F1 TERM 3 OPENER

ALL SUBJECTS

Dear Students, Attempt These Opener Exams!

FOR MARKING SCHEMES CALL/WHATSAPP 0705525657

NAME……ADM. NO……CLASS……

FORM 1 TERM 3 OPENER EXAMS

MATHEMATICS

TIME: 2 HOURS

INSTRUCTIONS TO CANDIDATES

- Write your **Name** and **Adm. No** in the space provided.
- These papers consist of two sections; Section A and section B.
- Answer all questions in section A and Section B.
- Write all your working on the space provided.
- Marks are awarded for steps which are correctly worked.
- Calculators must not be used.

For Examiner's Use Only

Question	1	2	3	4	5	6	7	8	9	10	11	12	13
Marks													

Question	14	15	16	17	18	19	20	21	22
Marks									

TOTAL MARKS

This paper consists of 12 printed pages. Students should check the question paper to ensure that all the Pages are printed as indicated and no questions are missin

SECTION A 50 MARKS

ANSWER ALL QUESTIONS IN THIS SECTION

1. Ayub travelled part of the journey by train and the rest of the journey by bus. The total fare was Ksh 4000. On return, the fare of the bus was hiked by a half of what he had paid and the total fare of the return journey hiked to Ksh 4800. Find the train fare. (3mks).

2. When 19346 is divided by a number, the quotient is 841 and the remainder is 3. What is the number? (3mks).

3. A square toilet is covered by a number of whole rectangular tiles of sides 60cm by 48cm. Calculate the least possible area of the room in square metres. (3mks).

4. Evaluate $\frac{1470^2}{\sqrt{7056}}$ using prime factors and leave your answer in prime factors form. (4

5. Evaluate $\frac{{}^1/_2 \text{ of } 3{}^1/_2 + 1{}^1/_2(2{}^1/_2 - {}^2/_3)}{{}^3/_4 \text{ of } 2\,{}^1/_2 \div {}^1/_2}$ (4mks).

6. Use number line to solve $6 - (-4)$
(2mks).

7. Given that X= 4 and y = -6, evaluate the following.
(3mks).

6x – 3xy

8. Simplify

$$\frac{a+b}{2} - \frac{2a-b}{3}$$

(3mks)

9. The ratio of boys and girls in a mixed school is 2:3. If there are 160 boys, how many girls are there? (3mks).

10. Find the ratio a:c, given that;

a:b = 7: 1, b:d = 1: 2, d: c = 2: e
(4mks).

11. The perimeter of a semicircular protractor is 14.28cm. Find its radius.
(3mks)

12. The area of the sector of a circle is 38.5cm^2. Find the radius of the circle if the angle subtended at the centre is 90^0. (Take π= $^{22}/_7$).
(3mks).

13. A cylindrical column of fat has diameter 17.5cm and height 10cm. Calculate the density in g/cm^{3}of fat if the column has a mass of 2kg.
(3mks)

14. Express the following measurements in 3 s.f
    (3mks)

a) 36.7892

b) 0.09854

c) 345204

15. Find the square root of 0.001952 using mathematical table.
    (3mks)

16. Arrange the following numbers in an ascending order.
    (3mks)

$2^{7}/_{8}$, $^{14}/_{5}$, 3, $^{17}/_{9}$

SECTION B 50 MARKS
ANSWER ALL QUESTIONS IN THIS SECTION

17. A rectangle measures 18cm by 12cm.
(a) If each dimension is reduced by 2cm, by what percentage is:
i). The perimeter reduced.
(3mks)

ii). The area of the rectangle reduced.
(3mks)

(b) If each dimension is reduced by 2%, by what percentage is the area of the rectangle reduced. (4mks).

18. (a) Study the equations below and complete the tables.

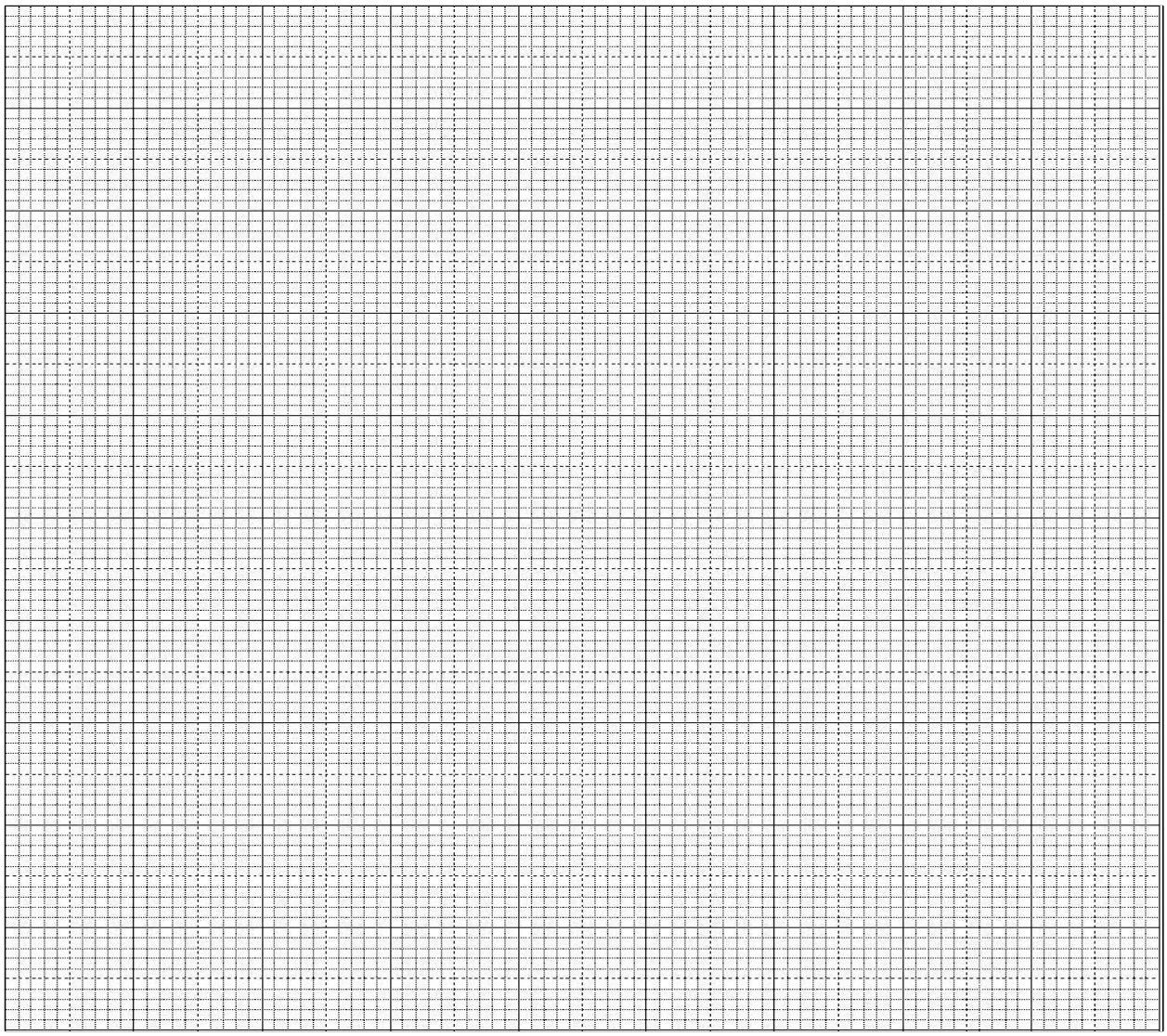
7x + 2y = 16

2x-y = 3

x	0	1	2
y			

x	0	2	4
y			

(b) On the same axis, draw the graphs of y = 2x – 3 and y = 8 - $\frac{7}{2}x$
(4mks)



(c) Use the graph to solve the simultaneous equations; (2mks)

$y = 2x - 3$

$y = 8 - \boxed{\frac{7}{2}x}$

19. (a) Draw triangle ABC in which AB = 11cm, AC = 8cm and BC = 5.6cm. (2mks)

(b) Construct the bisectors of any two angles of the triangle and let the bisectors meet at R. (2mks)

(c) Draw the perpendicular from R to AB so that it cuts AB at M.
(2mks)

(d) With centre R and the radius RM, Draw a circle.
(2mks)

(e) Calculate the area of the circle.
(2mks)

20. A carpenter constructed a closed wooden box with internal measurements 1.5m long by 0.8m wide and 0.4m high. The wood used in constructing the box was 1.0cm thick and had a density of 0.6 g/cm^3.
a) Determine the:
i). Volume in cm^3 of the wood used in constructing the box.
(3mks)

ii). Mass of the box in kg correct to 1dp.
(2mks)

b) Identical cylindrical tins of diameter 10cm and height 20cm with a mass of 120g each were packed in the box. Calculate;

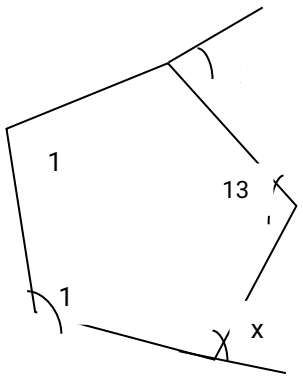
i). Maximum number of tins that were packed in the box.
(3mks)

ii). Total mass of the box with the tins.
(2mks)

21. Find the size of the angles marked with letters.

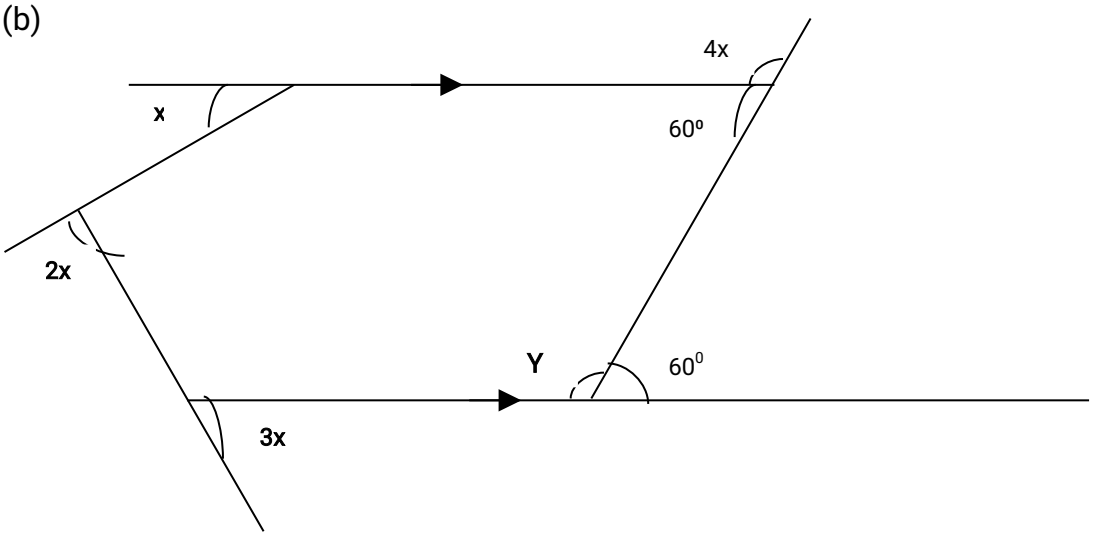
(a)

(1mk)

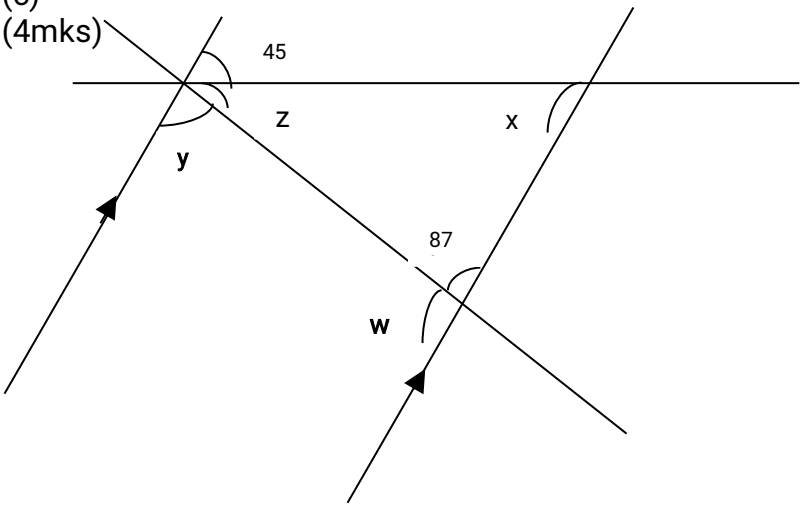


(5mks)

(b)



(c)
(4mks)



22. (a) The GCD of two numbers and their LCM is 360. If one of the numbers is 72, what is the other number?
(3mks).

(b)When a number **u** is divided by 34 or 24 or 40, the remainder is always 5. Find the least value of **u.** (3mks)

(c) Three bells ring at intervals of 12minutes, 15minutes and 18minutes. If they sound together at 10:00 am;

i). After how long will they next sound together?
(3mks).

ii). What time will this be?
(1mks)

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FORM 1 TERM 3 OPENER EXAMS

BUSINESS STUDIES

NAME :…… ADM.NO :…….. CLASS:……..

Instructions to candidates:

1. Answer all the questions in the spaces provided.
2. Answers should be written in English language.

1. Enumerate benefits of studying business studies to a student. (4mks)

a. ……

b. ……

c. ……

d. ……

2. Highlight four benefits of a business plan to an entrepreneur. (4 Mks)

a. ……

b. ……

c. ……

d. ……

3. Give four aids to trade (4mks)

a. ……

b. ……

c. ……

d. ……

4. State four reasons why choice should be made in satisfying human wants (4mks)

a. ……

b. ……

c. ……

d. ……

5. Name any four business activities (4mks)

a. ……

b. ……

c. ……

d. ……

6. Give any four purposes of a business(4 mks)

a. ……

b. ……

c. ……

d. ……

7. Name the machines used in the following (4mks)
   a) Trimming documents into required shapes and size

b) Performing complex calculations

c) Printing postage impression on envelopes

d) Removing pins from papers

8. State four factors of production and their rewards (4mks)

a. ……

b. ……

c. ……

d. ……

9. Give four features of economic resources (4mks)

a. ……

b. ……

c. ……

d. ……

10. Indicate with a tick whether the following resources are renewable or non-renewable (4mks)

ırces	wable	enewable

stone		
s		
energy		
al rubber		

11. Highlight four characteristics of basic wants (4mks)

a. ……

b. ……

c. ……

d. ……

12. Highlight four ways in which an open office layout can contribute to improved office operations. (4mks)

a. ……

b. ……

c. ……

d. ……

13. State whether the following is an internal or external environment of a business (4mks)

a) Finances……..

b) Management style of business……..

c) Competition……..

d) Government policy……..

14. State four personal attributes of a good office staff (4mks)

a. ……

b. ……

c. ……

d. ……

15. Hobbies is one of the sources of business ideas, highlight four other sources of business ideas. (4mks)

a. ……

b. ……

c. ……

d. ……

16. State four ways in which a society benefit from indirect production. (4mks)

a. ……

b. ……

c. ……

d. ……

17. A business opportunity exists where there are gaps in the needs of the market. State four such gaps. (4mks)

a. ……

b. ……

c. ……

d. ……

18. State any four characteristics of a good filing system (4mks)

a. ……

b. ……

c. ……

d. ……

19. Highlight four factors to consider when selecting office equipment. (4mks)

a. ……

b. ……

c. ……

d. ……

20. State four types of utilities created in production. (4mks)

a. ……

b. ……

c. ……

d. ……

21. List four features of a good entrepreneur (4mks)

a. ……

b. ……

c. ……

d. ……

22. Enumerate four activities carried out at the primary level of production. (4mks)

a. ……

b. ……

c. ……

d. ……

23. State four differences between goods and services. (4mks)

s	ces

24. State four causes of a business failure (4mks)

a. ……

b. ……

c. ……

d. ……

25. Define the following terms (4mks)

a. Specialisation:……

.....
.....

……..

b. Utility:……

.....
.....

……..

c. Division of labour:……

.....
.....

……..

d. Business:……

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FORM 1 TERM 3 OPENER EXAMS

AGRICULTURE

TIME 2 HOURS

NAME …… ADM NUMBER……..

Kenya Certificate of Secondary Education (K.C.S.E)

INSTRUCTIONS TO CANDIDATES

(a) Write your name and AdmNo number in the spaces provided

(b) Sign and write the date of examination in the spaces provided

(c) This paper consists of three sections A, B and C.

(d) Answer all questions in section A and B.

(e) Answer all questions in section C

(f) All the questions should be answered in the spaces provided

(g) Candidates should check to ascertain that all pages are printed as indicated and that no questions are missing.

FOR EXAMINER'S USE ONLY

Section	Question	Max Score	Candidates Score
A	1-16	40	
B	17-20	20	
C	21	20	
	22	20	
	Total	100	

SECTION A (4O marks

1. Differentiate between olericulture and pomoculture.

(2marks

2. List four methods of farming. (2 marks

3. State **three** reasons for treating water for us on the farm (3marks

4. Name **three** types of water pumps which can be used in the farm (3marks

5.State three advantages of shifting cultivation (3 marks)

6. List four environmental factors that affect crop distribution in Kenya (4marks

7. List down the four aspects of rainfall that affect agriculture.
(2marks

8.)Name two processes of rock weathering. (2marks

9..List two aspects of light that influence crop growth. (2marks

10.state three ways by which biological agents can enhance the process of soil formation (3marks

11. State two mechanical methods of separating soil particles according to size during soil analysis (1mark

12.statefour harmful effects of strong wind on crop production. (4mks

13. Outlinethreeways in which high temperature affects agricultural production in Kenya.(3marks

14.list the tool used for each of the following (4marks

i) Tightening barbed wires during fencing,

ii) Smoothening concrete flours during plastering.

iii) Administration of liquid medicine to livestock through the mouth.

iv) Lifting seedlings from the nursery

15. Define the following (2marks

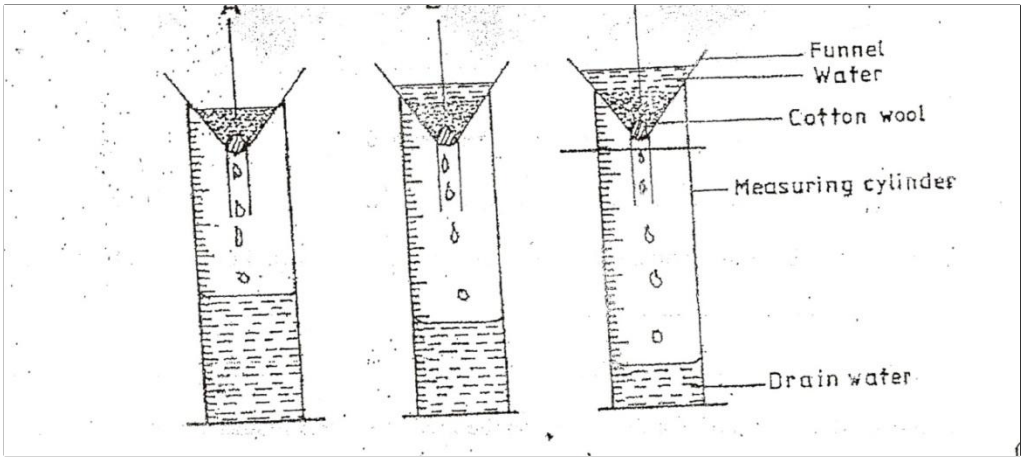
a.dam

b. weir

SECTION B (2O marks

16.The diagram below illustrates an experiment on soil. Study it carefully and answer the questions that follow.

A B C

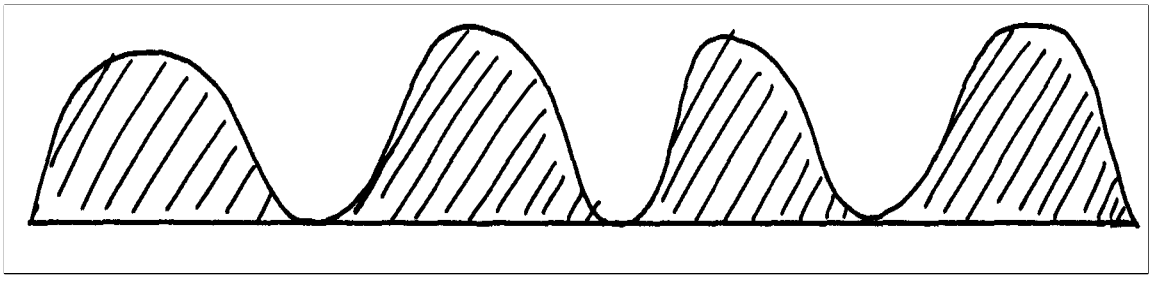


(a) State the aim of the experiment
(1mark)

(b) If the volume of water illustrated in the measuring cylinder was observed after one hour identify the soil sample labeled A and B.
(2 mark)

(c) State one way in which the soil structure of the sample labeled C above can be improved
(1 marks)

17. The diagram below illustrate a tertiary operation carried out in the farm

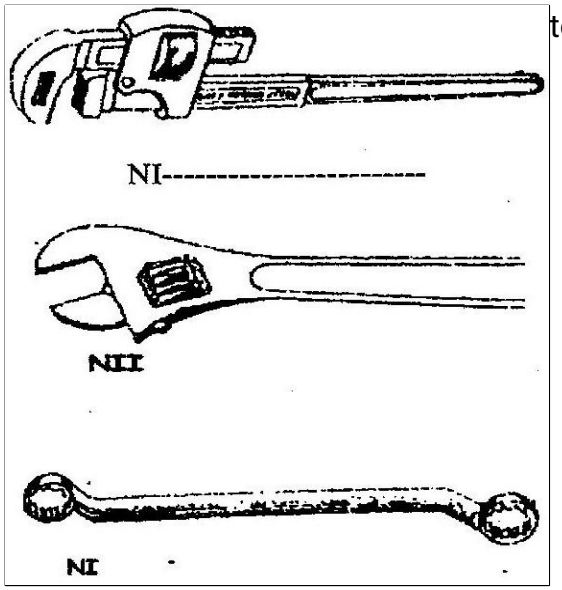


a) Identify the tertiary operation (1mark

b) (i) State the importance of the tertiary operation identified in **18(a)** above (2marks

(ii) Give **two** other tertiary operations carried out in the field besides the one identified above (2marks

18.The diagram labeled N I, N II, N III below represent some tolls used in farms.



i.Name the tools labeled above
(3mks

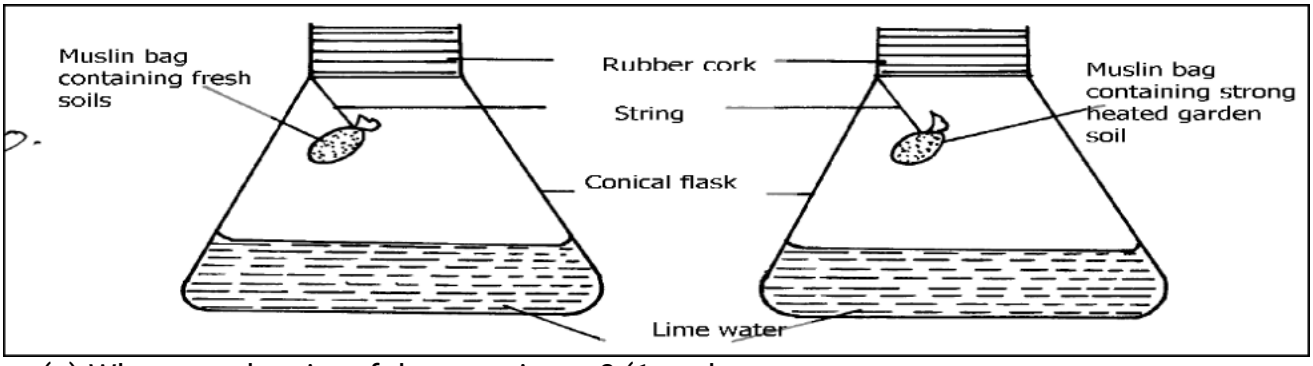
ii) What functional advantage does the tool labeled NII have over the tool labeled NIII? (1mk

iii) What is the function of tool labeled NI (1mark

19. (a) State one use of each of the following tools,
(i) sickle(1mark

ii) Secateurs(1mark

20. The diagrams below show an experiment carried out by a form 1 class. Study them carefully and answer questions that follow:



(a) What was the aim of the experiment? (1mark

(b) What was the observation that form 1 students made at the end of the experiment in
flasks D and E? (2marks

(c) Give the reason for the observation made in flask D (1mark

SECTION C - 40mks

21a. State and explain five reasons of maintaining farm tools and equipment (1O marks

b i. What is land preparation (1mark

ii.Discuss five reasons for preparing land (5marks

iii.State four reasons for carrying out minimum tillage (4marks

22 a. State and explain five roles of agriculture in the economic development of Kenya
(1O marks

b. i) List**three surface sources of water** **(3marks**

ii) Give **four** methods of harvesting water on the farm (4marks

iii) Outline the stages involved in water treatment process (6 x .5=3marks

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FORM 1 TERM 3 OPENER EXAMS

CRE

TIME: 2HOURS

NAME ……ADM NO……..

Instructions.

a) Answer all the questions in the spaces provided.

b) All the answers must be in English

1. a) Give six benefits of learning Christian religious education in Kenya schools. (6mks)

b) Identify seven literally forms used in writing the Bible. (7mks)

c) Give seven ways in which the Bible is used by Christians in Kenya today.

(7mks)

2. a) Outline six similarities in the Biblical stories of creation in Genesis 1 and 2 (6mks)

b) Give five attributes of God as portrayed in the Genesis stories of creation (7mks)

c)Identify seven causes of evil in Kenya today. (7mks)

3. a) Give five ways in which God showed his concern to the Israelites during the Exodus. (5mks)

b) Describe the breaking of the covenant at Mt.Sinai (Exodus 32:1-35) (8mks)

c)What is the importance of the ten commandments to modern Christians (7mks)

4. a) Explain seven reasons that prophet Samuel gave against Kingship in Israel (7mks)

b) Give seven achievements of king Solomon (7mks)

c)Identify six ways in which Christians in Kenya can demonstrate their faith in God today. (6mks)

5. a) Explain seven characteristics of the local Canaanite religion (7mks)

b) Describe the contest between prophet Elijah and the prophets of Baal at Mt. Carmel (1st King18:17-40)
(8mks)

c)Identify five forms of corruption that is practiced in Kenya today (5mks)

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FORM 1 TERM 3 OPENER EXAMS

ENGLISH

TIME: 2 HRS 30 MINUTES

NAME……..ADM NO…….

DATE…… SIGNATURE……

INSTRUCTIONS TO STUDENTS

1. Write your name and admission number in the spaces provided .
2. Answer all the questions in this question paper.
3. All your answers must be written in the spaces provided in this question paper.
4. Students must answer all questions in English.

For Examiners use only

Questions	Max score	Student score
1. Writing	20	
2. Comprehension	20	
3. Cloze test	10	
4. Oral Skills	10	
5. Oral Literature	10	
6. Grammar	30	
Total score	100	

All the best

Q1: WRITING (20MKS)

Write a story beginning with:

"The Principal came to our class and called out my name. My classmates looked at me ….."

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Q2 COMPREHENSION (20MKS)

Read the passage below and then answer the questions that follow

Ever wondered what the difference between abortion and murder is? Or should we ask what the two have in common? Both involve cutting life short. In the case of abortion, it happens to be the equally precious life of unborn baby that is ended.

In Kenya, abortion is illegal except when the life of the pregnant woman is in danger. Violating this carries the severe penalty of between 14 years and life imprisonment. The truth of the matter, though, is that many illegal abortions are still taking place. How else can we explain the presence of the foetuses in polythene papers dumped in city streets?

\

Many such abortions are unsafe. They are done using all manner of gruesome paraphernalia: wires, knitting needles, sticks, herbs, chemicals, detergents and drugs. Many people performing them lack the necessary skills and training. The environment in which they are done are usually unsafe and do not meet minimum hygienic or health standards.

This sorry situation has led some to clamour for the legalization of abortion. They argue that as things stand, it is adolescents and poor women who are forced to seek the services of the quacks. The financially - endowed counterparts visit private clinics of qualified doctors for the same services. They therefore do not suffer the consequences of a botched abortion; infertility, excessive bleeding, perforated internal organs such as the bladder and intestines and, worst of all, death. The feeling is that legalization of abortion would make it safe for all women.

But what reason, other than the legal one, would make a woman want to terminate a throbbing life within her? Interruption of career and education, being too young to bring up a baby or being abandoned by the father of the baby are often cited. Another reason is that the pregnancy is as a result of rape or incest. Whatever the reason, the negative consequences of illegal abortion, safe or otherwise, far outweigh any benefits it is purported to have.
Apart from the physical effects of unsafe abortion already mentioned, there are physiological ones. They include headache, accelerated heart beat, dizziness, stomach upsets and disturbed sleep and concentration. Eating disorders resulting in excessive weight gain or loss sometimes occur.

At the psychological level, a woman who has carried out an abortion usually suffers from debilitating guilt.
She feels that she has gone against a mother's natural tendancy. As a result of low-esteem, she feels worthless and undeserving of even getting another baby.

Depression may also set in, the victim may feel very sad and cry for a long spell. She may lose interest in life and want to commit suicide.

A mental illness called phychosis cannot also be ruled out. The sufferer exhibits very uncharacteristic behaviour and is not able to distinguish reality from fantasy.

There is also stigma at the social level. Not many people would proudly want to associate with one who has induced illegal abortion. A man seeking a marriage

partner is likely to give such a woman a wide berth.

In sum, though illegal abortion may appear to solve the immediate problem of the one seeking it, it creates life-long complications.

i. Provide an appropriate title for the passage
(1mk)

……

……

ii. Under what circumstance can abortion be legalized?
(2mks)

……

……

……

……

iii. According to the passage, how can we tell that illegal abortions are still taking place (2mks)

……

……

……

……

iv. According to the first paragraph, is there a difference between murder and abortion? Support your answer.
(2mks)

……

……

……

v. Make notes on the reasons that make people procure abortion.
(5mks)

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……

vi. Why is the public fighting to legalize abortion?
(2mks)

……

……

……

vii. What is the psychological effect of abortion?
(2mks)

……

……

……

viii. Explain the meaning of the following words as used in the passage
(4mks)

a) Tendancy……

b) Exhibits

……

c) Fantasy

……

d) Incest

……

Q3 CLOZE TEST (10 MARKS)

Fill in the blank spaces with the most appropriate word. *(10 marks)*

I had always lived (1)_____ dread of water. When my friends(2)

_____swimming I always stayed away because my mother (3)_____ made me promise her never to go for swimming and I (4)_____keep this promise very well.(5) _____ this reason, I never (6)_____myself the opportunity to get any kind of training. On this day, after, (7)_____a long time in the stream trying (8)_____ vain to catch fish my friends pulled (9)_____ their clothes and leapt into the stream (10)_____ I stood on the bank watching them.

Q4 ORAL SKILLS. (10 MARKS)

(1) Identify the silent letters in the following words. (5mks)

i) Calm -

ii) Judge-

iii) Scent -

iv) Write -

v) Wheel -

(2) For each of the following words write a word pronounced in the same way. (5mks)

i) Mail -

ii) There -

iii) Allowed –

iv) Flu -

v) Story -

Q5 ORAL LITERATURE (10MKS)

1) State any 5 types of oral narratives. (5mks)

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……

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……

……..

2) Identify two features of oral narratives. (2mks)

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.....

3) I have a house without a door. Answer- An egg.

i). Identify the above genre. (1mk)

……

……

ii). Give two functions of the above genre. (2mks)

.....

.....

.....

.....

Q6. GRAMMAR. (30 MARKS)

Identify the adverbs used in the sentences below.(5mks)

i) They stopped midway to buy food

……

ii) Children adjust to new situations quickly.

……

iii) You should never go for an engagement late.

……

iv) They cook pancakes daily.

……

v) He talked to the teacher rudely.

……

(2) Fill in each of the gaps in the following sentences with the correct form of the adjectives given in brackets.
(5mks)

i) My dress is ……..than yours.(smart)

ii) Mugo is the …… boy in our school.(tall)

iii) My school was the ……..in the county Music Festivals. (good)

iv) Rono is the ……..of the three athletes. (fast)

v) The form threes were ……..than the form fours during the talk.(attentive)

3. *Fill in the spaces in the following sentences with the correct prepositions. (5mks)*

i) The blind girl asked God to have pity …….. her.

ii) Mother complimented Sarah …….. her neat appearance.

iii) She brightened …… when she was shown the title deed.

iv) I bought the shamba ……Sulwe.

v) The thief jumped ……the wall and into the sewage.

4. *Rewrite the following sentences putting the verb in brackets in the past perfect aspect. (5mks)*

i) When Marwa arrived at the hotel, the meeting (has) ended.

_____

_____

ii) She (use) up all her savings by the time the baby was born.

_____

_____

iii) Papa (write) down the address and posted the letter.

_____

_____

iv) He (take) out a brush and painted the whole house red when I got home.

_____

_____

v) After an hour, we (prepare) your cheque.

_____

_____

5*) Fill in the blanks in the sentences below using the words in brackets.(5mks)*

a) The class ……a debate this morning. (contacted/ conducted)

b) The cabinet secretary is ……to holiday tuition.(oppressed/ opposed)

c) Kirui's ……smelt of alcohol. (breath/ breathe)

d) We could not ……on him to ……..the information on time. (relay /rely)

6*) Pick out the nouns from the sentences given and indicate what type they are. (5mks)*

a) The tables were repaired.

b) River Yala broke its banks.

c) Kennedy stood at the door.

d) His arrogance is disturbing.

e) There is plenty of soup.

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FORM 1 TERM 3 OPENER EXAMS

GEOGRAPHY

Time:2hrs

NAME: ADM

1) Name the branches of Geography
(3marks)

2) Explain the relationship between Geography and the following disciplines

a) Mathematics (2marks)

b) History (2marks)

3) Define the following terms.

a) Galaxy (2marks)

b) Milky Way (2marks)

4)

a) Name two planets without satellites.
(2marks)

.

b) Explain the origin of the earth according to the nebula cloud theory (4marks)

5) State the reasons why the earth has life on it.
(3marks)

6) Explain three forces that contribute to the shape of the earth.
(6marks)

7) Calculate the following.

a) What is the longitude of station x when it is 08:00am while in Nairobi at longitude 37°E the time is 12.00 noon?
(2marks)

b) What is the time at point Y 30°W when the time at point Z is 20°E is 4:00pm?
(2marks)

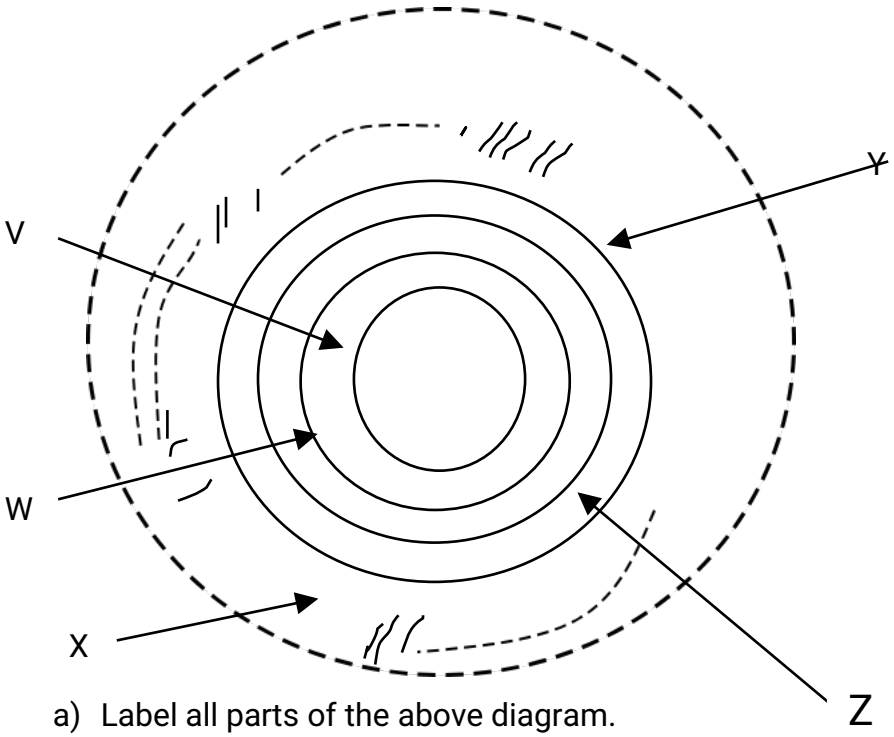
8)

a) What is the International Date Line?
(2marks)

b) State the effects of international date line?
(2marks)

9) List the five main latitudes on the globe.
(5marks

10) The diagram below represents the structure of the earth. Use the diagram to answer questions that follows.



a) Label all parts of the above diagram.
(5marks)

V

W

X

Y

Z

b) List the composition of the crust. (2marks)

c) Name the other layer of discontinuity that make up the interior of the earth.

(1mark)

11)

a) Define weather (2marks)

b) Identify five elements of weather (5marks)

c) What considerations should be put into account while siting a weather station? (4marks)

d) Give five characteristics of the Stevenson's screen
(5marks)

e) What are the elements of the weather measured from a Stevenson's screen?
(2marks)

12)

a) Describe the way a rain gauge works. (4marks)

b) Why is it possible that the data recorded in a school weather station will not be accurate?
(3marks)

13) Identify the ways in which clouds are classified. (3marks)

14)

a) Using a well labeled diagram, describe the occurrence of relief rainfall
(6marks)

b) Outline the characteristics of Inter-tropical convergence zone (ITCZ).

(4marks)

15)

a) Students from one of the schools in Kirinyaga county, carried out a field study in Kerugoya Market. What five preparations did they make apart from making a work schedule?
(5marks)

b) Why will it be necessary to make a work schedule before the study?
(3marks)

16) State three disadvantages of using interviewing method in the field study.
(3marks)

17) Study the statistical data below and answer the questions that follow

h												
ll in mm												

a) Calculate the mean of the rainfall amounts.
(2marks)

b) The annual range of rainfall
(2marks)

FORM 1 TERM 3 OPENER EXAMS

HISTORY AND GOVT

FORM 1

NAME:_____

ADM NO:_____

INSTRUCTIONS.

1. *Answer all the questions in the spaces provided.*
2. *Answer all the questions in English.*

NAME:_____ADM NO:_____

SECTION A

1. a) Name two divisions of History (2mks)

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.....

b) State three branches of History and Government
(3mks)

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_____
_____
_____
_____

2. a) Give three forms of government
   (3mks)

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b) Mention three unwritten sources of history and government
(3mks)

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c) Outline three disadvantages of oral traditions as a source of history and government (3mks)

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_____
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3. a) State 3 characteristics of homo erectus
(3mks)

……
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……

b) Outline two reasons why early man lived in groups (2mks)

_____
_____
_____
_____

c) Name two types of tools made by man during the two phases of Old Stone Age
(2mks)

_____
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4. a) Outline two reasons for the development of early agriculture in Egypt
(2mks)

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b) Give two cultural practices the Agikuyu borrowed from the cushites
(2mks)

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5. a) Name two examples of western Bantus
   (2mks)

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b) Mention three linguistic groups in Kenya today
(3mks)

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_____
_____

SECTION B

6. a) State three examples of printed sources of history and government
   (3mks)

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……

b) Describe the culture of early man during the late stone age
(12mks)

_____
_____
_____
_____

7. a) Outline 5 changes marking agrarian revolution in Britain (5mks)

b) Explain five remedies to food shortage in Kenya (10mks)

8. a) Outline five reasons for the migration of the communities in Kenya during 19th Century (5mks)

b) Discuss five results of the migration of the Agikuyu in Kenya during the 19th Century
(10mks)

9. a) State four roles of Orkoiyot among the Nandi during the 19th Century (4mks)

b) Describe the economic organization of the Akamba during the pre-colonial period (6mks)

10. a) Give five factors that promoted trade between East Africa Coast and outside world
(5mks)

b) Explain five impact of the Indian Ocean trade on the people of East Africa (10mks)

FORM 1 TERM 3 OPENER EXAMS

102

KISWAHILI

MUDA : SAA 2

JINA……NAMBARI ……DARASA……..

SEHEMU YA A: INSHA . (ALAMA 20)

Fafanua namna ajali za barabarani zinaweza kuzuiwa nchini Kenya.

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SEHEMU B: SHAIRI (ALAMA 15)

Soma ushairi ufuatao kisha ujibu maswali.

Kila mdharau chake

Kuzimu wenda kuona, kila mdharau chake

Cha kwake akikana, kutumai cha mwenzake

Fahamu anayo laana, mpiga chake mateke

Kila mdharau chake, kuzimu enda kuona

Siringe na kujivuna, chako ukakipa teke

Unavunja lako jina, ili watu wakucheke

ana laana kwa Rabana, kila mdharau chake

Kila mdharau chake, kuzimu enda kuona

Awe Fatu na Amina, au Asha ndugu yake

Katu hawatafanana, kila mtu hadi yake,

Kila mjuzi wa mana, huwa hadharau chake

Kila mdharau chake, kuzimu enda kuona

Tama naomba amina, kilicho chetu tushike

Kidumu na kulingana, na tukipe hadhi yake

Ana laana kwa Rabana, kila mdharau chake

Kila mdharau chake, kuzimu enda kuona

(*Diwani ya Akilimali na Akilimali Snow-White, K.L.B*)

Maswali:

1. Elezea ujumbe unaojitokeza katika ushairi huu. (al 2)

……

……

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2. Nakili kibwagizo cha ushairi huu. (al 1)

……

3. Elezea aina za ushairi huu kwa kuzingatia: (al 6)

i. mishororo

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ii. vina

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iii. vipande

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4. Elezea mambo matatu ambayo mshairi anatuonya dhidi yake. (al 3)

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5. Elezea maana ya maneno haya: (al 3)

a. siringe

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b. katu

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c. hadhi

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SEHEMU YA C: MATUMIZI YA LUGHA (ALAMA 40)

a. Elezea tofauti kati ya sauti /d / na / z/ (al

2)

……

……

b. Onyesha silabi inayowekwa shadda katika maneneo haya. (al 3)

i. umio

ii. kinywa

iii. mmomonyoko

c. Tunga sentensi moja ukitumia nomino ya kitenzi jina. (al 2)

……

d. Andika sentensi ifuatayo kwa wastani. (al 2)

Magoma hayo yatachezwa mawanjani.

……

e. Tambua viambishi awali na tamati katika neno: (al 3)

Achezaye

……

f. Taja vipashio vya lugha kisha utolee mfano kwa kila kipashio:

(al 4)

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g. Ainisha maneno yaliyopigiwa mstari. (al 2)

Naam, amekula kichache

……..

h. Jaza pengo kwa kutumia kinyume sahihi cha kitenzi kilichopigiwa mstari. (al 2)

i. Mimi nilim---------- kunguru aliyokuwa amenaswa.

ii. Alivaa sare asubuhi kisha ---------- jioni

i. Tunga sentensi moja kubainisha maana mbili za neno: chuo (al 2)

……

j. Onyesha KN na KT katika sentensi ifuatayo. (al 2)

Mpishi yule hodari atatuzwa vizuri sana.

k. Tunga sentensi **tatu** kudhihirisha matumizi mawili tofauti ya kibainishi. (al 3)

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……..

l. Elezea maana ya kiimbo (al 2)

……

……

m. Andika sentensi ifuatayo katika umoja. (al 2)

Hao wenyewe hawakusomea mafunzo ya ukulima bora.

……

n. Tunga sentensi kuonyesha matumizi ya kielezi . (al 2)

……

o. Bainisha ngeli za majina haya. (al 3)

i. zeruzeru

ii. ugwe

iii. saa

p. Yakinisha: Hukuja kunitembelea kazini. (al 2)

……..

q. Kamilisha methali: (al 2)

Maiti haulizwi ----------

SEHEMU D: FASIHI SIMULIZI (ALAMA 15)

i. Taja vipera vine vya semi. (al 4)

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ii. Eleze:

A .Sifa za semi (al 4)

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B.Umuhimu wa semi (ala4)

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iii. Elezea maana ya nahau hizi. (al 2)

a. kukunja jamvi ----------

b. kupata jiko ----------

iv. Fanani ni nani katika fasihi simulizi? (al 1)

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SEHEMU E: ISIMU JAMII (ALAMA 10)

Elezea sifa **tano** za sajili ya hospitalini.

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FORM 1 TERM 3 OPENER EXAMS
PHYSICS
TIME: 2 HRS.

NAME……ADM.NO……CLASS:…….

INSTRUCTION TO CANDIDATES:

a) *Write your **name**, **Admission number** and **class** in the spaces provided above.*

b) *This paper consists of **TWO** Sections; Section **A** and Section **B**.*

c) *Answer **ALL** the questions in both Section **A** and **B** in the spaces provided.*

d) ***ALL** working **MUST** be clearly shown.*

e) *Candidates should check the question paper to ascertain that all the **8** pages are printed as indicated and that no questions are missing.*

f) *Candidates should answer the questions in English.*

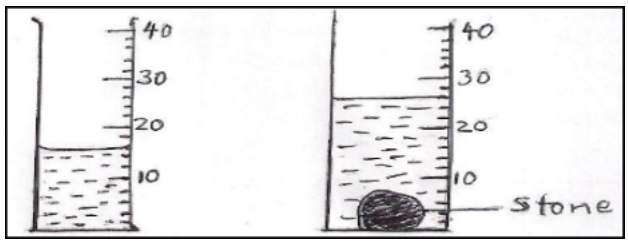
Where necessary, take:
g = 10N/kg
Density of water = 1000kg/m^3

For Examiners Use only

Section	Marks	Marks awarded
A	25 Marks	
B	55 Marks	
	Total (80Marks)	

Section A: 25 marks

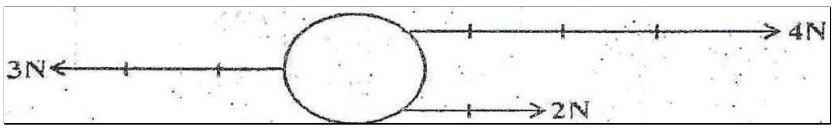
1. The figure below shows the volume of water in a measuring cylinder before and after immersing a stone. If the mass of the stone is 125g, determine its density. (3mks)



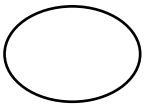
2. A drug manufacturer gives the mass of an active ingredient in a table as 4.0mg. Express this quantity in kilogrammes (1mk)

3. Giving an example, define the termderived quantities. (2mks)

4. A body is acted upon by three forces as shown below.



Draw on the body below to show the resultant force acting on it.
(2mks)



5. Stateany two the difference between mass and weight (2mks)

6. Explain why water wets the glass while mercury does not.(2mks)

7. Name the instruments you would use to measure each of the following:

   (a) The length of a football field. (1mk)

   (b) The height of a 20 litrejerrican (1mk)

   (c) The circumference of your waist. (1mk)

8. The water level in a burette is $30cm^3$. If 55 drops of water fall from the burette and the average volume of one drop is $0.12cm^3$, what is the final water level in the burette? (2mks)

9. A man has a mass of 70kg. Determine

   (a) His weight on earth, where the gravitational field strength is 10N/kg. (2mks)

(b) The gravitational field strength on the moon if his weight on the moon is 119N (2mks)

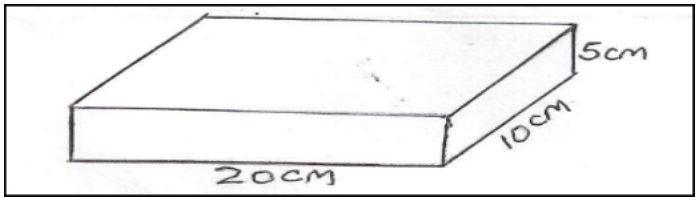
10. With the aid of a diagram show that pressure increases with depth (2mk)

11. Describe an experiment to show that matter is made up of small particles (2mk)

Section B: 55 marks

12. (a) Define pressure and state its SI unit (2mks)

(b) The figure below shows the measurements of a solid of mass 50kg.



Determine:

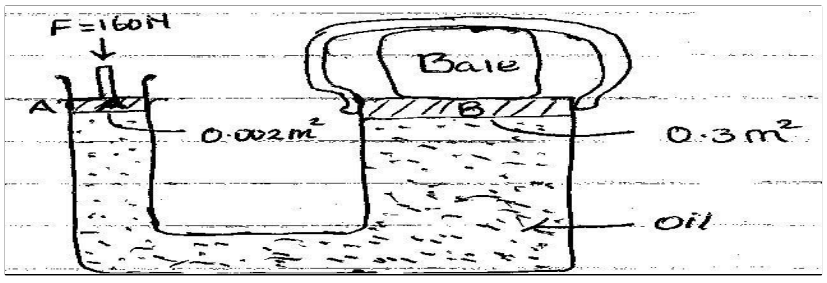
(i) The weight of the solid
(1mk)

(ii) The minimum pressure the solid can exert on a flat surface
(3mks)

(iii) The maximum pressure the solid can exert on a flat surface
(3mks)

(iv) A sea diver is 35m below the surface of sea water. If the density of the sea water is $1.03gcm^{-3}$, the atmospheric pressure 103 $000Nm^{-2}$ and g is 10N/kg; determine the total pressure on him.
(3mks)

13. The diagram below shows a simple hydraulic lift



If aforce of 160N is applied on the small piston. Determine:

(i) The pressure at the side of small piston A. (2mks)

(ii) Pressure experienced by the oil (1mk)

(iii) Force produced on Large pistonB to compress the bale (3mks)

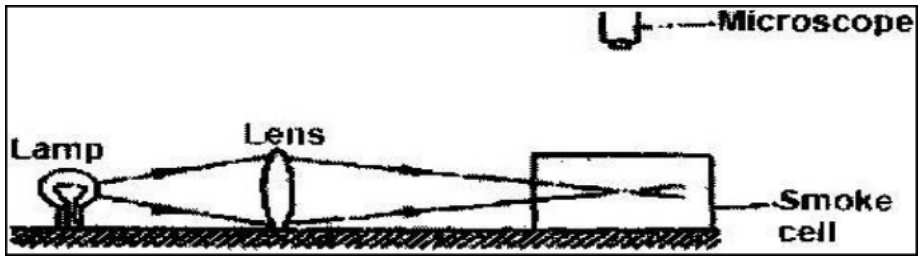
(iv) State **two** factors that affect pressure other than depth. (2mk)

14. a)Define the term diffusion
(1mk)

b) Distinguish between solid and liquid states of matter in terms of intermolecular forces. (2mks)

c) Hydrochloric gas diffuses faster than ammonia gas. Suggest a reason for this observation(2mks)

b) Brown motion of smoke particles can be studied by using the apparatus shown below. To observe the motion, some smoke is enclosed in the smoke cell and then observed through the microscope.

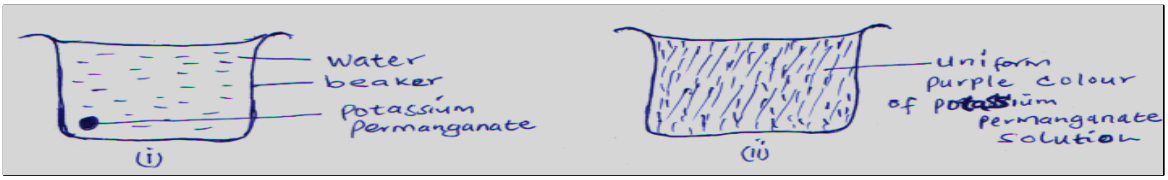


(a) Explain the role of the lamp, lens and microscope in the experiment (3mks)

(b) State and explain the nature of the observed motion of the smoke particles(2 marks)

(c) State what will be observed about the motion of the smoke particles if the temperature surrounding the smoke cell is slightly raised.
(1 mark)

15. The figure below shows a beaker filled with water. Some potassium permanganate was gently introduced at the bottom of the beaker at the position shown.Figure (ii) shows uniform purple colour of potassium permanganate solution after about 10 minutes

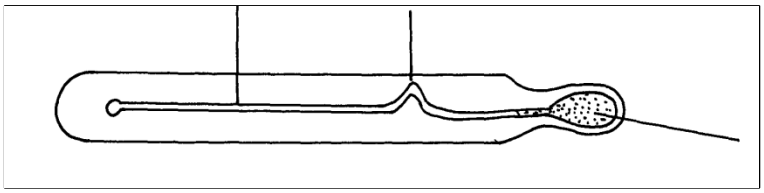


Explain how the appearance in figure(ii) was caused. (2mks)

16. a)Define the term temperature and state its SI units
(2mks)

b)The figure is of a below represent mercury in a clinical thermometer.

Tub



Explain why;

(i) There is a constriction on the tube (1mk)

(ii) The bulb is thin
(1mk)

(iii) Mercury is the mostly preferred thermometric liquid in clinical thermometer than alcohol (2mks)

(iv) A clinical thermometer is likely to break if sterilized using boiling water (1mk)

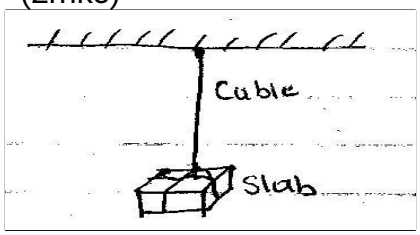
c) Convert

(i) Temperatures of -173^{o}c to Kelvin (2mks)

(ii) Temperatures of 376K to ^{o}c. (2mks)

17 a) Giving an example in each, state the difference between scalar and vector quantity.(4marks)

b) A concrete slab of mass 20g is held by a steel cable of a crane as shown below.
Name and show the forces acting on the slab
(2mks)



c)State any **two** examples of contact forces.
(2mks)

d) State any **three**effects of a force on a body
(3mks)

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FORM 1 TERM 3 OPENER EXAMS

BIOLOGY

TIME: 2 HOURS

NAME:_____ADM NO:_____ CLASS: _____

INSTRUCTIONS

1. Write your name and admission number in the spaces provided above.
2. Answer all the questions in this paper in the spaces provided.
3. This paper contains 9 printed pages,20 questions and hundred marks.

1. State the use of the following apparatus in collecting and observing organisms (3mks)

a) Pooter

b) Hand lens

c) Pitfall trap

2. The scientific name for French bean is *Phaseolus Vulgaris*

   a) What taxon does the term *Phaseolus* represent? (1mk)

   b) State two rules that are followed when giving a scientific name to an organism. (2mks)

3. a) What is meant by the term taxonomy (1mk)

(b) When are two organisms considered to belong to the same species?
(2mks)

4. Name the branch of biology that deals with the study of zooplanktons.
(1mk)

5. Four organisms were classified using the binomial nomenclature as below.

Organism	Name
V	Drosophila melanogaster
W	Canis lupus
X	Rana temporaria
Y	Canis familiaris

a) Name two organisms that are closely related.
(2mks)

b) Give a reason for your answer in (a) above.
(1mk)

6. Mango is known as MANGIFERA INDICA

i) Write down the scientific name given above following the acceptable system of naming. (1mk)

ii) What is the scientific naming system called? (1mk)

7. a) What is the formula for calculating linear magnification using a light microscope? (1mk)

(b) State two functions of the following cell organelle.
Nucleolus

(1mk)

Centrioles

(1mk)

Mitochondrion

(1mk)

Chloroplast

(1mk)

Golgi body

(2mks)

8. Give the functions of the following parts of a microscope.
(5mks)

Condenser

Fine adjustment knob

Eye piece

Objective lens

Diaphragm

9. Define the following terms

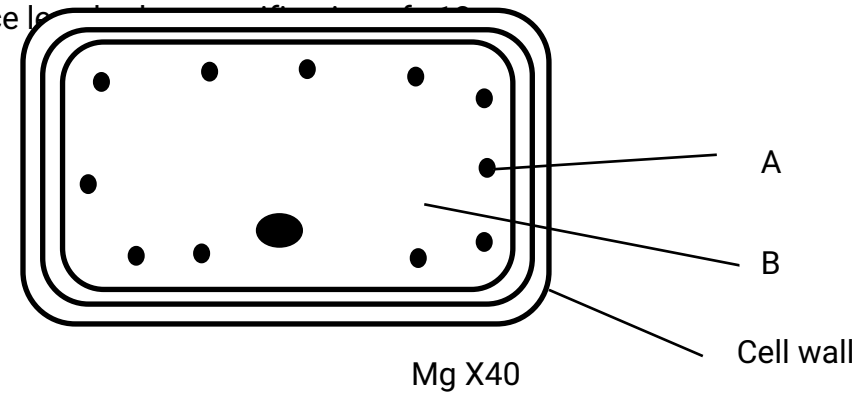
a) Magnification
(1mk)

b) Resolution
(1mk)

c) Give three differences between a plant cell and an animal cell.
(3mks)

cell	al cell
-	

10. The figure below is a diagram of a cell as seen under the light microscope. The microscope's eye piece l



Mg X40

i) Name three structures that show that this is a plant cell and not an animal cell. (3mks)

ii) Name one chemical compound that is only found in the structure labeled A and state its function.

(

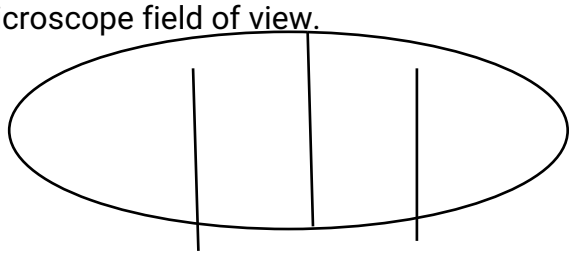
2m
ks)

11. Explain why the following processes are important during the preparation of temporary slides.

a) Staining
(1mk)

b) Use of a sharp cutting blade.
(1mk)

12. In a class experiment to establish the size of an onion cell, a learner observed the following on the microscope field of view.



If the student counted 20 cells across the diameter of this field of view, calculate the size of one cell micrometers.
(3mks)

13. a) List four skills that you develop as you study biology.
(4mks)

(b) List three careers that require study of biology.
(3mks)

c) State two importance of classification of living organisms.
(2mks)

d) Name five kingdoms of classification and in each case give an example.
(5mks)

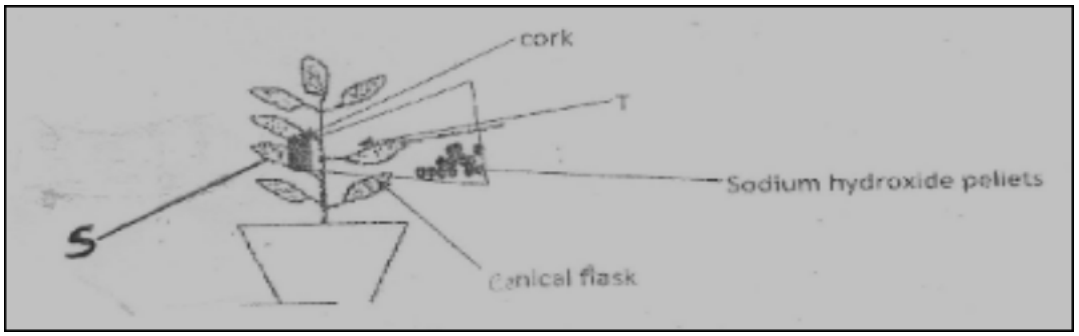
14. Distinguish between heterotrophism and autotrophism.
(2mks)

15. Name the building blocks of:
(2mks)

a) Lipids

b) Proteins

16. An experiment was set up as shown below to investigate a condition necessary for photosynthesis.



a) Name the condition being investigated.
(1mk)

b) What is the role of sodium hydroxide pellets.
(1mk)

c) Explain the expected results when leaf S and T are tested for starch.
(2mks)

17. Below is a list of carbohydrates; sucrose, fructose, cellulose, galactose, glycogen, maltose.

a) Name two monosaccharide's

(2mks)

b) Name two disaccharides

(2mks)

c) Name two polysaccharides

(2mks)

18. a) Explain the importance of the following stages in an experiment to test for

presence of starch in a leaf.

i) Dipping the leaf in hot water.

(1mk)

ii) Boiling the leaf in alcohol methylated spirit.

(1mk)

iii) Adding iodine.

(1mk)

i) What are the expected results if:

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FORM 1 TERM 3 OPENER EXAMS CHEMISTRY

TIME: 2 Hours

Name_____Adm. No._____

Class_____ Date _____

Instructions to Candidates

(a) Write your name and admission number.

(b) Answer ALL the questions in this question paper.

(c) All your answers must be written in the spaces provided in this question paper.

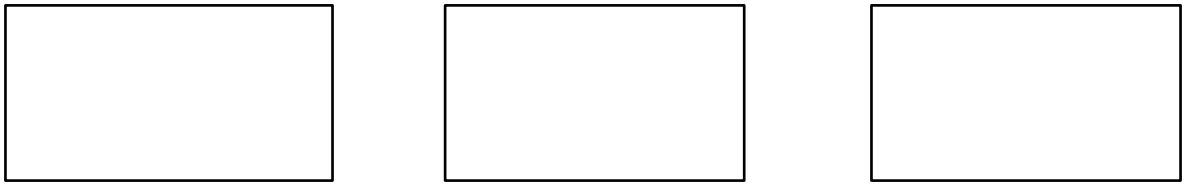
(d) Students must answer all questions in English

FOR EXAMINER'S USE ONLY

QUESTIONS	MAXIMUM SCORE	CANDIDATES SCORE
1-22	100	

1. a) In the boxes provided below show how molecules are spaced in solids, liquids and gases in

terms of kinetic theory. (3mks)



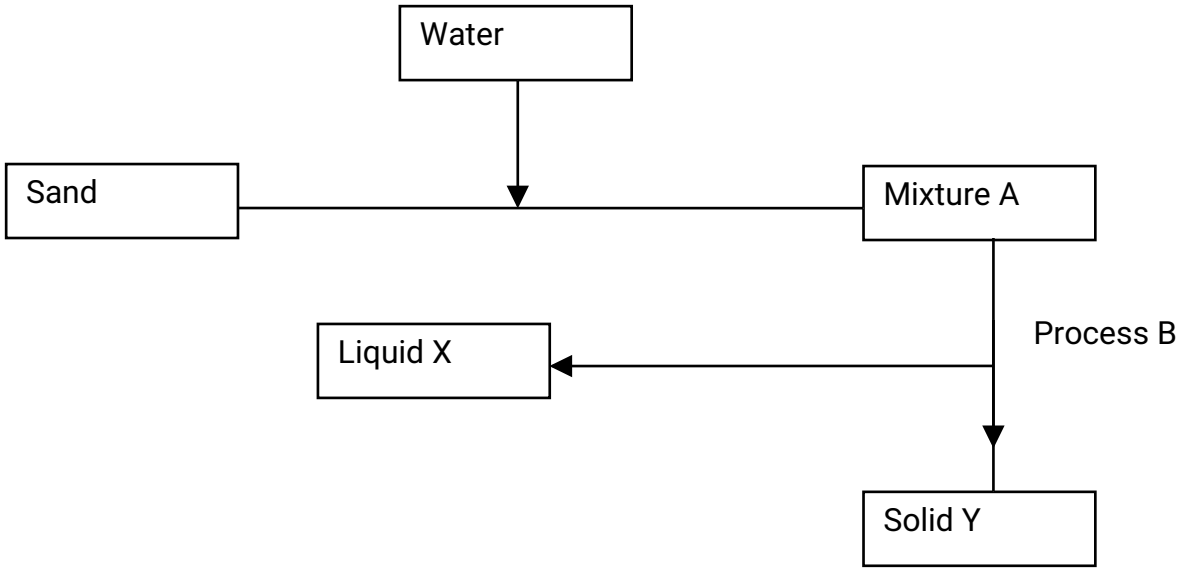
Solid Liquid Gases

b) What conclusion can you make regarding densities of solids, liquids and gases as per the packaging of molecules in 1 (a) above. (1mk)

2. State whether the substances given below are elements, compounds or mixtures. (4mks)

ance	
a) Piece of Aluminium metal	
b) Sugar	
c) Solution of common salt	
d) Crude oil	

3. Study the flow chart below and answer the questions that follows.



a) Name process B.
(1mk)

b) Give one reason why it's possible to separate the mixture A above using process B.

(1 mk)

c) Give the name for

i) Liquid X
(1mk)

ii) Solid Y
(1mk)

d) Give one application of process B in day to day life.
(1mk)

4. State the method of separation suitable for the following mixtures.

a) Iron fillings and sulphur powder.

(1mk)

b) Dye from flowers.

(1mk)

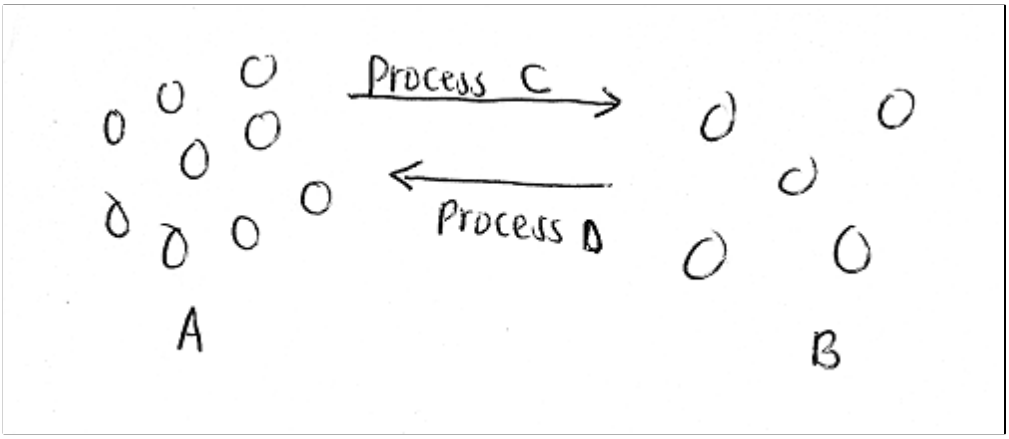
c) Petrol from crude oil.

(1mk)

d) Oil from nuts.

(1mk)

5. The diagram below represents arrangement of particles in a substance. Study it and answer the questions that follow.



a) Name process C.
(1mk)

b) Name two substances that undergo sublimation.

(2mks)

c) What name is given to process D?
(1mk)

6. a) If common salt is added to wax, what effect will it have on the temperature at which it melts?
(1mk)

b) When alcohol is heated, it changes to gas at 78^0C.
i) What is the name given to this temperature?
(1mk)

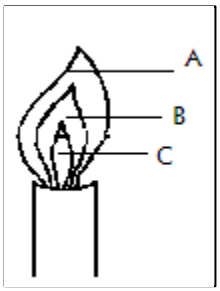
(ii) What will happen to this temperature if an impurity like salt is added to ethanol? (1mk)

7. Given the following substances and their PH values, indicate whether they are neutral, strongly acidic, weakly acidic, weakly alkaline or strongly alkaline.
(7mks)

ance	alue	e
a) Sugar solution		
b) Blood		
c) Sulphuric (VI) acid		
d) Tooth paste		
e) Black coffee		
f) Sodium hydroxide solution		
g) Urine		

8. State 2 ways through which the youth of Kenya can avoid abusing drugs.
(2mks)

9. A form one student at Moja High School lit a Bunsen burner with its air hole fully open.



a) Which colour was the part labeled A?
(1mk)

b) Identify the hottest part of the flame.
(1mk)

c) Which was the almost colourless region?
(1mk)

10. Classify each of the following substances as either conductors or non-conductors. (5mks)

(i) Copper metal

(ii) Paraffin

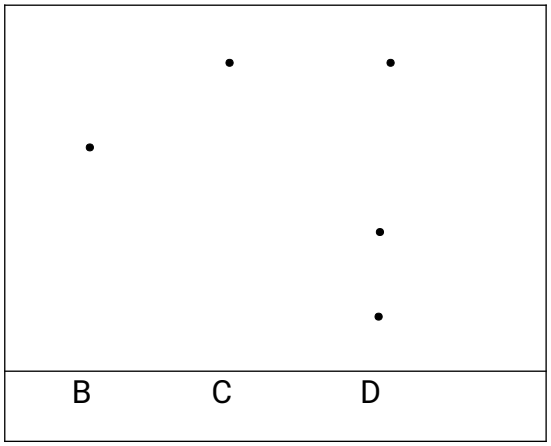
(iii) Glass

(iv) Graphite

(v) Magnesium

11. Three pure pigments were prepared and their spots placed on a filter paper as shown below. The pure pigments are A, B and C. A mixture D was also placed on the filter paper at the same time with the pure pigments.

The filter paper was then dipped in ethanol solvent and left for an hour. The results obtained were as shown below.



(i) Which of the three pure pigments is most sticky? Give a reason for your answer.
(2mk)

(ii) Which pure pigment is not present in the mixture D?
(1mk)

(iii) Show on the diagram the solvent front and the base line.
(2mks)

12. a) What is an acid-base indicator? (1mk)

b) Name any three common indicators used in chemistry and give their colours in acid solution.
(3mks)

tor	r in acid
(i)	
(ii)	
(iii)	

(c) What is the advantage of universal indicator over other common acid-base indicators?

(1 mk)

13. Citric acid, lactic acid, methanoic acid and hydrochloric acid are found in various substances in plants and animals. State where these acids occur. (4mks)

	e found
(i) Citric acid	
(ii) Lactic acid	
(iii) Methanoic acid	
(iv) Hydrochloric acid	

14. I. A student mixed iron fillings with sulphur powder in a watch glass. The mixture was heated and a new substance was formed.

a) Is this a physical or chemical change?
(1mk)

b) Give two reasons to support your answer in (a) above.
(2mks)

c) What name is given to the substance formed after heating sulphur and iron together?

(1 mk)

II. Determine whether the following substances undergo chemical or physical changes when heated.

(4 mks)

ance	of change
a) Ice	
b) Zinc oxide	
c) Iodine crystals	

d) Copper (II) Carbonate	

15. Write simple word equations for the following reactions. (5mks)

(i) Magnesium and oxygen.

(ii) Carbon and oxygen (excess)

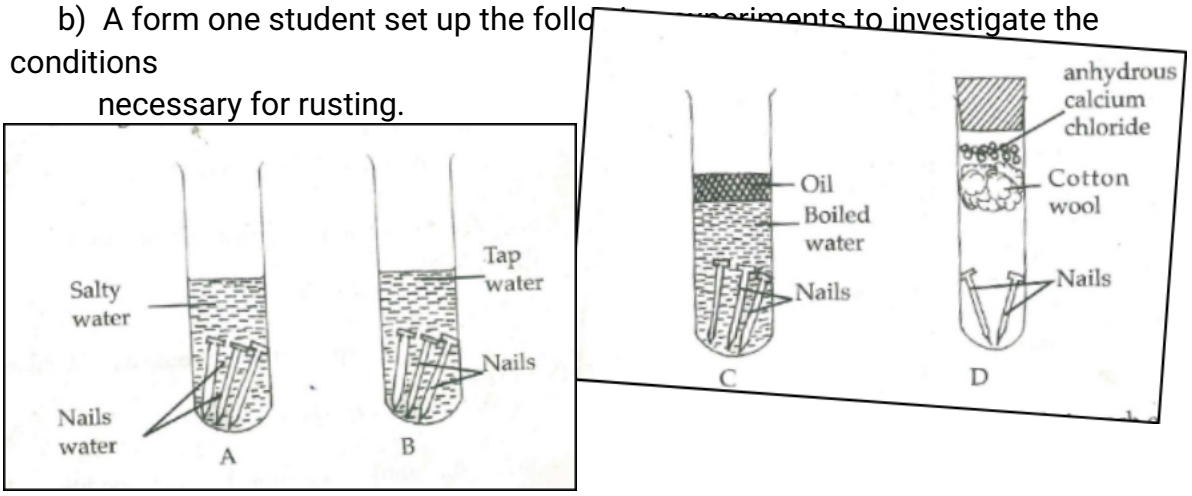
(iii) Zinc and Hydrochloric acid

(iv) Sodium Carbonate and Hydrochloric acid

(v) Calcium oxide and Sulphuric (VI) acid.

16. a) Give the chemical name of rust (1mk)

b) A form one student set up the follo[illegible]periments to investigate the conditions necessary for rusting.



(i) What observations were made in each of the test tubes after four days. (3mks)

(ii) Why was the water in test tube C

a) Boiled (1mk)

b) Covered with oil (1mk)

(iii) What was the purpose of anhydrous calcium chloride in test tube D? (1mk)

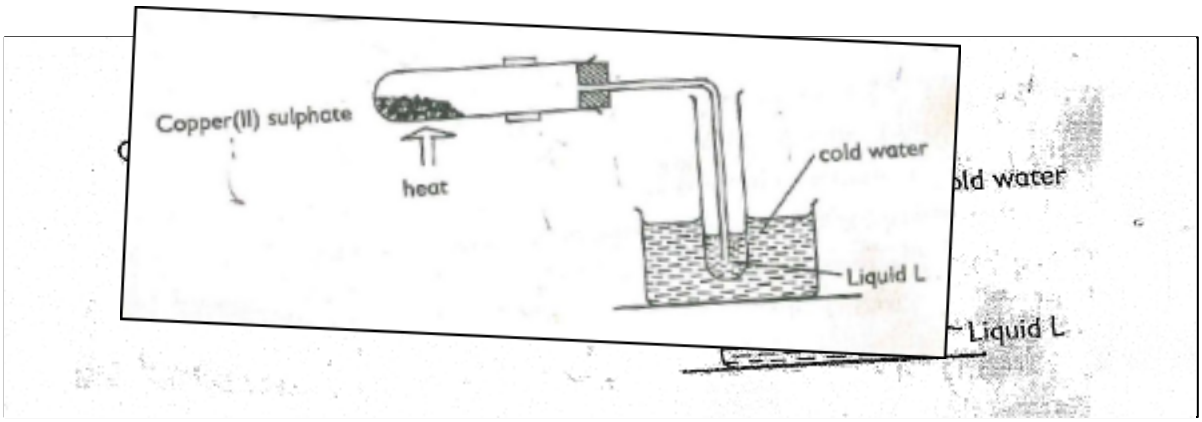
(iv) From the above experiment, what conditions are necessary for rusting? (2mks)

(v) Name a substance that accelerates rusting. (1mk)

(vi) State 2 methods used to prevent rusting. (2 mks)

(vii) Explain why cars in Mombasa rust faster than in Nairobi. (1mk)

17. The diagram below shows the effect of heat on hydrated Copper (II) Sulphate.



a) (i) What is the colour of hydrated Copper (II) Sulphate? (1mk)

(ii) State one observation made at the end of the experiment. (1mk)

(iii) Name liquid L. (1mk)

(iv) Name one test that can confirm the purity of liquid L. (1mk)

18. Name two apparatus that can be used to measure the volume of a gas. (2mks)

19. The table below shows liquids that are miscible and those that are immscible.

	ble	ble
	ble	scible

Use the above information to answer the questions that follow.

a) Name the method that can be used to separate a mixture of W and Y. (1mk)

b) Describe how a mixture of liquid X and Z can be separated. (2mks)

20. State one use of each of the following substances.

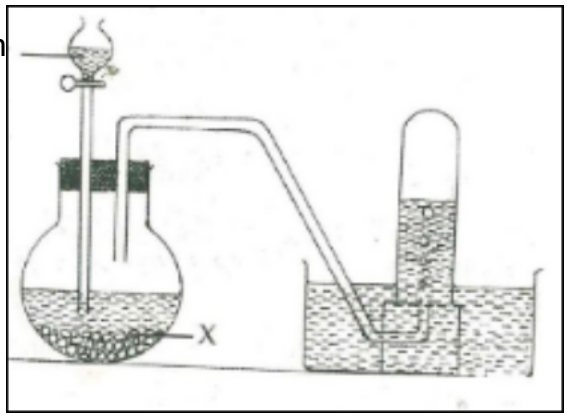
(i) Sulphuric (VI) acid. (1mk)

(ii) Magnesium hydroxide (1mk)

(iii) Nitric (V) acid. (1mk)

21. The diagram below shows preparation of oxygen gas in the laboratory.

Hydrogen peroxide



a) i) Name the reagent labeled X. (1mk)

(ii) Write a word equation for the reaction that occurs in the flask. (1mk)

b) What is the purpose of solid x in the experiment? (1mk)

c) State two physical properties of oxygen. (2mks)

d) State two uses of oxygen. (2mks)

ii)

iii)

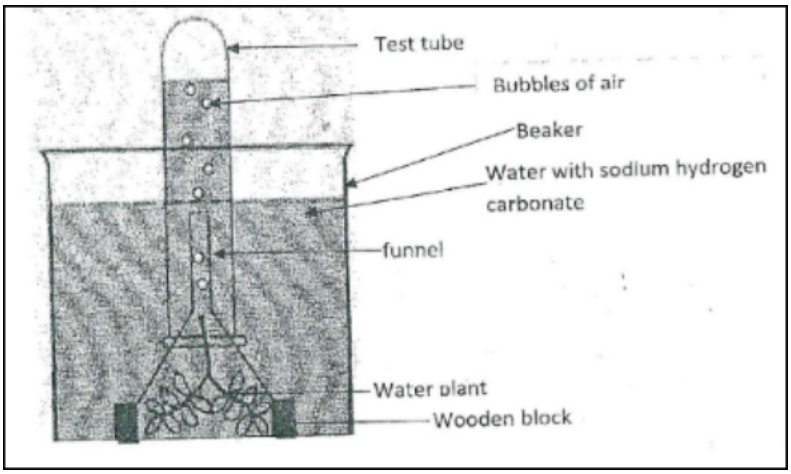
iv)

v) Starch is present.
(1mk)

vi) Starch is absent
(1mk)

d) What are the expected results if a variegated leaf is used?
(1mk)

19. A student set up the experiment shown below to investigate photosynthesis.



a) State the aim of the experiment.
(1mk)

b) Explain why

i) Sodium hydrogen carbonate was added to the water.
(1mk)

ii) A water plant was used.
(1mk)

c) How can a student test for the gas given out?
(1mk)

d) State two other factors affecting photosynthesis that the experiment can be used to investigate. (2mks)

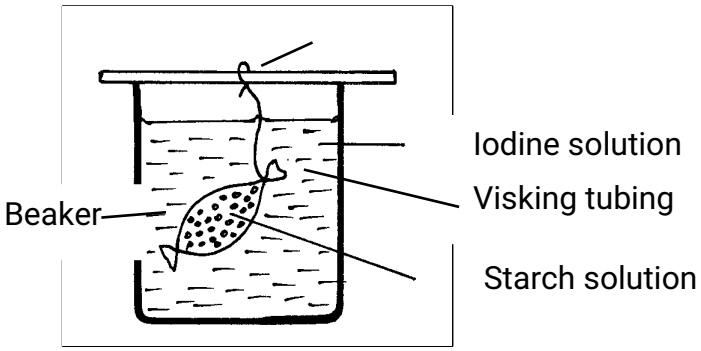
20. Name the cell organelle present in an animal cell but absent in a plant cell.
(1mk)

21. Explain the following

a) The leaf of a plant is thin broad and flat.
(1mk)

b) A plant cell does not burst when placed in distilled water.
(1mk)

22. The diagram below represents a certain physiological process. Study it carefully and answer the questions that follow.



a) State the physiological process illustrated above
(1mk)

b) What will happen to the visking tubing after two hours?
(1mk)

c) Account for the result in (b) above
(3mks)

d) Give three factors that affect the physiological process named in (a) above.
(3mks)

e) State two roles of the physiological process in (a) above in living organisms. (2mks)

23. Distinguish between haemolysis and plasmolysis.
(2mks)

24. Name the elements that form carbohydrates.
(3mks)