

FORM 2 TERM 1 OPENER

ALL SUBJECTS

SET 2

*A Comprehensive Standard Examination to
administer Form 2 Entrants in all KENYAN HIGH-
SCHOOLS.*

**CONTACT MWALIMU PUBLISHERS FOR
MARKING SCHEMES**

CALL/WHATSAPP 0705525657

FORM 2 TERM 1 OPENER

HISTORY

NAME..... ADM NO.....

CLASS..... SIGN.....

DATE.....

DURATION: 2 HOURS

INSTRUCTIONS

Answer all questions in the spaces provided

SECTION A (20 MARKS)

1. Define the term history (1mk)

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2. State two branches of history (2mks)

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3. Give two disadvantages of oral tradition as a source of information on history and government (2mks)

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4. Why is Africa the cradle land of mankind? (2mks)

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5. State one prehistoric site outside East Africa (1mk)

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6. Give two uses of the tools made by man during the old stone age (2mks)

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7. a) What is agrarian revolution (1mk)

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b) State three effects of the early agriculture in Mesopotamia (3mks)

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8. Give one factor that led to the development of early agriculture (1mks)

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9. Why did early agriculture in Egypt take place along the river banks? (2mks)

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10. Define the term trade (1mk)

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11. State two methods of trade (2mks)

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SECTION B (30 MARKS)

12. a) State three rights and responsibilities of a Kenyan

(3mks)

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b) Explain six conditions under which a Kenyan citizenship can be revoked. (12mks)

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[illegible][illegible]

(10mks)

SECTION C (20 MARKS)

14. a) State five factors that facilitated the coming and settlement of the early visitors. (5mks)

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b) State three early visitors to the East Africa's coast.

(3mks)

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15. a) State four importance of national integration

(4mks)

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b) Discuss four factors that may limit national unity

(8mks)

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FORM 2 TERM 1 OPENER

BIOLOGY

NAME..... ADM NO.....

CLASS..... SIGN.....

DATE.....

TIME: 1HR 30MINS

INSTRUCTIONS.

Answer all the questions in the spaces provided.

1. State the function of the following organelles. (2mks)

a. Lysosomes

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b. Ribosomes

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2. A student observed a row of 16 epidermal cells in a microscopic field that was 8mm in diameter. Calculate the average length of one cell in micrometres. Show your working.

(3mks)

3. A student drew a 6cm diagram of a plant flower if the actual length of the flower was 12cm. calculate the magnification of the drawing made by the student. Show your working.

(3mks)

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4. State three factors that affect the rate of diffusion.

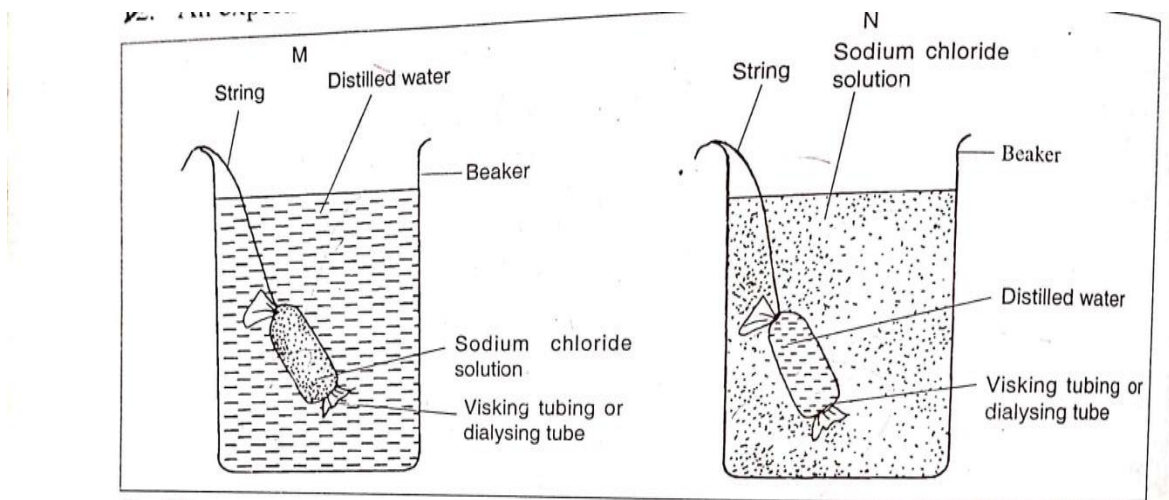
(3mks)

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5. An experiment was set-up in a laboratory as shown below.



i. What will happen to visking tubing in M and N after two hours.

(2mks)

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ii. Explain the observations made in M.

(2mks)

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iii. What does visking tubing represent in a living organism?

(1mk)

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6. Distinguish between autotrophism and heterotrophism modes of nutrition. (2mks)

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7. State three properties of monosaccharides. (3mks)

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8. The equation below shows formation of a disaccharide.

Glucose + Glucose process p → Q + water

i. Name process P. (1mk)

ii. Product Q. (1mk)

iii. Other than product Q named above name other two examples of disaccharides. (2mks)

9. List four factors which affect enzyme controlled reaction. (4mks)

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10. Name two nutrients that are absorbed without being digested by the enzymes in humans. (2mks)

11. List three types of salivary glands.

(3mks)

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12. Give two roles of saliva in the process of digestion.

(2mks)

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13. Differentiate between homodonts and heterodonts.

(2mks)

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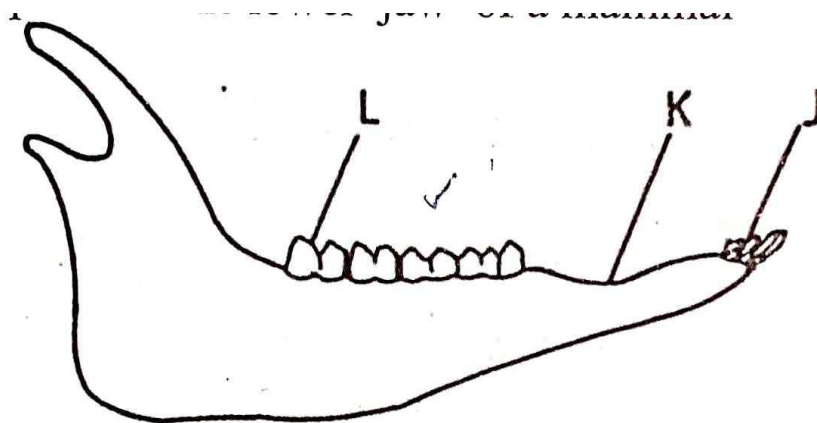
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14. The diagram below represents the lower jaw of a mammal.



a. Name the mode of nutrition of the animal whose jaw is shown above. (1mk)

b. Mode of feeding. (1mk)

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

d. Diet of the animal. (1mk)

e. Name the toothless gap labeled K. (1mk)

f. Name the substance that is responsible for hardening of teeth. (1mk)

15. State the roles of the structures found within a tooth:

a. Blood vessels. (1mk)

b. Nerves. (1mk)

16. List two major types of dental diseases. (2mks)

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17. Give two roles played by bile salts in the process of digestion. (2mks)

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18. Explain five ways in which the illume is adapted to its functions. (5mks)

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19. The following is a dental formula of a certain mammal.

$I^{0/3} C^{0/1} Pm^{3/3} m^{3/3}$

i. Calculate the total number of teeth of the mammal. (2mks)

ii. Give the likely mode of feeding. (1mk)

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

20. Name the disease in humans caused by deficiency the following: (5mks)

i. Vitamin A

ii. Vitamin D

iii. Vitamin C

iv. Iodine

v. Iron

b. State one function of water in the diet. (1mk)

c. State five factors that determine energy requirements in human beings. (5mks)

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FORM 2 TERM 1 OPENER

BUSINESS STUDIES

NAME..... ADM NO.....

CLASS..... SIGN.....

DATE.....

INSTRUCTIONS

Answer all questions in the spaces provided

1. State the term given to each of the following descriptions (4mks)
 - (a) Study of activities that are carried out in an office.....
 - (b) Study of the process of identifying a business opportunity, acquiring the resources to
Start and run a business.....
 - (c) Study of trade and aids to trade.....
 - (d) Study of a systematic record keeping.....

2. High light **four** reasons why a business plan is necessary to an entrepreneur (4mks)
 - (a).....
 - (b).....
 - (c).....
 - (d).....

3. State **four** characteristics of economic resources (4mks)
 - (a).....
 - (b).....
 - (c).....
 - (d).....

4. Highlight **four** factors an organization would consider when an office layout (4mks)
- (a).....
- (b).....
- (c).....
- (d).....

5. Classify each of the following as **renewable** or **non-renewable resource** (4mks)
- (a) Wool.....
- (b) Lead.....
- (c) Soda ash.....
- (d) Natural gas.....

6. Identify the office etiquette described in the following statements. (4marks)

	Statement	Office Etiquette
a)	Handling people politely, pleasantly and with consideration	
b)	Being committed to the organization one is working for	
c)	Performing duties with excellence, precision and correctness	
d)	Ability to keep time in attending duties and appointments	

7. Outline the way through which each of the following types of utility may be created in production. (4marks)

- (a) Time utility:
- (b) Form utility:
- (c) Place utility.....
- (d) Possession utility.....

8. Highlight **four** reasons why a consumer should satisfy basic wants before secondary wants. (4mks)
- (a).....
- (b).....
- (c).....

(d).....

9. Outline **four** external business environments that may affect the performance of the business. (4mks)

(a)

(b)

(c)

(d)

10. Name the documents that each of the following descriptions refer to. (4mks)

a) Used to correct an overcharge on an invoice

b) Used to alert the buyer that the seller received an order.....

c) It is used to inquire for goods.....

d) It is used to organize for transportation of goods between a seller and a public carrier.

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11. Give four characteristics of indirect production (4 marks)

(a)

(b)

(c)

(d)

12. Under what **four** circumstances would cheque payment be preferred most than cash payment? (4mks)

(a)

(b)

(c)

(d)

13. State **four** characteristics of a departmental store. (4mks)

(a)

(b)

(c)

(d)

14. State any **four** factors that can contribute to the success of business in a certain area
(4mks)

(a)

(b)

(c)

(d)

15. Outline **four** features of a service. (4mks)

(a)

(b)

(c)

(d)

16. Highlight **four** features of a good filing system. (4 marks)

(a)

(b)

(c)

(d)

17. Outline any four roles of an entrepreneur in production. (4 marks)

(a)

(b)

(c)

(d)

18. As a student of business studies give two benefits you can get from learning
the subject (2 Marks)

(a)

(b)

FORM 2 TERM 1 OPENER

AGRICULTURE

NAME..... ADM NO.....

CLASS..... SIGN.....

DATE.....

INSTRUCTIONS:

Answer all the questions in the spaces provided

1. What are farm records? (1mk)

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2. State five uses of farm records (5mks)

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3. List four characteristics of a dairy cow. (4mks)

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4. Give five ways in which soil loses fertility (5mks)

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5. Name three types of organic manure. (3mks)

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6. Name the tool used for; (3mks)

a) Shooting solid drugs through the mouth of an animal.

b) Lifting seedlings from the nursery

c) Checking the vertical straightness in construction

7) State three main sources of water on the farm (3mks)

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8. List four reasons for treating water (4mks)

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9. a) What are the functions of the following in preparation of compost manure?(3mks)

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b. what is the importance of the stick that is driven into the compost heap during preparation
(1mk)

10. Name various breeds of: (3mks)

a) Beef cattle:

b) Rabbit:

c) Dairy goats:

11. State the six stages in treatment of water in an orderly manner (6mks)

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12. a) What is opportunity cost? (1mk)

b) Give two instances when opportunity cost is zero (2mks)

13. List four aspects of rainfall (4mks)

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14. Give four characteristics of crops used for green manure preparation (4mks)

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15. State four reasons for preparing land before planting (4mks)

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16.a) Name five farm records kept by a farmer (5mks)

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b). List two types of labour records (2mks)

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17. Name two categories of plant nutrients (2mks)

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18. List six biotic factors affecting agricultural production (6mks)

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WELCOME TO FORM TWO

All The Best

FORM 2 TERM 1 OPENER

CHEMISTRY

NAME..... ADM NO.....

CLASS..... SIGN.....

DATE.....

TIME:2 HOURS

INSTRUCTIONS

Answer all questions in the spaces provided

1. From the following list of compounds; zinc oxide, solid carbon (IV) oxide, sodium carbonate, nitric (V) acid, iron (III) chloride;
(i) Identify two that sublime. (2 mks)

(ii) Identify a pair that react to form salt and water only. (2 mks)

(iii) Write a word equation for the reaction between sodium carbonate and nitric (V) acid. (1 mk)
2. In an experiment to investigate the percentage of oxygen in air, 200 cm³ of air was passed over heated copper turning repeatedly until a constant volume of air remained. 160 cm³ of air remained at the end of the experiment.
(i) Name one gas remaining in the 160 cm³ of air. (1 mk)

(ii) Determine the percentage of air used up during the experiment. (2 mks)

(iii) What observation would be made during the experiment. (1 mk)

(iv) Write a word equation for the reaction between copper and oxygen. (1 mk)

3. Name the best method to use to separate the following mixtures. (4 mks)

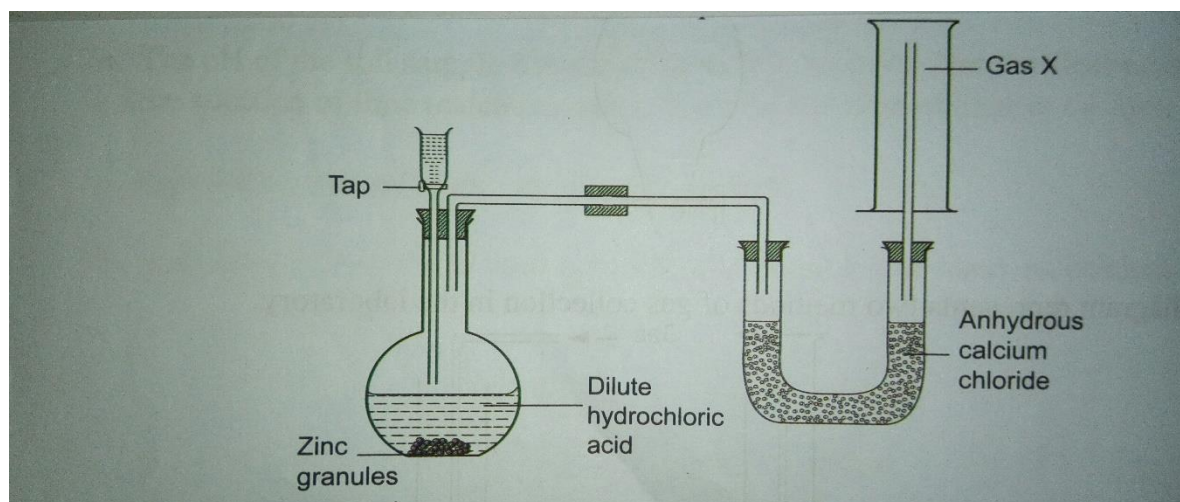
(i) Common salt and water.

(ii) Coloured dyes in ethanol.

(iii) Ammonium chloride and sodium chloride.

(iv) Ethanol and water.

4. Study the set up below and answer the questions that follow.



(a) Identify gas X. (1 mk)

(b) Name the method used to collect gas X and give the property of the gas that enables it to be collected using the method. (2 mks)

(c) Write a word equation for the reaction liberating gas X. (1 mk)

(d) Why is not advisable to use the following in this method of preparing hydrogen;

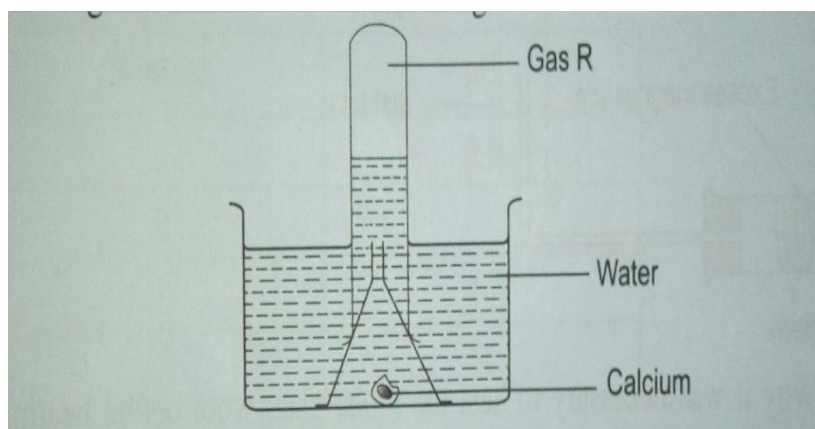
(i) Calcium and dilute sulphuric acid (1 mk)

(ii) Zinc and Nitric (V) acid. (1mk)

(e) What is the purpose of anhydrous calcium chloride in the U-tube? (1mk)

(f) Name another compound that could serve the same purpose as anhydrous calcium chloride. (1 mk)

5. When magnesium is burnt in air, it reacts with oxygen and nitrogen gas giving a white ash. Write two equations for the two reactions that take place. (2 mks)
6. The diagram below was used to investigate the action of water on calcium metal.



- (a) Identify gas R. (1 mk)
- (b) The remaining solution in the beaker changes red litmus paper to blue. What does this suggest about the resulting solution. (1 mk)
- (c) Write a word equation for the reaction. (1 mk)
- (d) What would be observed if Carbon(IV) oxide is bubbled through the solution. (1 mk)
7. a) Name the particles that are found in an atom. (3 mks)
- b) Atoms are said to be electrically neutral. Explain. (2 mks)

c)Element Q has 18 neutrons and a mass number of 34.

i)How many protons are present in element Q?(1 mk)

(ii)Write the electron arrangement of element Q.(1 mk)

(iii)To which period and group does Q belong?Explain your answer.(2 mks)

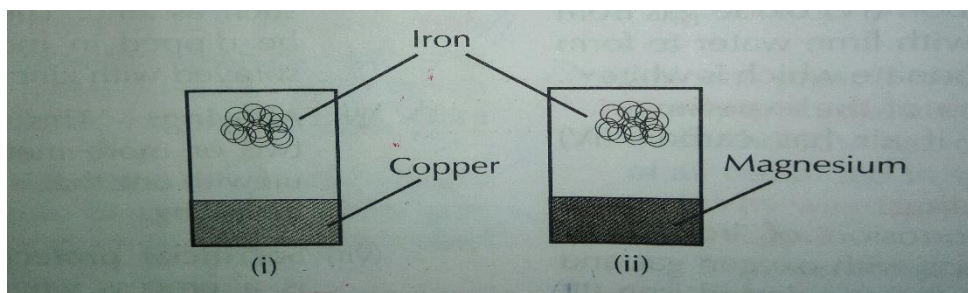
8.(a)In an experiment to investigate what happens when steam is passed over heated magnesium,wet sand or cotton wool soaked in water is heated first before heating magnesium.Why is it necessary?(1 mk)

(b) Write a word equation for the reaction between magnesium and steam.(1 mk)

(c)Write a word equation for the reaction between iron and steam.(1 mk)

9.(a)What is the chemical name of rust?(1 mk)

(b)A form one student in attempt to stop rusting put copper and magnesium in contact with iron as shown.



(i) The set ups were left outside for two weeks. Where did rusting occur? Explain. (2 mks)

(ii) Name the method used by the student to prevent rusting. (1mk)

(iii) How does painting prevent rusting? (1 mk)

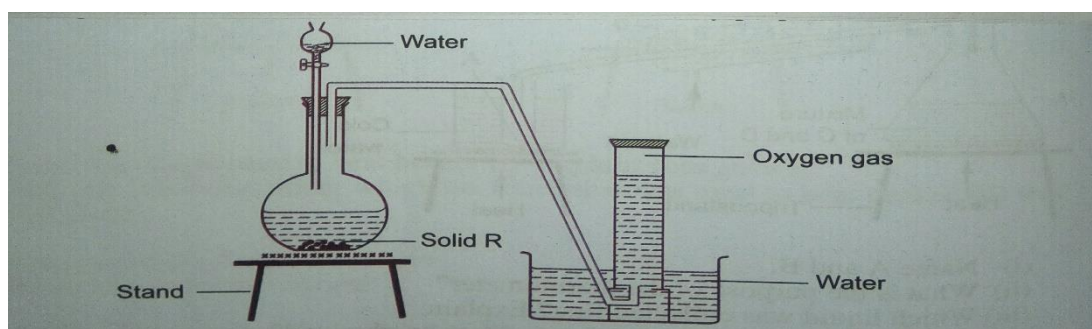
10. State the use of the following apparatus as used in the laboratory.

(a) Pipe-clay triangle (1 mk)

(b) Desiccator (1 mk)

(c) Wire gauze (1 mk)

11. The diagram below represents a set up for the laboratory preparation of oxygen gas.



(i) Name solid R. (1 mk)

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

(iii) How can one test for oxygen gas?(2 mks)

(iv) Give two commercial uses of oxygen gas.(2 mks)

12. A student was supplied with a colourless liquid suspected to be water.

(i) Describe one test that could be carried out to show that the liquid was water.(2 mks)

(ii) How could it have been shown that the liquid was pure water?(1 mk)

13. When a student was stung by a stinging nettle plant, a teacher applied an aqueous solution of ammonia to the affected area of the skin and the student was relieved of pain. Explain.(2 mks)

14. A mixture of magnesium powder and lead (II) oxide will react vigorously when heated but no reaction occurs when a mixture of magnesium oxide and lead powder are heated.

(a) Explain the observations above.(2 mks)

(b) Write a word equation for the reaction between magnesium and lead(II) oxide.(1 mk)

(c) From (b) above, identify the;(i) oxidised substance.(1 mk)

(ii)oxidizing agent.(1 mk)

(iii)what name is given to such a reaction?(1 mk)

15.Classify the following as either physical or chemical changes.(5 mks)

a) Freezing of beer

(b)Rusting of iron

(c)Heating of glass until it melts

(d)Burning a candle.

(e)Heating copper(II)nitrate

WELCOME TO FORM TWO

All the Best

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FORM 2 TERM 1 OPENER

CRE EXAM

NAME..... ADM NO.....

CLASS..... SIGN.....

DATE.....

TIME:2 HOURS

INSTRUCTIONS

Answer all questions in the spaces provided

1. Name the five books of the bible which are referred to as the Pentateuch.(5mks)

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2. State five promises that God made to Abraham (5mks)

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3. Give reasons why Israelites demanded for a king(5mks)

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4. Outline the activities carried out by the Israelites on the night of the Passover.(5mks)

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5. Describe the contest between prophet Elijah and the prophet of Baal at mount Carmel(1kings 18:17-40)(8mks)

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6. State ways in which God demonstrated his concern for the Israelites during exodus(5mks)

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7. Highlight the achievements of David as king of Israel.(6mks)

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8. What are the benefits of learning Christian religious education in secondary school.(6mks)

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9. Describe the incident when Abraham was willing to sacrifice his son Isaac.(gen 22:1-19)

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10. State effects of translating the bible into African local languages(7mks)

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11. Sate five responsibility of the living towards ancestors in traditional African community(5mks)

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12. Which moral values were acquired during marriage in tradition African communities(5mks)

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WELCOME TO FORM TWO

All the Best

Mwalimu Publishers

FORM 2 TERM 1 OPENER

ENGLISH

NAME..... ADM NO.....

CLASS..... SIGN.....

DATE.....

DURATION: 1 HOUR 45 MINUTES

INSTRUCTIONS

A. This paper consists of six sections as follows:-

SECTION A: WRITING (15mks)

SECTION B: CLOZE TEST (10mks)

SECTION C: ORAL SKILLS (10mks)

SECTION D: GRAMMAR (20mks)

SECTION E: ORAL LITERATURE (15mks)

B. Ensure that you answer all questions in the spaces provided.

SECTION A: WRITING (15MKS)

Your friend in primary school is in form one in Bidii Secondary of P.O Box 341, Kisimani. She has written to you telling you about her new school. She has also requested you to carry your end of term one examinations for comparative analysis. Write your reply to her.

SECTION B: CLOSE TEST (10MKS)

A neighbor had left (1) _____ store un attended (2) _____ she heeded the cries of her (3) _____ baby. Her kitchen caught fire, and the flames (4) _____ to the neighboring shacks in (5) _____. There was no (6) _____ available and no fire (7) _____ for the people to call. (8) _____ that the assembled crowd of hundreds

(9)_____ do was gather buckets of sand and (10)_____ into the flame.

SECTION C: ORAL SKILLS (15MKS)

1. For each of the following words, write a word that is pronounced the same way (5mks)

- i. Principle
- ii. Dye
- iii. Weak
- iv. Stationery
- v. Sent

2. You have noted that your desk mate Vivian has a poor handwriting. State two factors that might have contributed to this (2mks)

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3. In Form One, one makes new friends. Write three things that you can do when introducing yourself to a new person, so as to appear friendly (3mks)

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SECTION D: GRAMMAR (20MKS)

- I. Fill in the blank spaces in the following passage with the most appropriate article (4mks)
- _____ banana tree is _____ strange looking plant. It grows very quickly and in less than _____ year will reach a height of seven meters or more. Usually, pruning needs to be done and one can take more than _____ hour to finish an acre.
- II. Choose the correct word from the ones in bracket and use it to fill in the blank spaces (4mks)
- a) "I am sorry for the _____," said my friend. (loose, loss)
- b) Why have you _____ to eat raw bananas while we have ripe ones in the store? (chose, chosen)
- c) We _____ for our president each time we get an opportunity. (pray, prays)
- d) Who _____ the bell this morning? (rang, rung)
- III. Complete the sentences below using appropriate reflexive pronouns. (4mks)
- a) The boy was beside _____ with fury for missing the penalty.
- b) Let us not deceive _____ that life is a bed of roses.
- c) When one faces challenges, one has to encourage _____ that things will just be fine.
- d) A house divided against _____ cannot stand.
- IV. Use the plural forms of the words in brackets to fill in the blank spaces. (4mks)
- a) You surely do not need three _____. (radio)
- b) Remember to buy grandmother some _____. (potato)
- c) The two _____ met so that they could make strategic plans for their locations. (Chief).
- d) The two _____ disappeared into the nearby bush. (deer)
- V. Use the most appropriate word to fill in the blank spaces so as to form questions. (4mks)
- a) _____ is your mother? Is she a nurse or a teacher?
- b) _____ did you find at the shop? Tom or Mary?
- c) _____ of these bags is yours? The red one or the green one?
- d) _____ pen is this? Is it Wilson's or Kennedy's?

SECTION E: ORAL LITERATURE (20MKS)

Read the following story and answer the questions that follow

The Monkey and The Crocodile

A long long time ago. Monkey and Crocodile were very good friends. The Monkey's house was close to a river and there were many fruit trees on the banks of this river.

Usually monkey would sit on the branches of the fruit trees and chat with his friend Crocodile who would be basking on the banks of the river. Their friendship continued for a long time until they decided it was time to introduce their wives to this friendship. "We have been friends for a long time and you don't even know my house, Crocodile began.

"Neither do you know mine," Monkey replied. "It is easier for you to come to my-house that it is for me to visit you since I cannot swim and your house is beyond the water."

"That is not a problem. I can always carry you on my back," responded crocodile. "Let us visit my house first. My wife is a very good cook," Monkey argued. "No" replied Crocodile "My wife has had a baby and there is plenty to eat in the house."

"Let us not argue about this," Monkey said. "If we go to my house first, my wife will not be anxious when I tell her I am going across the waters to visit you." They agreed that they would visit Monkey's house first. Though at first Monkey's wife was afraid of crocodile, she later realized that Crocodile was very friendly. She did not have problems with her husband visiting him. In fact she wished she would join him.

Monkey was very excited the following day when he got to the banks of the river and found Crocodile waiting for him. This was going to be Monkey's first trip across the waters and he could not hide his excitement. He jumped onto Crocodile's back and Crocodile swiftly swam towards the deep waters.

When they were in the middle of the river, crocodile slowed down and began, laughing.

"Why are you laughing?" Monkey asked in surprise "You fool. Did you think I would take you to my house? I have waited for that heart of yours for a long time. Today I have it."

Immediately Monkey knew he was in deep trouble. He started thinking of a way out of his predicament. "Poor you, my friend: Why didn't you tell me this earlier?" Monkey calmly asked. "What do you mean?" asked Crocodile in surprise "It is not difficult for me to give you my heart. If you had asked when we were at my house. I would even have given you my wife's heart too," Monkey replied. Crocodile was confused.

"Then why don't you give it to me now?" Crocodile asked.

You see my friend; Monkeys have a tradition of leaving their hearts at home when they are going for a long journey. I therefore left mine on my favorite tree." Crocodile was even more confused.

"We can go and visit your wife first, and then I will give you my heart when you take me back," Monkey suggested.

"No," cried crocodile "I will take you back first. When I have your heart, we can then visit my wife."

Quickly, Crocodile headed back to the bank of the river. When they got there, monkey jumped from Crocodile's back onto his favorite tree. He asked crocodile to open his mouth wide to receive the heart. Monkey then picked the biggest of the mangoes on the tree and threw it into Crocodile's open mouth. It fell in with a thud, breaking four of Crocodile's teeth. Crocodile was so upset but there was nothing he could do as Monkey jumped from tree to tree insulting him.

From that day Monkey and Crocodile have remained enemies. And that is the end of my story and may I not end like it.

Questions

A

1. Classify this narrative and give reasons for your classification (3mks)

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2. Name two characters found in this story (2mks)

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3. a) Using an adjective, describe monkey's character trait that enabled him save his life from the crocodile (1mk)

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b) Illustrate your answer

(2mks)

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4. What economic activity is practiced by the people from whom this narrative was collected? (2mks)

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5. Write a proverb that summarizes the narrative and explain how this proverb applies to the narrative

(3mks)

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6. Apart from your answer in A1 above, name two other types of narratives that you know of

(3mks)

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WELCOME TO FORM TWO

All the Best

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FORM 2 TERM 1 OPENER

GEOGRAPHY

NAME..... ADM NO.....

CLASS..... SIGN.....

DATE.....

DURATION: 1 HOUR 45 MINUTES

INSTRUCTIONS

Answer all questions in the spaces provided

Instructions: Answer all the questions in the spaces provided.

1. (a) Give **three** sub branches of physical Geography. (3 marks)

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- (b) Give **four** heavenly bodies that make up the solar system. (4 marks)

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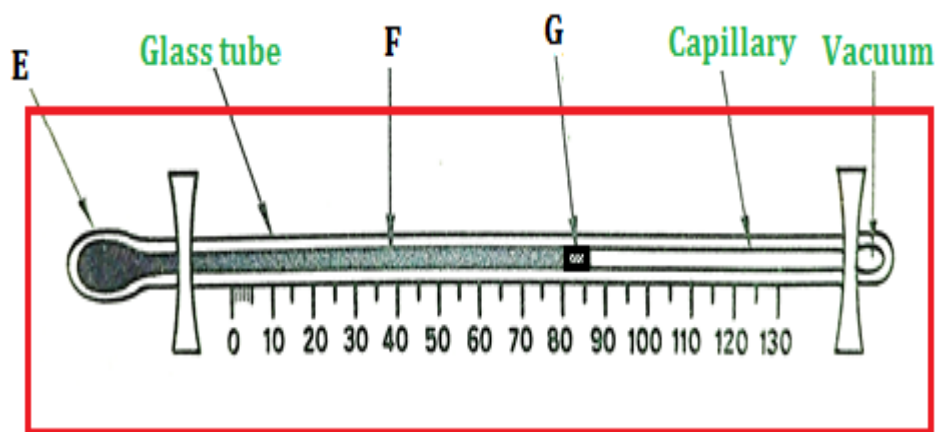
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2. (a) Apart from the crust, name the other **two** main internal layers of the earth.(2 marks)

(b) State **five** characteristics of the earth's crust.

(5 marks)

3. The diagram below shows a maximum thermometer. Use it to answer question (a)



(a) Identify the parts marked E, F and G.

(3 marks)

(b) Apart from a maximum thermometer, name **three** other types of thermometers found at a weather station.

(3 marks)

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(c) List **five** factors that affect the temperature of a place. (5 marks)

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4. Explain **three** environmental hazards associated with convectional rainfall. (6 marks)

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5. The table below represent rainfall and temperature for City K. use it to answer question (a) and (b).

Months	J	F	M	A	M	J	J	A	S	O	N	D
Temp °C	27	25	30	25	20	18	17	24	27	28	27	28
Rainfall (mm)	50	80	100	250	150	100	25	25	100	150	220	200

- (a) Calculate the mean annual range of temperature. (2 marks)

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- (b) Calculate the annual rainfall total for City K. (2 marks)

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6. (a) Differentiate between a map and a plan. (2 marks)

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- (b) State **five** qualities of a good sketch map. (5 marks)

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7. (a) What are igneous rocks? (2 marks)

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(b) State **three** differences between plutonic rocks and volcanic rocks. (6 marks)

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8. (a) Define the term mining? (2 marks)

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(b) Give **four** ways in which minerals occur. (4 marks)

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(c) Explain **four** benefits of trona mining at Lake Magadi to Kenya. (8 marks)

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9. Suppose you were to carry out a field study on trona mining at Lake Magadi:

(a) Give **three** stages of trona processing that you would observe. (3 marks)

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(b) State **three** follow up activities that you would carry out. (3marks)

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WELCOME TO FORM TWO

All the Best

Mwalimu Publishers

FORM 2 TERM 1 OPENER

KISWAHILI

NAME..... ADM NO.....

CLASS..... SIGN.....

DATE.....

DURATION: 2 HOURS

INSTRUCTIONS

Answer all questions in the spaces provided

1. INSHA (alama 20)

Uhalifu umejaa kitongojini mwenu, andika hotuba ya chifu wa eneo lenu kwa wanakijiji.

2. UFAHAMU

SOMA TAARIFA IFUATAYO KISHA UJIBU MASWALI YANAYOFUATA

Wanasayansi wengi wameshidnwa kuelewa ni kwa nini watu huvuta sigara jambo hili kuwa moshi wa sigara huathiri wavutaji wa sigara na watu walio karibu nao na pengine huleta ugonjwa wa moyo. Wavutaji hupata na kikohozi cha adaima kisichosikia dawa, maisha hupata limuewatatiza binadamu kwa karne nyingi zilizopita na kuwaacha rundo la maswali kuhusu uvutaji sigara.

sigara au sigareti ni kitu cha uraibu wa kuvuta, kinachotengenezwa kwa majani ya tumbako yaliyokaushwa. Husokotwa katika karatasi maalum. Tumbako pia huvutwa kwenye kiko hunuswa na hutafunwa.. tumbako inayosagwa na kunuswa au kubwiwa huitwa ugoro.

Hapana shaka wavutaji sigara huharibu afya yao. Wataalamu wa sayansi na madaktari wamefanya uchunguzi na wamethibitisha maradhi mfano wa pumu kutokana na moshi wa sigara unaowakereta koo. Kuna pia wanaosema kwamba uvutaji sigara unasababisha saratani ya mapafu. Watu wengi hufa kwa

ugonjwa wa ghafla kwa sababu ya sumu ya moshi wa sigara ambao hutunguza na kuyatoboatoboa mapafu.

Baadhi ya wavuta sigara hutupa vipande vya sigara ovyo bila kuzimwa na hivyo husababisha hasara kubwa kama vile uhomaji wa misitu, nyumba na nguo na wakati mwingine husababisha hata vifo. Uvutaji sigara umefika kiwango cha kusikitisha, utaona vijana yaaniwasichana na wavulana wadogo sana, wakivuta sigara mbele ya watu wazima bila kujali hii ni aibu kubwa sana.

Tabia hii inatokana na mifano wanayoiona kutoka kwa wazazi wao au watu wengine. Si ajabu kumsikia mzazi akimtuma mwanawe akamununulie pakiti ya sigara au kopo la tumbako. Wazazi kama hao huwafanya watoto wavute sigara ili nao wajione kama ni watu wazima.

Sababu nyingine ya kuvuta sigara ni kutaka kujionyesha ati wana nakidi na kwao, au umaarufu. Hivyo basi sigara hazifai kupatiwa matangazo yenye kuvutia kwa vijana.

Aina nyingine ya uaraibu ni uvutaji bangi. Bangi ni aina ya mimea Fulani unaolevya na kupumbuza akili yanapotafunwa au kuvutwa. Wavuta bangi kwa hakika hupatwa na baa nyingi mwilini. Hukonda na huvaringika akili sijue wanalofanya. Wataalamu husema bangi ikiingia akilini, huharibu kitivo cha fikira mpaka mtu huwa kama mwenda wazimu.

Ni muhimu wazazi na walimu wawakataze na wawakanye watoto wasishiriki katika tabia hizi mbaya.

MASWALI

1. Ipe taaarifa uliyosoma kichwa mwafaka. (alama 2)

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2. Taja madhara ya sigara katika afya zetu. (alama 4)

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3. Sababu zipi hufanya watu huvuta sigara. (alama 3)

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4. Taja jukumu la wazazi na walimu dhidi ya uvutaji sigara wa vijana ni lipi? (alama 2)

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5. Hasara gani zinazopatikana katika mazingira yetu kutokana na uvutaji sigara (alama 2)

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6. Fafanua maana ya maneno haya kama yalivyotumiwa katika habari hii (alama 2)

(i) Uraibu

(ii) Nakidi

3. MATUMIZI YA LUGHA (Alama 30)

a) Eleza tofauti kati ya sauti hizi : (alama 2)

/r/ na /l/

b)Onyesha silabi inayowekwa shadda kwenye maneno haya : (alama 2)

- i. Karatasi
- ii. Samahani

c) Andika ukubwa wa: (alama 2)

- i. Mti
- ii. Kiatu

d)Kanusha sentensi hii katika wingi: (alama 2)

Kifaru anapatikana mbugani

e)Andika sentensi zifuatazo kwa kutumia kirejeshi amba- (alama 2)

Mabondia hawa ni wale waliotuwakilisha hivi majuzi huku Ushelisheli.

f) Eleza maana ya kiimbo (alama 2)

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g) Onyesha viambishi awali na tamati katika : (alama 2)

Uliotatizika

h)Tunga sentensi yenye sehemu hizi: (alama 2)

N+V+T+E

g)Eleza maana mbili zinazojitokeza katika sentensi hii: (alama 2)

Alimpigia mpira.

h)Andika sentensi hii katika hali ya udogo: (alama 2)

Watu wale ni weusi tititi hawaonekani gizani.

i)Sahihisha sentensi ifuatayo: (alama 2)

Musa alienda sokoni alikonunua ng'ombe mbili.

j)Eleza maana ya misemo ifuatayo: (alama 2)

i. Vaa miwani

ii. Kula kalenda

k) Taja matumizi mawili ya kistari kifupi: (alama 2)

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l)Andika maneno yenye sauti mwambatano zenye miundo hii: (alama 4)

i. I+I

ii. K+K+I

iii. K+K+K+I

iv. K+I+I

FASIHI SIMULIZI

(ALAMA 5)

a) Eleza umuhimu wa nyimbo

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WELCOME TO FORM TWO

All the Best

Mwalimu Publishers

FORM 2 TERM 1 OPENER

MATHEMATICS

NAME..... ADM NO.....

CLASS..... SIGN.....

DATE.....

DURATION: 2 1/2 HOURS

INSTRUCTIONS

Answer all questions in the spaces provided

INSTRUCTIONS TO STUDENTS

- Write your name and admission number in the spaces provided on top of this page.
- All answers and workings must be written on the question paper in the spaces provided below each question
- Show all step in your calculation , giving your answers at each stage in the spaces provided below each question
- Marks may be given for correct working even if the answer is wrong
- Electronic calculators and mathematical tables may be used except where stated otherwise
- Take $\pi = \frac{22}{7}$

FOR EXAMINERS USE ONLY:

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21

SECTION 1(50MKS)

- Evaluate without using a calculator.

FOR MARKING SCHEMES CALL/TEXT/WHATSAPP 0705525657

$$\frac{4 \text{ of } 20+10 \div -5 \times 6}{6 \times 9-4 \div 2+12}$$

(3mks)

$$2. \frac{0.24+(-0.3 \times -0.81)}{0.08 \div 0.4}$$

(3mks)

3. a) Find the H.C.F of 36 and 54

(1mk)

b) If three numbers 36,54 and another number have a G.C.D of 6 and L.C.M of 216, find the other number (2mks)

4. a) Simplify the expression

(3mks)

$$\frac{3x + 4}{4} + \frac{x + 1}{2} - \frac{2x + 8}{3}$$

b) Solve for x in the equation below.

$$2(x+4) = 14$$

(2mks)

5. Use a number line to work out the following:

i) $3 + -4$

(1mk)

ii) $5 - -2$

(1mk)

6. The length of an arc of a circle is 88cm. Find the radius of the circle if the arc subtends an angle 144° at the centre (Take $\pi = 22/7$) (3mks)

7. Four men can build a stone wall 32m long in 12 days . What length of wall can eight men, working at the same rate , build in eight days. Give your answer to 4 significant figures (3mks)

8. A shopkeeper made a loss of 20% by selling a trouser at Sh. 960 . What profit would he have made if he had sold it at sh.1500 (3mks)

9. A girl spent $\frac{2}{5}$ of her pocket money on bread and $\frac{1}{6}$ of the remainder on stationery. If she had Ksh. 200 left at the end of the term, how much pocket money did she have at the beginning of the term. (3mks)

10. Small cubes of of edge 2cm are to be packed into a rectangular container measuring 6 cm by 5 m and 4 m. How many cubes are required ? (3 mks)
11. If $a:b=2:3$ and $b:c=5:9$, find the ratio $a:c$ (2mks)
12. Express $0.\dot{4}0\dot{7}$ as a fraction. (3mks)
13. Three bells ring at intervals ring at intervals of 40 minutes, 45 minutes and 60 minutes. If they ring simultaneously at 6.30 am, at what time will they ring next together? (3mks)

14. The area of 10 square plots is 160 ares .Find the length in metres of the side of each plot
(3mks)

15. Find the perimeter of a circular protractor whose radius is 14 cm
(3mks)

16. Convert the following decimals into percentage (3 mks)
(i)0.67

(ii)1.25

(iii)0.167

ANSWER ALL THE QUESTIONS IN THIS SECTION

SECTION II (50MKS)

17. (a) A cylindrical can of diameter 20 cm and height 60cm is filled with water using a cylindrical jar of diameter 10 cm and height 8 cm. How many jarfuls will fill the can? (5 mks)

(b) Find the surface area of an isosceles triangular prism of length 25 cm, height 4.5 cm and base 6 cm (5 mks)

18. (a) Find the area of the sector of a circle of radius 3 cm if the angle subtended at the centre is 140° . (Take $\pi = \frac{22}{7}$) (4 mks)

(b) A minor arc of a circle subtends an angle of 105° at the centre of the circle. If the radius of the circle is 8.4 cm, find the length of the major arc (3 mks)

(c) Calculate the surface area of a rectangular tank measuring 5.4 cm long, 3.6 cm width and 1.8 cm high. (3 mks)

19. (a) All prime numbers less than ten are arranged in descending order to form a number

(i) Write down the number formed (2 mks)

(ii) State the total value of the second digit in the number formed in a(i) above (2 mks)

(b) The lengths of wires were 30 m, 36 m and 84 m. Pieces of wire of equal length were cut from the three wires. Calculate the least number of pieces obtained. (6 mks)

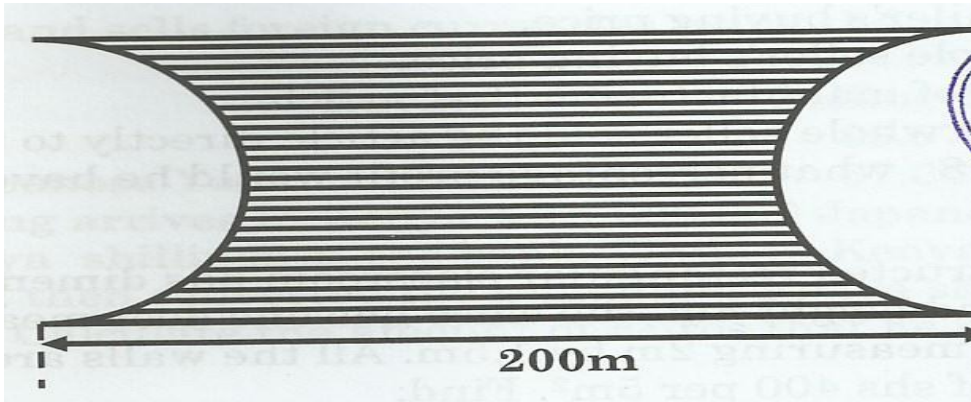
20. (a) When a certain number is divided by 30, 45 or 54 there is always a remainder of 21. Find the number (4 mks)

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

(c)(i) Express 1050 in terms of its prime factors (1 mk)

(ii) Determine the smallest positive number such that $1050P$ is a perfect square (2 mks)

21. The following figure represents a piece of land . The two ends are semicircles of radius 70m each.



a) Calculate

(i) The perimeter of the land

(2mks)

(ii) The area of the land in hectares

(3mks)

b) A private developer bought this piece of land at a price of Ksh 5,000,000 per hectare and later sold the all land at Kshs. 14,760,000. Determine

(i) The price at which he bought the whole piece of land

(2mks)

(ii) His percentage profit

(3mks)

WELCOME TO FORM TWO

All the Best

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FORM 2 TERM 1 OPENER

PHYSICS

NAME..... ADM NO.....

CLASS..... SIGN.....

DATE.....

DURATION: 2 HOURS

INSTRUCTIONS.

Answer all the questions in the spaces provided.

1. List two career opportunities in physics. (2mks)

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2. Match the following basic physical quantities. (5mks)

Basic physical quantity	SI unit	Symbol
Time	Second	
Electric current		A
Amount of substance		mol
Thermodynamic temperature		

3. Give three differences between mass and weight. (3mks)

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4. A wire of radius 3.0mm and length 200m is melted into a sphere. Calculate the radius of the sphere in metres. (3mks)

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5. a. Give two precautions necessary while handling a density bottle. (2mks)

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b. The mass of an empty density bottle is 20g. its mass when filled with water is 40g and 50g when filled with liquid X. calculate the density of liquid X if the density of water is 1000Kg m^{-3} .

(3mks)

6. 1800cm^3 of fresh water of density 1000kg/m^3 is mixed with 2200cm^3 of sea water of density 1025kg/m^3 . Calculate the density of the mixture. (3mks)

7. Define force and state its SI Unit. (2mks)

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8. Explain why water rises up in narrow tubes but mercury, which is also a liquid, falls in narrow tubes to a level below the outside surface. (2mks)

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9. Give two factors affecting surface tension. (2mks)

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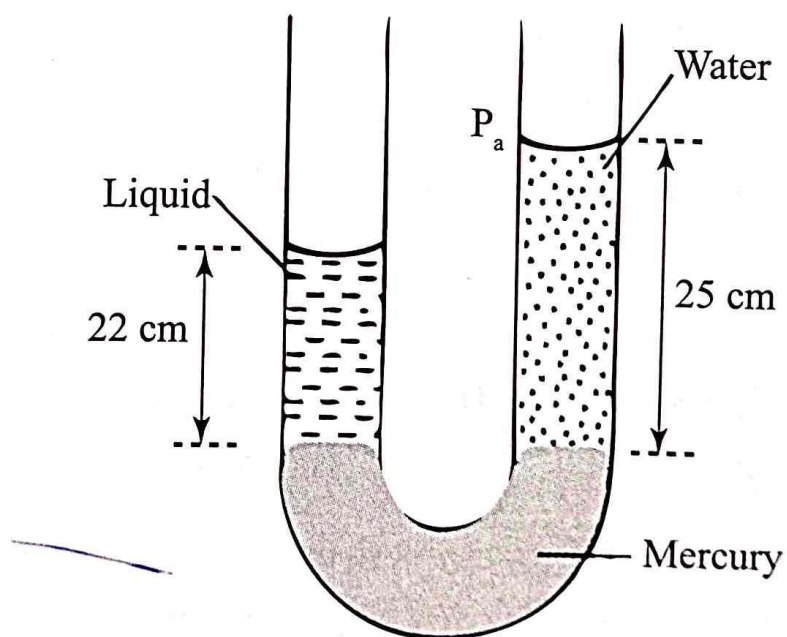
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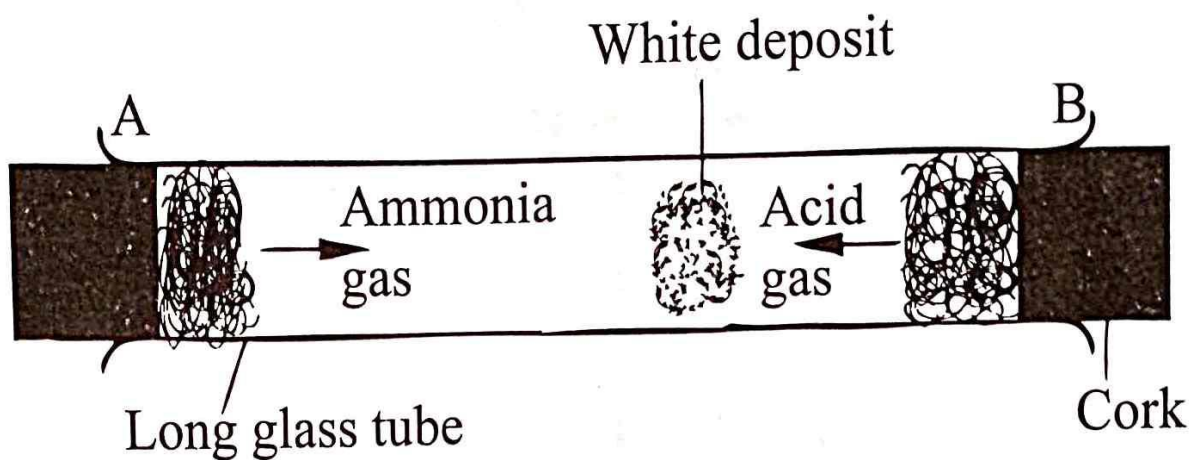
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10. Describe the working mechanism of a hydraulic brake system. (4mks)

11. The figure below shows a U-tube filled with water, mercury and another liquid, determine the density of the liquid. (3mks)



12. The figure below, ammonia gas and an acid gas diffuse and react to form a white deposit on the walls of the glass tube, the deposit forms nearer end B.



- a. State which gas diffused faster. (1mk)
- b. Explain how the rate of diffusion depends on the density of a gas. (2mks)
- c. Explain the effect of performing the experiment above at a higher temperature. (2mks)

13. A faulty mercury thermometer reads 10°C when dipped into melting ice and 90°C when on steam at normal atmospheric pressure. Determine the reading of this thermometer when dipped into a liquid at 20°C . (3mks)

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14. What is the purpose of a translucent screen on the:

a. Pinhole camera. (1mk)

b. Give two characteristics of image formed by a pinhole camera. (2mks)

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c. The distance between the pinhole and screen of a pinhole camera is 10cm. the height of the screen is 20cm. at what minimum distance from the pinhole must a man 1.6m tall stand if a full length image is required? (3mks)

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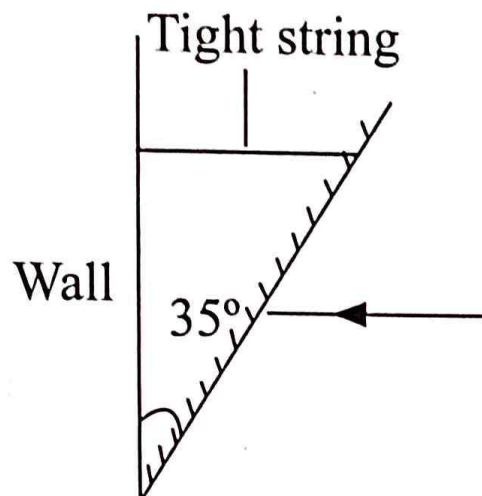
15. State the laws of reflection. (2mks)

a. Angle of incidence (2mks)

b. Give three characteristics of the images formed by a plane mirror. (3mks)

c. How many images would be seen from two mirrors when reflecting surfaces make an angle of 60° with each other? (2mks)

d. A plane mirror is suspended using a string and makes an angle of 35° with the wall as shown below,



A ray of light strikes the mirror horizontally. Calculate the angle between the horizontal and the reflected ray. (3mks)

16. State the basic law of electrostatic charges.

(1mk)

b. List three uses of the electroscope.

(3mks)

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c. List down the hazards of electrostatics.

(2mks)

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17. Define electric current.

(1mk)

b. A charge of 180 coulombs flows through a lamp:

i. Every minute. Calculate the current flowing through the lamp. (2mks)

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ii. Calculate the number of electrons involved (charge of electron is $1.6 \times 10^{-19}\text{C}$) (3mks)

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