instead of manganese (iv) oxide, heating is not required. Explain. (1mk)

(iv). Give two advantages of using potassium permanganate over manganese (IV) oxide. (2mks)

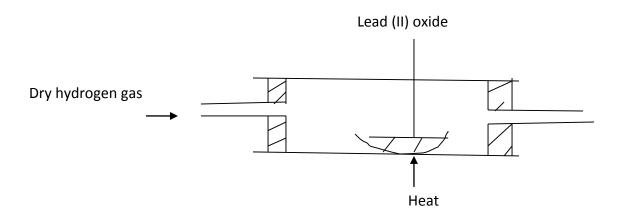
- (v). Iron metal reacts with chlorine to form substance E. identify substance E. (1mk)
- (vi). Write a chemical equation to represent the reaction in (V) above .(1mk)
- (c). The set up below was used to collect gas F produced between water and calcium metal.



- (i). Name gas F. (1mk)
- (ii). Write an equation for the production of gas F. (1mk).
- (iii). At the end of the experiment, the solution in the beaker was found to be a weak base. Explain why the solution was a weak base. (2mks)

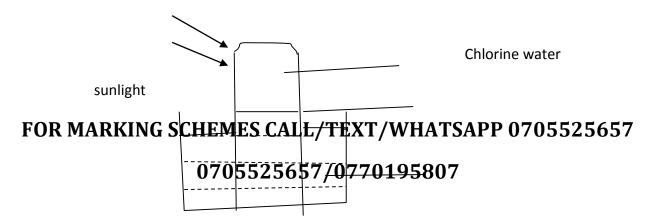
(iv). Give one laboratory use of the solution formed in the beaker.		
2(a). The set op below was used to investigate the reaction of sodium metal with cl	nlorine gas.	
Study it and answer the questions that follow.		
Deflagrating spoon Chlorine gas Warm piece of sodium m (i). State two observations that would be made in the gas jar.	netal (2mks)	
(ii). Write an equation for the reaction that occurred.	(1mk)	
(iii). Name one use of the product formed.	(1mk)	

(b). In an experiment, dry hydrogen gas was passed over heated lead (II) oxide as shown below.



- (i). State the two observations made in the combustion tube after the experiment. (2mks)
- (ii). Write a chemical equation for the reaction that occurred in the combustion tube.(1mk)
- (iii). What property of hydrogen gas is shown by the reaction in b (ii) above? (1mk)

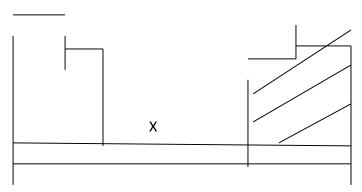
3. In an experiment, a test tube of chlorine gas was inverted in water as shown in the diagram. It was then left to stand in sunlight for one day.



Gas	M
-----	---

	Test tube			
After one day, a gas M was found to have collected in the test tube as shown above.				
). identify gas M. (1mk)				
(ii). Suggest whether the PH of the solution the beaker w day. Give an explanation.	vould increase or decrease after one (2nks)			
(iii). Thecolour of chlorine water was observed to have claster one day. Explain.	hanged from pale yellow to colourless (2mks)			
(iv) Write an equation to support your answer in 3(iii) ab	ove. (1mk)			
(v). State and explain the observation made when a moi mouth of the test tube containing chlorine gas.	ist blue litmus paper was placed at the (3mks)			
(vi). Write an equation to show how the process in 3(v) a	above occurs. (1mk)			
(vii). Give two uses of chlorine gas.	(2mks)			

4(a). The chart below is an outline of part of the periodic table.



- (i). With the help of vertical and horizontal lines , indicate the direction of increasing non-metallic nature of the elements. (2mks)
- (ii). Which type of elements are represented :

II. In the shaded area? (1mk)

- (b)(i). Element A is in the same group of the periodic table as chlorine. Write the formula of the compound formed when A reacts with magnesium. (1mk)
- (ii). Soot is one of the environmental pollutants.

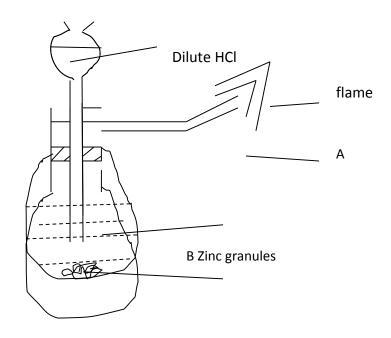
I.Explain the term pollutant. (1mk)

II.State how soot is formed from hydrocarbons. (1mk)

(iii). What role do the following play in the commercial preparation of oxygen gas?

- I. Concentrated sodium hydroxide. (1mk)
- II. Concentrated Sulphuric (VI) acid. (1mk)

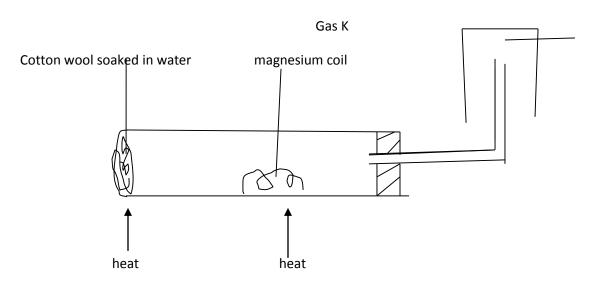
(b). Study the diagram below and answer the questions that follow.



(i). Write a chemical equation for the reaction that occurred at points:

I. A (1mk)
II. B (1mk)

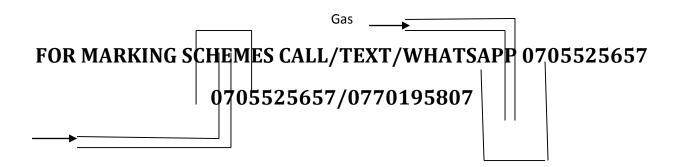
(ii). A student set up the experiment bellow to collect gas K. the glass wool was heated before heating the magnesium coil



(a). Explain why it was necessary to heat the moist cotton wool before heating the magnesium. (2mks)

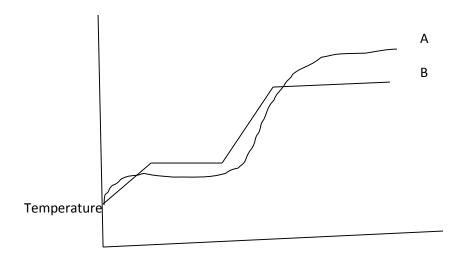
- (c).what property of gas K makes it possible to be collected by the method shown? (1mk)
- (d). Write a chemical equation for the reaction that produced gas K. (1mk)

(e). The diagram represents two methods of gas collection in the laboratory.



Gas

- (i). Name the methods of gas collection above. (2mks)
- (ii). Which method is suitable for collecting dry carbon (IV) oxide gas? Give a reason . (2mks)
- 5. The curves bellow represent the variation of temperature with time when pure and impure samples of a solid were heated separately.



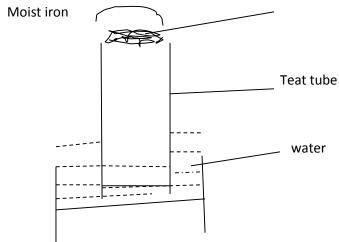
(a). Which curve represents the variation in temperature for pure solid? Explain. (2mks)

(b)State the effect of an impurity on the melting and boiling points of a pure substance.(2mks)

(c). Name two gases used with oxygen in welding.

(2mks)

6. The set up bellow was used to study some properties of air.



(i) .Draw another diagram to show the level of water in the test tube after 24 hours. Explain the observations. (3mks)

(ii). State and explain one observation made on the moist iron after 24 hours. (2mks)

(iii). State one disadvantage of rusting. (1mk) (iv). Fractional distillation of liquid air is usually used to separate various gaseous mixtures in air. Explain how nitrogen is obtained. (1mk) (v). The PH of a soil sample in a given area was found to be 5.5. an Agricultural officer the addition of lime (calcium oxide). State the function of lime in the soil. (1mk) FORM 2 TERM 2 OPENER EXAMS FORM TWO CRE **TIME:2HOURS** 1. a) Give seven differences between the first and the second account of creation stories.(7mks) (b) State six consequences of sin according to (Gen 3, 4, 6-9, 11) (6mks) (c)Outline seven ways in which wrongdoers were punished in Africa society. (7mks) 2. a)Outline **seven** reasons for the call of Abraham. (7mks)

b) Describe how Abraham demonstrated his faith in God. (8mks)

c) Identify ways in which Christians demonstrate their faith in God. (5mks)

3. a) Outline the Old Testament prophecies about the Messiah. (8mks)

b) Outline what angel Gabriel revealed to Mary about Jesus Christ during the annunciation

		of his birth.		(6mks)
	c)	State Four ways in which church leaders are preparing the people for the second	d coming	;
		of Christ.	(6mks)	
4.	(a)E	explain the circumstances that led to the spread of idolatry in Israel.		(8mks)
	(b)(Give seven reasons why Elijah faced hostility and danger as a prophet of God.	(7mks)	
	(c)C	Outline the practices of idolatry in the society today.		(5mks)
5.	a)	Explain ways in which Jesus fulfilled the Old Testament prophesies about the M	lessiah	
			(7 mks)	
	b)	From the infancy stories(Luke 1&2) explain four occasions when people are give	en	
		divine revelation that Jesus is the promised messiah	(8 mark	s)
	c)	State five ways in which Christians spread the gospel of Christ (5 mark	S	
6.	(a)	State seven factors which promote harmony and mutual responsibility in Traditi	onal	
		African Communities.	(7mks)	
	(b)	Explain the role of healers in Traditional African Communities	(7mks)	
	(c)	Identify six factors undermining kinship ties in modern society	(6mks)	

FORM 2 TERM 2 OPENER EXAMS

FORM TWO ENGLISH

In not more than 250 words, Write a letter of apology to the head teacher of your school giving reasons as to why you did not attend the school's academic day. (20mks) CLOZE TEST (10MKS) Fill in the blank spaces with the most appropriate word. 'I am done! I am done!' my voice echoed in the forest. I wept aimlessly. I did ______ know whether I was weeping because my friend was dying ______ because I had very

little hope of	the nex	t sunrise		fell	like a	heavy
	covering the whole coun	try around us	. A hyena	, which wa	as appa	arently
	helplessness,					
laughter	frightened m	e so much	that I	could he	ar my	own
	beating. I shouted as _			_ as my en	npty st	omach
would allow me	and the	ran to the fo	rest. Fron	n that day	to this,	, when
iam telling this st	ory, I have never been confronte	ed by such a pr	roblem.			
ORAL SKILLS (30MKS)					
1. Read the poem	n below and answer the question	s that follow.				
I had a dream las	t night. I dreamed					
I had to pick a mo	other out.					
·						
I had to pick a fat	her too					
At first, I wonder	ed what to do,					
There were so ma	any there, is seemed,					
Short and tall and	d thin and stout,					
But just before I	sprang awake,					
I knew what pare	ents I would take.					
·						
And this surprise	and made me glad;					
Thou word the or	oos Lalways hadl					
They were the or	ies i always liau!					
Questions.						
			(0.1.)			
 Explain how the 	e poet achieves rhythm in the po	em	(3mks)			

ii) Which word	s would you stress in line 7 of this poem?	(2mks)	
iii) How would	you say the last line of this poem?		(1mk)
iv) You are perconcentrating?	rfoming this poem to your classmates.	How would you know (4mks)	that they are not
i)			
ii)			
iii)			
iv)			
2. Identify the	shortcomings in Nyasuguta's telephone s	kills in the following co	nversation.
	(2. l)		
Nyasuguta:	(Dialing a number) Is that Turbo wholes	alers ?	
Voice 1: Sorry,	wrong number		
Nyasuguta: right) I	(Tries several other numbers unsuccess s that Turbo wholesalers?	fully and eventually get	s it
Voice2: Yes it is	s. Can I help you?		
Nyasuguta:	I want to order Maize flour.		

Voice 2:How many bales, Madam?			
Nyasuguta: many b	Just a minute (turns from the phone and asks her husband how pags they need). Ten bales.		
Voice 2:Any preference in the brand?			
Nyasuguta:	of course! Everybody goes for pembe brand.		
Voice 2:Anything else, Madam?			
Nyasuguta:	No. But I want them delivered		
Voice 2:When a	and what address?		
Nyasuguta:	Before too long to shop number eight, Musembe shopping centre.		
Voice 2:Pardon	, what was the number again?		
Nyasuguta:	(Impatiently and shouting) 8-9-5		
	deliver them in an hours time. Thank you Madar pleasure doing business with you.	m. It has	
a) Shortcoming	S	(5mks)	
i)			
ii)			
iii)			
iv)			
v)			
b) Identify instances of etiquette as used by voice 1 and 2		(4mks)	
i)			

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ii)

iii)
iv)
3. Identify the silent letter / sound in each of the following words. (6mks)
i) Fracas –
ii) Bomb –
iii) feign-
iv) Psychology-
v) wrap -
vi) Juice-
4. In the following sets of words identify/ underline the odd one out.
i) Choir chord chore chain
ii) Gas garminata grasa guisa
ii) Gas germinate grace guise
iii) cynic cycle census chat
in Chafabaia abana abana

iv) Chef chain chores charge

v) Ambush Amass Amoeba Amaze

2. COMPREHENSION

(20 MKS)

Read the passage below and answer the questions that follow

TATII'S PROBLEMS

She has lived a state of uncertainty since 1982. Her life has been <u>dreary</u> and full of disappointments. Her parents have been strict and <u>demanding</u>. She has had not time to visit her friends and cousins living upcountry. Every time, she has asked her parents to let her go and pay a visit to her friends, they have said, "You cannot go to visit your friends until you have finished your studies. Life had become very difficult in this country because of too many jobless young people. The situation has been made worse by the great number of examinations failures. No daughter of ours is going to be like these unemployed people. So you see, Tatii, you cannot go upcountry until your 'O' levels are over.

It has been like that for the past four years. Her life has been that of a <u>zombie</u>. She has listened to her mother's <u>sighs</u> and her father's preaching. The 'O' level results are out and her parents won't believe that she has not passed.

What is she going to tell them? She had hoped to please her parents by <u>securing entrance</u> to the university, but all is now lost. Yes nearly lost. All would have been lost if Mrs. Ngueso, the school career teacher, hadn't been called in to calm down Tatii and advise her parents.

Poor Mrs. Ngueso! She has had quite a task to save Tatii from her <u>harsh</u> parents. Tatii's father has been the most difficult one to convince that Tatii is not the only girl who has failed her 'O' level examinations. As soon as he had seen Mrs Ngueso, he had started complaining that teachers no longer caned the children to make them work hard enough to pass their examinations. at some point in his discussion with Mrs. Ngueso, Tatii's father had nearly lost his temper. But Mrs. Ngueso had been his match! She had <u>braved</u> his <u>sour looks</u> and insisted that it was Tatii they had met to discuss and not just any other school child.

She said, Tatii has worked well, but I has constantly appeared as if she has lacked the social support she needed to succeed. Tatii is a very girl but she has been very unhappy. Particularly lately. Sir, the girl needed moral support from you, her parents, as well as from school. The school can give some moral support and the academic support a child needs. But most of all the parents have always been expected to encourage their children in the most <u>crucial movements</u> of their life. May be you and to some extent the school, owe Tatii some assistance.

Now Tatii's mother spoke for the first time. "Baba Tatii, let us do as Mrs. Ngueso says. The child has been very unhappy. I haven't told you this bhut since the appearance of the examination results I have lived in fear. Tatii has behaved very strangely at times. Her friends have reported that she was planning to run away from home. Please let us give her a second chance"

Tatii's father turned and looked at his wife for the first time sine Mrs. Ngueso arrival. He saw in her pleading eyes the pain of a loving mother. He quickly looked away. At that moment he realized how very blind he had been to his wife and daughters suffering. He rose to leave, turned and extended his hand to Mrs. Ngueso and said, ;Thank you very much, mwalimu Tatii will be in school at the beginning of term. Then he left the room.

2.1 Why does the author describe Tatii life as having been dreary? (1mk)

2.2	2 What excuse have Tatii parents constantly given for not allowing her to visit her relatives friends. (2mk)		
2.3	Why was Tatii so unhapp	y after the results of the examina	itions came out. (1mk)
2.4	What was Tatii father rea	actions to her results?	(1mk)
2.5	State the reasons Mrs. N	gueso gives for Tatii problems	(2mks)
2.6	What evidence is there in the father?		nother was more understanding thar nks)
2.7	Compare Mrs Ngeuso's c	haracter and that of Tatii's father	r. Put your answer in the table below (4mks)
	Character	Character Trait	Illustrations from the text
	Mrs. Ngueso		

	Tatii's Father		
2.8 E	xplain the meaning of th	ne following words and phrases as	s used in the passage
D)reary		
C	Demanding		
Z	ombie		
S	ecurity entrance		
F	larsh		
В	raved		(6mks)
G	GRAMMAR. (20MKS)		
1. Giv	ve the plural forms of the	e words listed below.	
a) Ox	_		
o) sta	ndium –		
c) Ra	dius-		
d) Oa	sis –		
e) Go	ose-		(3mks)

2. Rearrange the following words the order in which they would appear in the dictionary.		
a) trachea, tweet, tragedy, thump, thirst.		
b) Mongrel, Frenzy, target, puzzle.		
c) climate, cataract, cokpit, captive, cock		
d) Head lamp, headgirl, headboy, head teacher	(2mks)	
3. Complete the following collective nouns using the appropriate word.		
a) A of journalists.		
b) A of flowers.		
c) A of judges		
d) A of monkeys		
e) A of sheep.	(2 ½ mks)	
4. The words below are misspelled, correct them.		
a) profesar		
b) Tomorow		

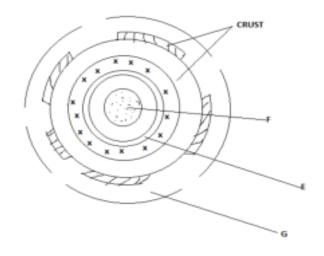
c) Imediately	
d) Pronounciation	(2mks)
5. Use suitable pronouns to replace the underlined nouns.	
a) The wheather is changing. The wheather is becoming rather chill	y.
b) Mary took the book. She said it was <u>Mary's</u> .	
c) People don't like liars. <u>People</u> say liars are no better than murder	rers.
d) <u>Otieno</u> is a very good leader.	(2mks)
6. Join the following sentences using the conjunctions listed below.	
Avoid unnecessary repetition, and, but so also, or.	
a) Tigers are beautiful animals. Tigers are dangerous animals.	
b) You can borrow my pen. You can buy one from the shop.	
c) They went to the theatre. They bought tickets for "passion of Chr	rist"
d) The train was booked up. I went by Akamba bus. (2mks))

7. Rewrite the following sentences using either the comparative or superlative form of adjectives in brackets.				
a) Statistics show that (much) enegy is consumed by industry than by individuals.				
b) Susan is the (tall) girl in our class.				
c) This book is (expensive) than that one.				
d) The Atacama Desert in Chile is the (dry) in the world. (2mks)				
8. Fill in the blanks in the following passage with appropriate prepositions. Breakfast was usually served 6.30 am. Every recruit the second of the second	ne camp			
was expected to be the parade ground 7.15 am.				
this particular Wednesday I had woken up feeling very low and my head was				
clouded a myriad thoughts the impending events the camp. (4 ½ mk				
FORM 2 TERM 2 OPENER EXAMS FORM TWO GEOGRAPHY TIME:2HOURS				
TIME:2HOURS	(2mks)			
TIME:2HOURS (a) What is an eclipse?	(2mks) (4mks)			

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1

2.



landscape

(i)

(ii)

	(a) N	ame the parts marked E,F and G	(3mks)
	(b) Si	tate four characteristics of the part labeled G.	(4mks)
3.	(a) (b)	Identify three forms of rock metamorphism. State the extrusive equivalent of earth of the following intrusive igneous r	(3mks) cocks (3mks)
	(i)	Granite	(JIIKS)
	(ii)	Diorite	
	(iii)	Gabbro	
4	(a)	What is a seismic wave?	(2mks)
	(b)	State 4 ways in which earthquake affects human activities	(4mks)
5	(a)	Differentiate between fissure and vent eruption	(2mks)
	(b)	Describe how the following features are formed	
		(i) Batholiths	(6mks)
		(ii) Volcanic plug	(5mks)
	. ,	xplain 4 negative effects of Volcanicity on human activities ou are planning to carry out a field study on features formed by volcanicity	(8mks) on the

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Name two drainage features you are likely to study

(2mks)

(2mks)

Formulate two null hypotheses

- 6 (a) State four ways in which minerals occur (4mks)
 - (b)(i) Othe than shaft method name two other underground methods of mining (2mks)
 - (ii) Kenya recently discovered petroleum in Ngamia II Turkana. State five positive effects that Kenya is likely to benefit from (5mks)
 - (c) Explain four ways in which Kenya has benefited from the mining of soda ash from Lake Magadi (8mks)
 - (d) State six adverse effects of gold mining to the environment of South Africa (6mks)

FORM 2 TERM 2 OPENER EXAMS

FORM TWO HISTORY/GOVERNMENT TIME:2HOURS

SECTION A (25MKS)

Answer all questions in this section.

1. Defines the government. (2mks)

2. Name two oral sources of information on history and government. (2mks)

3. Define the term citizenship.	(2mks)
4. Identify two main methods of trade.	(2mks)
5. Name the first deputy chief justice under the new constitution.	(1mk)
6. Name the highest court in Kenya today.	(1mk)
7. Name two groups of the Luo who migrated and settled into Kenya.	(2mks)
8. State two causes of Bukusu résistance during the establishment of colonial rule in Ker	nya.(2mks)
9. Name two Christian missionaries at work in Kenya by the19th century .	(2mks)
10 . Give one environmental reason for the migration of Cushites into Kenya.	(1mk)
11. How many constituencies do we have in Kenya?	(1mk}
12. Apart from Fort Ternan, name two other sites in Kenya where Kenyapithecus was dis (2mks)	scovered.
13. Identify two groups of people that comprise the Eastern Cushitic speakers in Kenya.	(2mks)
14. Name the two deputies prime minister in the coalition government.	(2mks)
15. Who is the last minister of sports and youth affairs in the coalition?	(1mk)
SECTION B (45MKS)	
Answer any THREE questions.	
16. (a) What factors influenced the growth of Nairobi?	(5mks)
(b)Discuss the problems facing Nairobi.	(10mks)
17. (a) Describe the economic organization of the Nandi during the pre-colonial period.	(5mks)
(b)Explain the functions of the Orkoiyot among the Nandi up to the 17^{th} century	(10mks)
18. (a)State THREE factors which facilitated the spread of Islam in East Africa.	(3mks)
(b)Explain the factors that contributed to the growth and rise of Coastal city States	s. (12mks)
19. (a) State THREE political parties that are members of the Coalition of Reforms and De	emocracy (3mks)
(b) Explain the achievements of the coalition government.	(12mks)
SECTION C (30mks)	

SECTION C (30mks)

Answer any TWO questions.

20. (a) State THREE symbols of National unity. (3mks)

(b) Discuss SIX factors that promote National unity. (12mks)

21. (a) Mention FIVE factors promoting National intergration. (5mks)

(b) Classify and discuss human rights. (10mks)

22. (a)State features of Macadam Roads. (5mks)

(b) Explain the advantages of road transport. (10mks)

MTIHANI WA KIDATO CHA KWANZA

KISWAHILI KIDATO CHA KWANZA

MARCH/APRIL

MUDA:SAA 2 1/2

1. UFAHAMU

Soma makala yafuatayo kisha ujibu maswali.

Nairobi, mji mkuu wa Kenya ,ni jiji la maajabu na mastaajabu chungu nzima. <u>Nadhari y</u>a mtu anayewahi kuingia jiji hili kwa mara ya kwanza huvutiwa na huo msheheneko wa majumba ya fahari, marefu ajabu ,kiasi chaminazi mitano-sita ,iliyounganishwa kuelekea juu. mbinguni.

Jumba linalowavutia watu wengi ni lile la makongamano ya kimataifa liitwalo kwa Kiingereza Kenyatta International Conference Centre Jumba hili,hadi miaka michache iliyopita, ndilo lililokuwa refu zaidi mjini Jumba lenyewe- lina ghorofa ishirini na tisa hivi ,usipohesabu hilo pambo kama kofia kileleni mwake,linalojulikana kama mwavuli. Hata hivyo ,miaka michache iliyopita jengo hili lilipitwa urefu na Mnara wa Nyakati (Times Tower).Mnara huo hasa ni jumba linaloafiki lakabu yake ya kikwaruza mawingu.Jumba hili lina ghorofa zisizopungua thelathini na mbili.

Mbali na majumba haya mawili ,kuna majumba mengine zaidi ya ishirini katikati ya jiji ambayo ,japo mengine ni mafupi kiasi ,yana maumbo ya kustaajabisha kweli kweli.Hebu zingatia mwenyewe jumba liitwalo "mdomo wa kengele" au "bell —bottom" ambalo ni vioo vitupu ,toka chini hadi juu.Fauka ya ,umbo lake ni la kipekee ulimwenguni kote. Jumba hili lina kama miguu, kisha kiuno mithili ya kinu hivi japo si mviringo.Linapaa juu ,mbali sana ,likichukua umbo pana kuliko lilivyo chini;umbo la fua pana kama kengele.

Halafu rudia barabara .hizi hazina hesabu katikati ya jiji na ni pana, tena safi sana.Magari yanayotumia barabara hizi ni kochokocho,ya kila ama yanashindania nafasi,

Ajabu kubwa ya Nairobi hata hivyo ni idadi ya watu.Hakuna hasa anayejua idadi kamili ya watu wa Nairobi ,lakini sio kupiga chuku ninaposema kwamba ,hasa nyakati za kuelekea kazini asubuhi ,kwenda kula chakula cha mchana ,kuelekea nyumbani baada ya kazi na kuvuka barabara wakati wa msongamano, watu hukanyangana .Mtu anayesema kwamba watu wa Nairobi ni wengi kama chungu ,au kama mchanga wa ufuo wa bahari, hatii chumvi.

Watu wa Nairobi ,kwa tabia na mavazi, si kama watu wa kwingineko nchini Kenya .Watu hawa huvalia nadhifu sana.Wanawake ni warembo ajabu na hutengeneza nywele zao mithili ya hurulaini peponi.Wengi huvaa suruali ndefu. Kucha zao na midomo yao hupaka rangi maridadi sana.Huzungumza Kiswahili na Kiingereza takriban wakati wote.Wanawake wengi ajabu huendesha magari yao wenyewe ,jambo ambalo litakushangaza mara tu uingiapo jijini ,hasa kama ulilelewa ukidhani maskani mwafaka ya

wanawake ni jikoni peke yake;yaani kuzingatia ile falsafa kuwa "kuoa ni kupata jiko". Wanaume nao huvaa suti safi ,maridadi na shingoni wamefunga tai stahiki yao. Wanaume hao huendesha magari na kuyaegesha karibu na afisi zao. Huingia afisini mwao kwa maringo na madaha,huku funguo za magari yao zikining'inia vidoleni. Hawa nao husema na Kiingereza kupitia puani, utadhani ni waingereza hasa.

Kwa upande mwingine ,watoto ni nadhifu kweli kweli hasa watoto wa shule.Hawa huvalia sare zilizofuliwa na kunyoshwa vizuri kwa pasi. Wake kwa waume ,shingoni huvalia tai Watoto wa shule za Nairobi huongea Kiswahili, Kiingereza na sheng,ambayo ni "lahja" yao waliyoibuni."Lahja" hii ni mchanganyiko wa Kiswahili,Kingereza na msamiati mchache wa lugha nyingine za Wakenya zisemwazo jijini Nairobi na vitongoji vyake.

Kwa jumla ,watu wote wa Nairobi hutembea kasi sana.Hawana hata wakati wa kutembea polepole na kuangazaangaza huku na huko.lwapo wewe ni mgeni jijini,ukizubaa utapigwa kumbo na waendelee na hamsini zao kama vile hapakutokea jambo.Hili linapojiri, usidhani limefanywa maksudi.La, hasha.Ni vile tu kwamba Wanairobi hawana muda wa kupoteza.

(a)	Kwa nii	ni majumba ya jiji la Nairobi yana majina au lakabu za Kiingereza?	(ala 2)
			••••••
(b)	(i)	Baadhi ya maajabu ya Nairobi ni barabara safi, msongamano wa magari	na
		majumba marefu. Ongezea maajabu mengine matatu.	(ala 3)
•••••	••••••		
•••••	••••••		

	(ii)	Watu wa Nairobi wanajipenda kweli kweli, Fafanua
(ala 3)	(11)	wata wa Nanosi wanajipenaa kwen kwen, Talahaa
•••••	••••••	
(c)	(i)	Je, Unadhani watu wa Nairobi kweli hukanyagana? Eleza ni kwa nini msimulizi
		ametoa maelezo hayo
		(ala 1)
	(ii)	Unafikiri ni kwa nini hasa wanawake wa Nairobi wanaonekana nadhifu? (ala 2)
(d)	Kwa ni	ni neno "lahja" limewekwa alama za mtajo?
(ala 1)		

	(e)	Eleza maana ya maneno na tamathali za usemi zifuatazo.
(ala 3)		
		(i) Nadhari
		(ii) Linaloafiki
		(iii) Waendelee na hamsini zao

2. UFUPISHO

Kiswahili nchini Kenya kilisambazwa kwa njia ya biashara kutoka upwa wa Kenya kwenda bara yake ,ingawa si kwa wingi sana kwa sababu wenyeji wa upwa wa Kenya —Mombasa, Siu na Patewalikuwa katika vita vya kupigana na utawala wa Kisultani wa Seyyid Said, Sayyid Majid na Seyyid Barrgash. Hata hivyo kuna baadhi ya misafara iliyokwenda bara na kueneza Kiswahili. Kwa mfano, Waswahili wa kutoka Jomvu na Mvita walifanya biashara na Wakamba. Baadhi yao walioa Ukambani na mpaka wa leo kuna milango ya Waswahili ambao nyanya zao wanatoka Ukambani. Wafanyabiashara wengine Waswahili walifika mpaka Umaasaini.

Utawala wa kikoloni ulikitweza sana Kiswahili. Waingereza walitilia mkazo utumiaji wa lugha za kikabila kwa vile walisema kwamba mtu angeeleza hisia zake vizuri kwa kutumia lugha yake ya

kwanza.Kiswahili kilitwezwa na kuchukuliwa kuwa ni lugha ya maboi.Wajerumani walikitweza sana nchini Kenya.Wamisheni pia walikipinga Kiswahili kwa sababu ya ufungamanao na Uislamu,

Hata hivyo, Kiswahili kilikuwa kinatumika katika mawasiliano, kwa hivyo wakakata shauri kwamba kitumike katika kufundashia shuleni.Lugha za makabila zilitumiwa katika madarasa ya chini-Kiswahili katika madarasa ya kati, na Kiingereza katika madarasa ya juu.Mtihani wa Kenya African Preliminary Examination (KAPE), ulikuwa ukifanywa katika lugha ya Kswahili nchini Kenya, uliondolewa,

Kiswahili kilitumika katika kuwaunganisha wakenya katika shughuli za ukombozi wa nchi na pia kama lugha ya umma.Mnamo mwaka wa 1964,Tume ya Ominde ilipendekeza kwamba Kiswahili kitumike kwa vile ndiyo lugha ya kumuunganisha Mwafrika, na pia ingetuwezesha kuwasiliana na nchi zingine za Afrika Mashariki na Kongo,

Mnamo mwaka wa 1969, chama cha Kenya National Africa Union (KANU) ,kilifanya Kiswahili kuwa lugha ya taifa, Raisi wa kwanza wa KANU alikuwa akitolea hotuba zake nyingi katika lugha ya Kiswahili, na alitoa kwa Kiingereza kwa ajili ya mabalozi tu.Fasihi ya Kiswahili ilianzishwa mwaka wa 1973, na kwa hivyo wanafunzi wakaanza kuifanya katika kidato cha nne na cha sita.

Ingawa Kiswahili kilitwezwa sana na Waingereza, bado kinatumika na watu wengi kama lugha ya mawasiliano.Mwaka wa 1968, Berndt Heine alifanya uchunguzi na aliona kwamba asilimia 85.25 ya Wakenya hutumia Kiswahili kama lugha yao ya pili na ndiyo lugha ya mawasiliano.Hivi sasa lugha ya Kiswahili imepewa kipaumbele;ni lugha ya taifa na pia lugha rasmi.Katika sekta ya elimu,Kiswahili ni somo la lazima katika shule za msimgi na za sekondari.Ni somo ambalo linanaendeelezwa hata katika vyuo vikuu vya Kenya.

Ni muhimu kutaja kuwa Kiswahili hakikuenea katika bara ya Kenya kama kilivyoenea Tanganyika. Kiswahili kilienea sana Tanzania kwa sababu ya wakoloni, yaani Wajerumani,waliosisitiza matumizi ya Kiswahili;lakini Waingereza walikitweza katika nchi ya Kenya

Licha ya hayo,nchi ya Tanzania ina lugha 120, na Kenya ina lugha kama 41.Nchi ikiwa na lugha nyingi na watu wachache wanaoitumia kila mojawapo ya lugha hizi,ni rahisi kukuza au kuinua lugha moja kuwa lugha ya taifa inayotumiwa na watu wengi.Hoja hii ilifanya Kiswahili kisienee sana Uganda na Kenya ,lakini kikaenea sana Tanzania.

Kiswahili hakikuenea sana nchi ya Kenya kwa sababu biashara haikufana sana katika pwani ya Kenya kama mji wa Unguja. Wanyamwezi na Wayao waliokuwa wakishughulika na biashara huko Tanzania walieneza Kiswahili katika bara, jambo ambalo Wakamba walioshughulika na biashara Kenya hawakushughulika nalo. Wakamba hawakuiga lugha ya watu wa pwani, Wamaasai waliogopwa sana na wafanyabiashara, na kwa hivyo biashara haikufana sana.

(a)	Bila kupoteza maana iliyokusudiwa fupisha aya ya kwanza na ya pili (maneno 50-60)
	ala 7)
	Nakala chafu
•••••	
•••••	

Nielenie auf:	
Nakala safi	
	•••••
	••••••
(b) Kwa kuzingatia aya za mwisho, eleza mambo muhimu yanayoshughulikiwa na	
1:1:/	(1 0)
mwandishi (maneno 60 – 70)	(ala 8)
Nakala chafu	

Note to the Co	
Nakala safi	
MATUMIZI YA LUGHA	
(a) (i) Eleza tofauti kati va sauti /z/ na /d/	

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(ala 1)

	(ii) Toa kigezo chochote kimoja cha kuainishia konsonanti.	(ala 1)
(b)	Sentensi ifuatayo ina maana mbili tofauti. Zieleze.	
(ala 2)		
	Huyu amekuja kutuliza.	
(c)	Ikanushe sentensi ifuatayo kwa udogo.	(ala 2
	Nyumba yenyewe ilijengwa bondeni karibu na mto.	
(.1)		
(d)	Onyesha shadda katika maneno yafuatayo:	

(ala 2)

	(i)	Mbono (mti)
	(ii) Bar	abara (sawasawa)
(e)	(i) (ala 2)	sentensi kuonyesha matumizi mawili ya: Kinyota
	(ii) (ala 2)	Ritifaa .
(f) (ala 2)		sentensi mbili tofauti zinazobainisha maana tofauti kati ya Nduni

	(II) Dulli	
(g)	Taja aina zozote mbili za sentensi. (ala 2)	
(h)	Andika sentensi ifuatayo iwe katika hai ya -ki- ya masharti Tulilala sana tukachelewa kwenda shuleni.	(ala 2
(i)	(1) Taja aina nne za nomino. (al2)	
	(2)Tambua aina za vihusishi vilivyo pigwa mistari katika sentensi zifuatazo.	(al2)
	(a)Hassan anacheza vizuri <u>kuliko</u> Kiprini.	

	(k	o)Simtambui <u>kwa vile</u> amebadilisha nguo.
(j)	Taja ng	eli za nomino zifuatazo (ala 3)
	(1)Ujing	ga
	(2)Ugoı	njwa
	(=)	
	(3)Kuch	пета
	(4)Suka	ri
	(5)Baru	a
	(6)Mti	
	(O)IVILI	
محمادنا	(k)	Tunga sentensi ukitumia nomino ifuatayo pamoja na kivumishi kisisitizi cha mbali
kidogo,		
		Mgomba

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(ala 2)

(I) (ala 2)	Tunga	sentensi mbili ukitumia neno <u>kisabuni </u> kama:
	(i)	Nomino
	(ii)	kielezi
•••••	••••••	
(m)	Andika	a visawe vya
	(i)	Hidaya
	/;;\	Ngou
		Ngeu
(n)		e sentensi ifuatayo upya ukitumia '0" rejeshi tamati
(ala 2)	Chara	vi iliyochafuka si ile unayoizungumzia.
	(I) (ala 2) (m)	(ala 2) (i) (ii) (m) Andika (ii) (iii) (n) Iandika (ala 2)

(o) (ala 2)	Onyesha kishazi huru na kishazi tegemezi katika sentensi ifuatayo			
	Mwanasiasa shupavu aliyewachochea wananchi amekamatwa.			
(p) (ala 2)	Yakinisha sentensi ifuatayo katika umoja			
	Nyuzi zisingekatika zisingepotea.			
(q)	Taja matumizi ya kiambishi ku_ (ala 1)			
(r) (ala 2)	Taja aina mbili za mofimu			

4. ISIMU JAMII

a. gumzo	Taja sababu mbili zinazomfanya mzungumzaji kutumia zaidi ya lugha mo (ala 2)	oja katika	
			••
b.	Kwa kutoa mfano, eleza maana ya uwingi lugha.	(ala 2)	
			••
c. (ala 6)	Fafanua mambo sita yanaoweza kuifanya lugha yeyote ife,		
(ala 6)	Fafanua mambo sita yanaoweza kuifanya lugha yeyote ife,		
(ala 6)			
	gumzo 	b. Kwa kutoa mfano, eleza maana ya uwingi lugha.	gumzo (ala 2)

FORM 2 TERM 2 OPENER EXAM	<u>S</u>
FORM TWO MATHEMATICS	
TIME:2HOURS	
Evaluate without using tables or calculators.	(3mks)
$\frac{0.036 \times 0.0049}{0.07 \times 0.048}$	
1. The sum of interior angles of a regular polygon. Find the size of each exterior angle	e. (3mks)

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2. The length of an arc of a circle is $\overline{5}$ of its circumference. If the area of the circle is 346.5cm², find

(4mks)

the angle subtended by the arc at the Centre of the circle.

3.	Given that x=2y and 3y=5z. find the ratio x:y:z hence or otherwise find the amount of got if Ali, Ben and Chris shared Kshs. 36000 in the ratio x:y:z respectively.	money Al (4mks)
4.	A plane leaves town A for town B at 0540 hours. If the journey takes 6.5 hours, at what does the plane reach its destination?	time (3mks)
5.	A cylindrical solid metal is 3m long and has a mass of 4kg. if its density is 5.6g/cm^3 , find radius of its end. (take π =3.142)	the (4mks)
6.	Express the number 9000 as a product of its prime factors.	(1mk)
	b) Find the value of P if the number 9000P is a perfect cube.	(2mks)

7. Find the value of T given that $T = \frac{ab}{a^3 + bc}$ and a=2, b=-1,and c=-3 (3mks)

walimuepublishers@gmail.com 8. A shop keeper sells a shirt for Kshs. 350 thereby making a profit of 40%. Calculate the buying price of the shirt. (3mks

The GCD of three numbers is 45 and their LCM is 18900. Two of the numbers are 675 and 540. Find the other possible numbers. (2mks)

9. Find the perimeter of the figure below. (Take π =22/7).

(3mks)

3.5cm

 75^{0}

John is twice as old as his friend Peter. Peter is 5 ye	ars older than Alice. In 5 years John will be
three times as old as Alice. How old is Peter now?	(3mks

10. Ondieki had travelled from Texas to Kenya and arrived with U\$17500 on 12/2/2013. On arrival he changed the dollars into Kenya shillings and immediately used Kshs. 850,000. Later on 15/2/2013 he had some immediate use of £3600 and therefore c hanged all the money he had into sterling pounds. Finally on 18/2/2013 he converted what remained to Kenya shillings.

Buying	Selling	
Kshs.Kshs.		
12/2/2013 U\$ 82.36	85.74	
15/2/2013 £ 110.14	118.26	
18/2/2013 £ 112.64	119.56	
How much did he remain with in Kenya shillings?	(3r	nks)

11. The sum of the digits of a two digits number is 13. If the digits are reversed the number decrease by 27. Find the number. (3mks)

12. A man walks to work at 16km/hr and back home at 5km/hr. find the distance from his work place if the whole journey takes him 2 hours 12 minutes. (3mks)

13. If 3=-
$$\frac{1}{4x} = \frac{1}{8x}$$
, find the ratio $\frac{1}{2x} + 2 : \frac{1}{3x} + 1$ (3mks)

SECTION II (50 MARKS)

ANSWER ANY FIVE QUESTIONS

14. (a) Using a ruler and a pair of compasses only construct a triangle ABC such that AB=4cm, BC=5cm and \triangle ABC=120 $^{\circ}$. Measure AC. (4mks)

	b) On the diagram, construct a circle which passes through the vertices of the triangle Measure the shortest distance from the centre of the circle to line BC.	e ABC. (4mks)
	c) Measure the radius of the circle.	(2mks)
15.	Two aero planes P and Q leave an airport at the same time. P flies on a bearing of 240 900km/h while Q flies due East at 750km/h. a) Using a scale drawing of 1cm to represent 100km, make a scale drawing to show positions of the planes after 40 minutes.	

	b)	Determine the bearing of		
		i)	P from Q	(2mks)
		ii)	Q from P	(2mks)
	c)	Find the	e shortest distance between plane P and plane Q after 40 minutes.	(1mk)
16.	con	npany pa	ion company requires to transport 144 tonnes of stones to sites A and B. the ays Kshs. 24000 to transport 48 tonnes of stone for every 28 km. kimani transport 48 tonnes of stone for every 28 km. kimani transport 48 tonnes of stone for every 28 km. kimani transport 48 tonnes of stone for every 28 km. kimani transport 48 tonnes of stone for every 28 km. kimani transport 48 tonnes of stones to sites A and B. the	ported
	a)	Find ho	w much he paid.	(3mks)

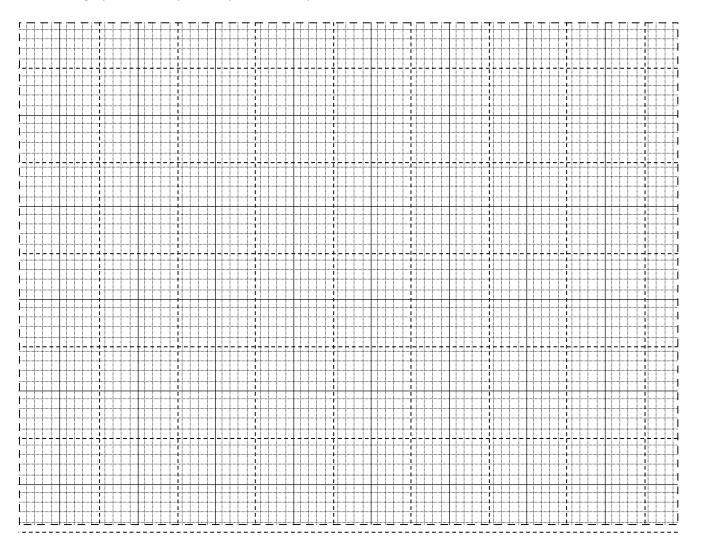
	b)	Kimani (4mks)	spends Kshs. 3000 to transport every 8 stones to the site. Calculate his total programme to the site.	rofit.
	c)		g transported the remaining stones to sites B, 84km away. If she made 44% pro r transport cost.	ofit, (3mks)
17. A tank has two inlet taps P and Q and an outlet tap R. when empty, the tank can be filled by tap P in 4 ¹ /2 hours and by tap Q in 3 hours. When full the tap can be emptied in 2 hours by tap R.				
a) The tank is initially empty, find how long it would take to fill up the tank;				
		i)	If tap R is closed and taps P and Q are opened at the same time.	(3mks)
		ii)	If all the three taps are opened at the same time.	(3mks)

b)	Find the fraction of the tank that would be filled by 9.00am if initially the tank is empt	y and
	the taps are opened as follows.	(4mks)

P at 8.00 am R at 9.00 am

Q at 8.45 am

a) Plot the graphs of the equations y=2x + 3 and $y=-\frac{1}{2}x + 3$. (4mks)



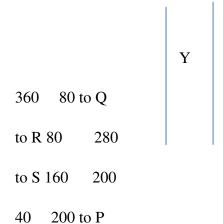
b) Use your graph to find the coordinates of the point of intersection of the two lines. (2mks)

c) Hence, state the solutions to the equations
$$y=2x + 3$$
 and $y=-\frac{1}{2}x + 3$. (2mks)

d) Find the angle made by the line y=2x+3 and the x-axis.

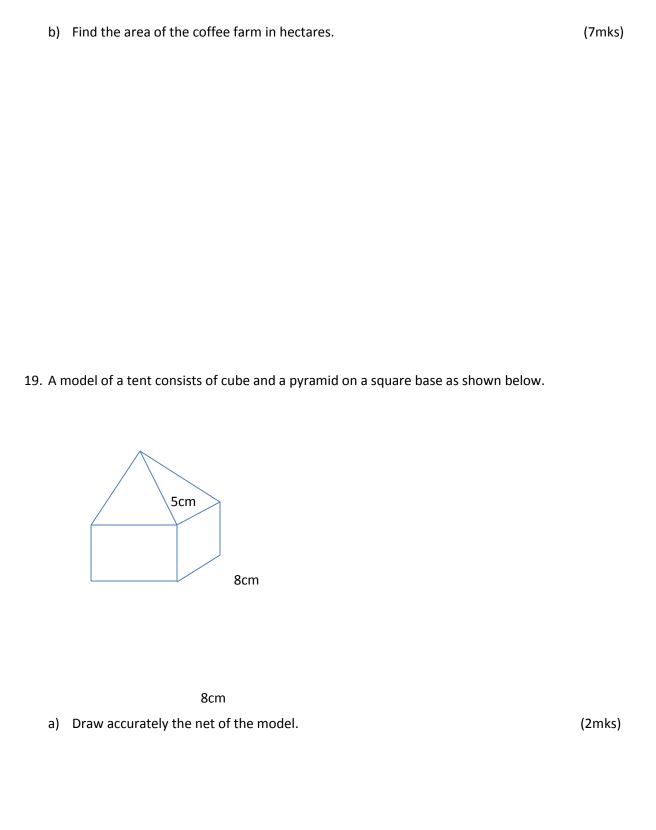
(2mks

18. A coffee farm was surveyed and its measurements entered in a field book as shown below. (Take XY=400m as the baseline.)



X

a) Using a scale of 1cm to represent 40m, draw the map of the coffee farm. (3mks)



	b)	Use the net to calculate the total surface area of the model. (4mks)	
	c)	If the ratio of the area of the model to the area of the actual is 1:10000, find the area of material required to make the tent (floor area inclusive) in m ² .	of the 4mks)
20.	-	Water and alcohol are mixed in the ratio 1:4. Find the density of the mixture if the densiter is $1 \mathrm{g/cm^3}$ and that of alcohol is $0.8 \mathrm{g/cm^3}$.	ty of 4mks)
	b)	40 cm ³ of water is poured into an empty measuring cylinder. A stone of mass 129g is p into the cylinder. If the density of the mixture of the stone is 8.6g/cm ³ , find the new re of the cylinder.	

c) Convert 8.6g/cm³ into kg/m³.

(2mks)

FORM 2 TERM 2 OPENER EXAMS

FORM TWO PHYSICS

TIME:2HOURS

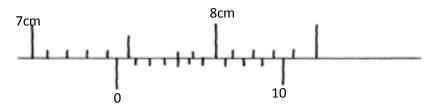
SECTION A (25MARKS)

Answer all question this section

1. Distinguish between mass and weight of a body stating the S.I units for each.

(2mks)

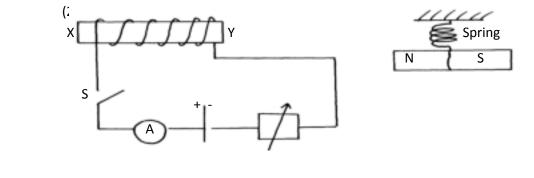
2. The figure below shows part of scale of vernier calipers.



What is the reading indicated on the scale(1mk)

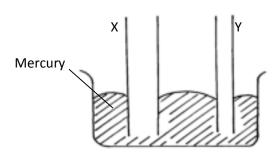
3.	180cm ³ of fresh water of density 100kg/m ³ is mixed with 2200cm ³ of sea water of density			
	1025kg/m³. Calculate the density of the mixture	(4mks)		
4.	Explain why fish can survive under water when the surface is already frozen	(2mks)		
5.	Two inflated balloons are at the same level while suspended from threads a short dist	ance apart		
	as shown below; Air blown			
	Some air is blown gently in the space between the balloon in horizontal direction. Exp	lain		
	what happens to the balloons. (2mks)			
6.	State one advantage of an alkaline battery over a lead acid battery. (1mk)			

7. The diagram below shows a permanent magnet suspended by a spring. State with reason the behaviour of the magnet when the switch is closed.



8.	Convection and diffusion both involve motion of fluids. Distinguish between the two. (2	mks)
	A negatively, charged rod is brought close to (but not touching) an uncharged sphere. If the	e
	sphere is momentarily earthed and then the rod is removed, briefly explain what happens.	
	(2mks)	

(2mks)



9. Indicate on the diagram below, the level of mercury in the tubes X and Y

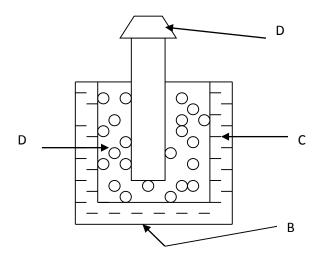
n object weighs 1200N on a certain planet. What is the gravitational field strength	of this
the object is 60kg?	(3mks)
tate two properties of a thermometric liquid.	(2mks)
SECTION B (55MARKS) Answer <u>all</u> question this section	
a) Define pressure and give its S.I nits. (2mks)	
b) The diagram below represents a motor car hydraulic braking system;	71
	tate two properties of a thermometric liquid. SECTION B (55MARKS) Answer all question this section a) Define pressure and give its S.I nits. (2mks)

FOR MARKING SCHEMES CALL/TEXT/WHATSABR 0705525657
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Master piston

i.	State two properties of the liquid used as a brake fluid	(2mks)
••••••		
ii.	Given that in the diagram (b) above the master piston has an area of 15c slave	m ² and the
piston	has an area of 50cm^2 a force of 100N is applied on the master piston. Find	the force
used t	o stop the car.	(3mks)
c)		
	answer.	(2mks)
d)	Give a reason why gas is not suitable for use in place of the brake fluid.	(1mk)

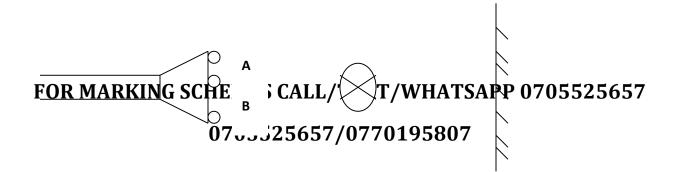
	e)	Xcm ³ of substance A which has density of 800kg/m ³ is mixed with 100cm ³ of water with
		a
		density of 1000kg/m^3 . The density of the mixture is 960kg/m^3 . Determine the value of X (3mks)
13.	a)	Give reasons why it is necessary to leave the caps of the cells open when charging an accumulator
		(1mk)
	b)	Define current and state its SI unit (2mks)
	c)	A charge of 120 coulombs flow through a 1 am every minute. Calculate the current
		flowing through the lamp.
		(3mk
	d)	What do you understand by open and closed circuits. (2mks)



i.	State the polarities of A and B.	(2 mks)
••		
ii.	Name the chemical substances in the parts labeled C and D (2mks)	
	· ,	
•••••		
•••••		

14.

a) The figure shows an arrangement of source of light, an opaque object and a screen.
 Using A, B and C as point sources, sketch on the same diagram labeled a ray diagram to show what is observed on the screen.
 (3mks)



walimuepublishers@gmail.com b) In a certain pinhole camera, the screen is 10cm from the pinhole. When the pinhole is placed 6cm away from a tree, a sharp image of a tree 16cm high is formed on the screen. Find the height of the tree. (3mks) c) Distinguish between Lunar and Solar eclipse by stating the events that lead to the formation of each (4mks)

	•••••	
	d)	A girl stands 4 m in front of a plane mirror
	i.	What is the distance between the girl and the mirror (3mks)
	ii.	Explain how you would use an electroscope to distinguish between a conductor and an insulator
		(3mks)
.5.	a)	Fill in the table of charges appropriately (5mks)

Charge on Electroscope	Charge brought near cap	Effects on leaf divergence
+	+	
-	-	
+ or -	Uncharged body	

b)	What is the name given to the opposite charge to the one of	method of charging an electroscope whe the charging materials?	ere it requires an (1mk)
c)	Distinguish between a basic ph	nysical quantity and a derived physical qu	antity giving an
	example of each.		
	(3mks)		
Physica	al quantity	Derived physical quantity	
d)	State any two ways by which f	rictional force between two surfaces can	be reduced.
	(1mk)		
e)	Explain why large mercury dro	ps form oral ball on a glass slide	(2mks)

)	Explain why a man using a parachute falls through air slowly while a stone falls through
	air very fast.
	(2mks)