F1-F3 PER SUBJECT EXAMS

For the Marking Schemes WhatsApp/sms/call

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Subjects Tested include; Maths, Eng ,Kisw, Bio, Chem, Phy, Geog, Hist, CRE, Agric, B/S, Home Sci, Computer

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NAME: _____ ADM NO.:_____

CLASS : _____ SIGNATURE: _____ DATE: _____

FORM 1

BIOLOGY

END OF TERM 1

TIE: 2HRS

END OF TERM ONE EXAMINATION

INSTRUCTIONS

1. Answer all the questions in the spaces provided

1. a) Name the main branch of Biology that studies the following. (2mks)
   i. Organisms such as a Crocodile.

   ……

   ii. Organisms seen as a bean plant.

……

b) Explain the following biology sub-branches (5mks)

i. Mycology

……

ii. Ornithology

……

iii. Anatomy

……

iv. Cytology

……

v. Bio chemistry

……

c) State any three scientific skills gained through the study of biology (3mks)

……

……

……

2. Explain four reasons why you would encourage your friends in High school to study Biology (4mks)

……

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……

3. a) Explain the following characteristics of living organisms (4mks)

i. Growth

……

……

ii. Development

……

……

b) State any two environmental problems that the study of biology tries to solve. (2mks)

……

……

c) Name the characteristics of living organisms, illustrated through the following activities. (4mks)

i. A cow giving birth to a calf.

……

ii. A student eating "Githeri" in the dining hall

……

iii. A gazelle running away after spotting Lion from a distance.

……

iv. A student sneezing after smelling strong perfume.

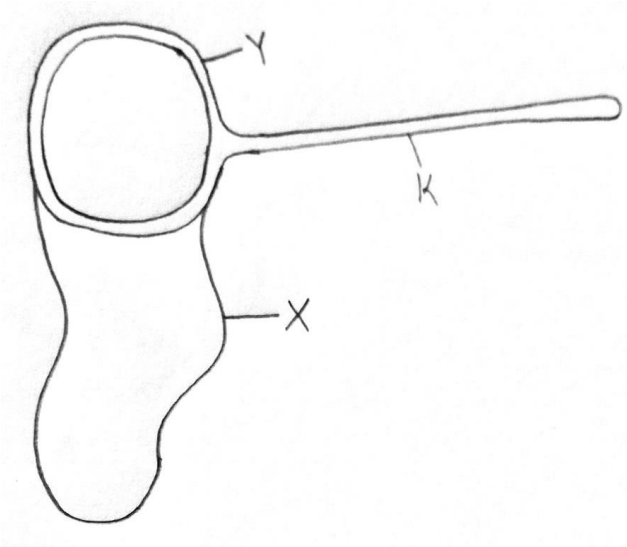
……

4. Give two significance of locomotion to animals (2mks)

……

……

5. a) Below is an instrument used for collection of specimen



i. Name the instrument (1mk)

Name parts labelled;

X ……

Y ……

ii) Briefly explain how the instrument works (2mks)

……

……

……

b) State two precaution to follow when collecting a spider for biology study. (2mks)

……

……

c) State three ways in which plants compensate for their inability to locomote. (3mks)

……

……

……

6. How does nutrition as a characteristics of living organism differ in plants and animals. (2mks)

……

……

……

7. Differentiate between locomotion and movement (2mks)

……

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……

CLASSIFICATION 1

8. a) Define classification (2mks)

……

……

b) State two reasons for classifying organisms (2mks)

……

……

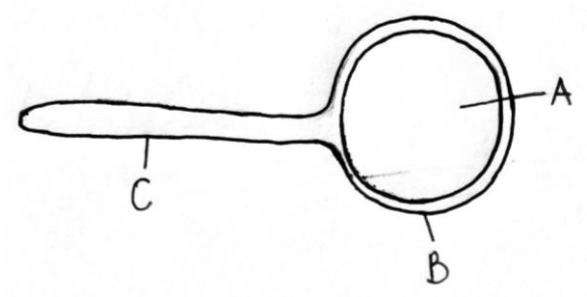
c) Differentiate between taxonomy and taxon (2mks)

……

……

……

9. a) Label parts A, B, C (3mks)



A ……..

B ……..

C ……..

b) Identify the apparatus above and state its function (2mks)

……

……

c) If magnification of a drawing is X8 and the drawing length is 16cm. What is the actual length of the object (3mks)

10. a) What is binomial nomenclature (2mks)

……

……

b) The scientific name for maize is *Zea mays*. Identify the generic and specific name (2mks)

……

……

c) State two rules of binomial nomenclature (2mks)

……

……

d) A cross between a donkey and a horse produces an infertile offspring called mule. Give a reason (2mks)

……

……

11. State the five kingdoms into which living things are placed and its each case give two examples of organisms (5mks)

……

……

……

……

……

12. List the seven units of classification in an hierarchical order from the smallest into the largest. (7mks)

……

……

……

……

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……

……

13. Define the term cell (2mks)

……

……

14. Name two types of microscopes (2mks)

……

……

15. Fill the table below

Part	**Function**
(i)	Holding while carrying microscope
Base	(ii)
(iii)	Contains lens for magnifying object
Fine adjustment knob	iv
Mirror	(v)
Condenser	(vi)

16. Mention four rules to be observed when one is using a microscope (4mks)

……

……

……

……

17. A student observed an animal cell under a microscope which was magnified X675 times using an eye-piece lens magnification power X15. What was the objective lens power? (Show your working) (4mks)

18. State four differences between light microscope and electron microscope. (4mks)

……

……

……

……

19. Name two functions of a microscope. (2mks)

……

……

20. Mention two handling practices and care of a light microscope. (2mks)

……

……

NAME: _____ ADM NO.:_____

CLASS : _____ SIGNATURE: _____ DATE: _____

FORM 2

BIOLOGY

END OF TERM 1

TIE: 2½HRS

END OF TERM ONE EXAMINATION

INSTRUCTIONS

2. Answer all the questions in the spaces provided

1. a) Define the following branches of Biology. (4mks)

   i. Botany

   ……

   ……

   ii. Anatomy

……

……

iii. Embryology

……

……

iv. Genetics

……

……

b) Mention three importance of studying Biology (3mks)

……

……

……

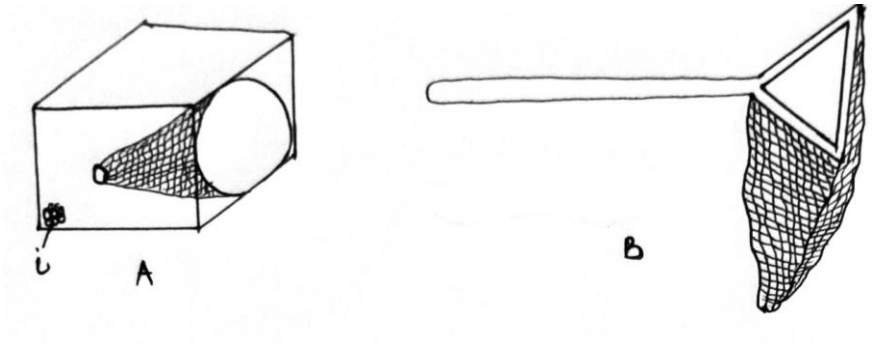
2. a) Outline the precautions a student should take when collecting, preserving and observing live specimen in a Biological laboratory. (3mks)

……

……

……

b) The diagram below illustrate some apparatus used in collection of biological specimens for study.



i. Identify the apparatus

A ……

B ……

ii. Identify part labeled (i) and state it function;

Name ……

Function ……

c) What is the importance of the following characteristics of living organism. (2mks)

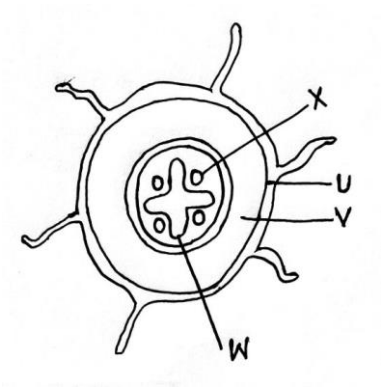
i. Nutrition

……

ii. Excretion

……

3. Below is a transverse section of a young plant.



a) i) Identify the part from which the section was removed. (1mk)

……

ii) Give two reasons (2mks)

……

……

b) Name the parts labelled U, V, W and X (4mks)

U …… V ……

W …… X ……

c) If the young plant was first immersed in a red dye for one hour before the section was made, which part that would be stained Red. (1mk)

……

d) State three adaptation of the structure labelled W to its function (3mks)

……

……

……

……

4. a) Outline the adaptation of Xerophytes that enables them to deal with problems of transpiration (4mks)

……

……

……

……

b) Describe three structural differences between arteries and veins (3mks)

……

……

……

……

……

……

c) State the importance of circulatory systems in animals. (3mks)

……

……

……

5. a) Distinguish between magnification and resolution (2mks)

……

……

……

b) Name two instruments used to magnify specimens in a biology laboratory (2mks)

……

……

c) Why is it advisable to use the fine adjustment knob only when focusing on an object using the high power objective lens? (1mk)

……

……

6. Give the significance of the following activities in microscopy? (3mks)

   i. Keeping sections in water

   ……

   ii. Staining sections

   ……

   iii. Cutting very thin sections

   ……

7. State the function of the following parts of a microscope (2mks)

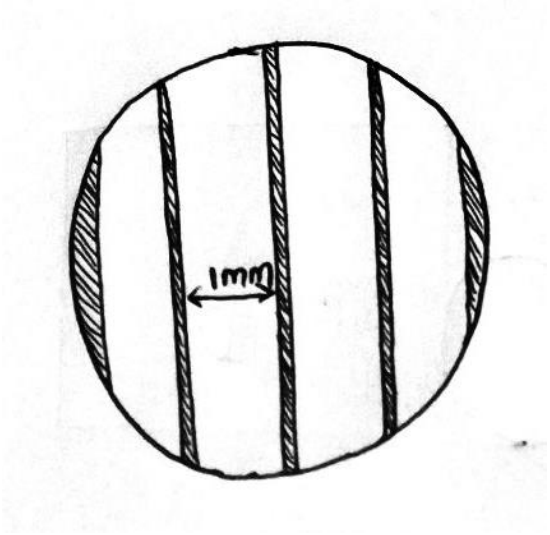
   i. Turret

   ……

   ii. Objective lens

   ……

8. a) Form two students at Twaweza School observed 10 cells across the field of view shown below. Calculate the size of one cell in microns (1000microns = 1mm) (2mks)



b) State one limitation of estimating the cell size using above method. (1mk)

……

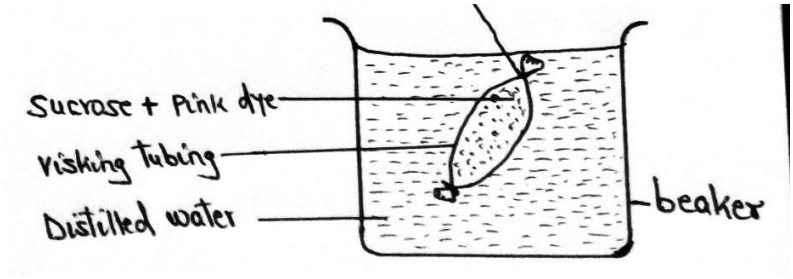
9. Differentiate between an organ and a tissue giving examples in animals. (2mks)

……

……

……

10. Form two students set up an experiment to investigate two physiological processes in living organisms. At the end of the experiment, they observed that the visking tubing had increased in size while the water in the beaker turned pink.



a) Name the physiological process responsible for;

i. Water in the beaker turning pink (1mk)

……

ii. The visking tubing increasing in size (1mk)

……

b) i) Describe how that physiological process named in a(ii) above occurred (3mks)

……

……

……

……

ii) State three illustrations of the process named in a(ii) above in plants (3mks)

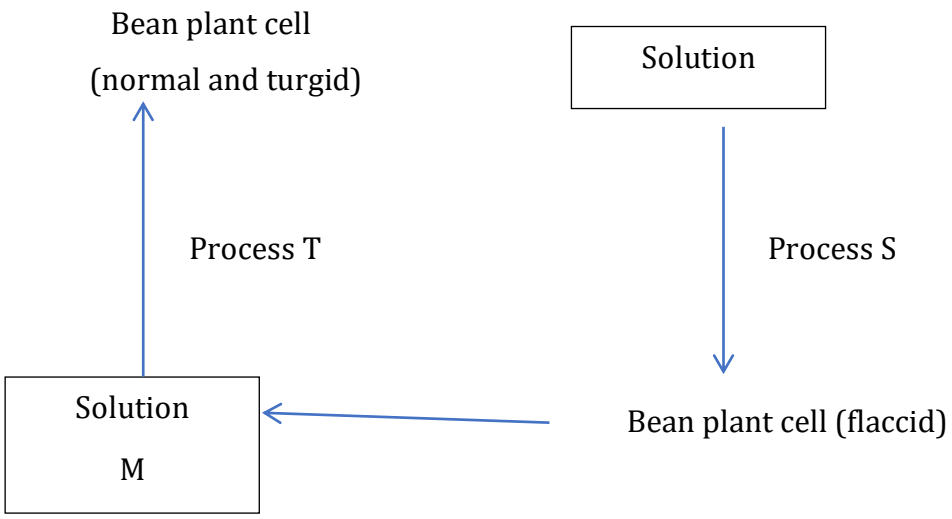
……

……

……

……

11. Use the scheme below to answer questions that follow.



a) Give the nature of solution (2mks)

K ……

M ……

b) Name process; (2mks)

T ……

S ……

c) Describe how process S occurs (3mks)

……

……

……

……

d) Why is it not possible to obtain a normal animal cell in process T (1mk)

……

……

12. a) Active transport is an active process. Explain (2mks)

……

……

……

b) Explain how surface area to volume ratio affects the rate of diffusion. (2mks)

……

……

……

13. The scientific name for lion is PANTHERA LEO.

i. Identify the generic and specific name (2mks)

……

……

ii. Give two mistakes made when writing the scientific name (2mks)

……

……

iii. A lion and a leopard are both in the cat family yet they cannot interbreed. Explain (1mk)

……

……

iv. What is Binomial nomenclature (1mk)

……

v. State two rules of binomial nomenclature (1mk)

……

……

vi. Give three reasons why classification in important (3mks)

……

……

……

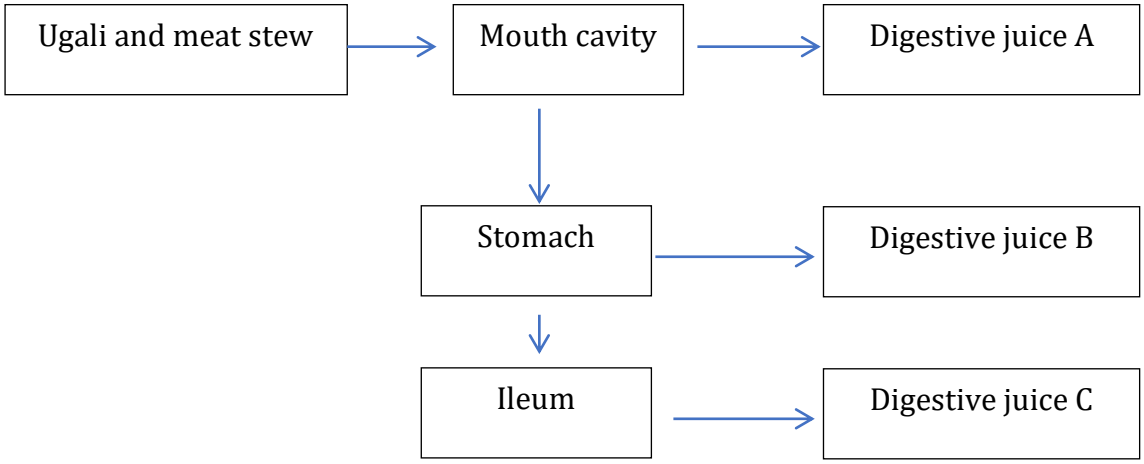
14. a) Differentiate between ingestion and egestion. (2mks)

……

……

……

b) The following flow diagram represents passage of a meal through the human digestive system. Study the diagram and answer the question that follow.



i. Name the physical process that will occur in the mouth cavity (1mk)

……

ii. Name the digestive juices represented by B and C (2mks)

B ……

C ……..

iii. Explain two ways in which the digestive system is protected from corrosive effects of digestive juices. (2mks)

……

……

……

……

iv. Name the hormone that stimulates the secretion of juice B (1mk)

……

v. Identify two contents of digestive juice A (2mks)

……

……..

15. Explain five adaptations of the leaf to its photosynthetic function. (10mks)

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NAME: _____ ADM NO.:_____

CLASS : _____ SIGNATURE: _____ DATE: _____

FORM 3

BIOLOGY

END OF TERM 1,

TIE: 2½HRS

END OF TERM ONE EXAMINATION

INSTRUCTIONS

1. Answer all the questions in Section A
2. In section B, question 13 is compulsory and answer either question 14 or 15

SECTION A (60MARKS)

1. Explain the following terms (3mks)

   i) Mycology

   ……

   ……

   ii) Cytology

   ……

   ……

   iii) Ornithology

   ……

   ……

2. a) Name the tissue responsible for;

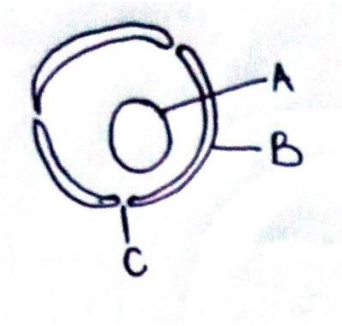
   i) Protecting inner tissue of animals (1mk)

   ……

   ii) Growth in plants (1mk)

   ……

   b)The diagram below shows a …of a eukaryotic cell.



   i) Name the part lalelled C (1mk)

   ……

   ii) Give the function of part A (1mk)

   ……

3. i) The diameter of field of view of a light microscope is 6.5mm. Plant cells lying across the diameter are 12. Determine the size of the cell in micrometer (2mks)

   ii)State at least two activities of the cells that are controlled by nucleus (2mks)

   ……

   ……

4. a) Define the following terms as used in ecology (3mks)

   i) Community

   ……

   ……

   ii) Biomass

   ……

   ……

   iii) Population

   ……

   ……

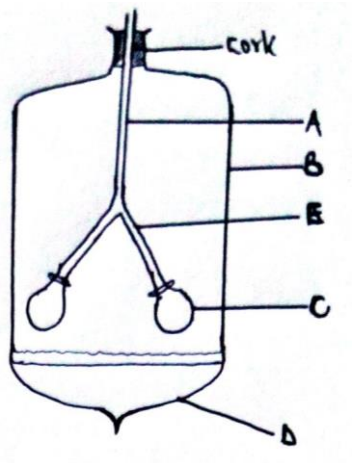
   b)Name three biotic relationships in natural ecosystem (3mks)

   ……

   ……

   ……

5. The figure illustrates a model of ribcage in man. Carefully study the model and answer the questions that follow.



   a) Name the structure in the ribcage represented by parts labelled C and D in the model (2mks)

   C ……

   D ……

   b) Name the process represented by part D when; (2mks)

   i) Pushed up

   ……

   ii) Pulled down

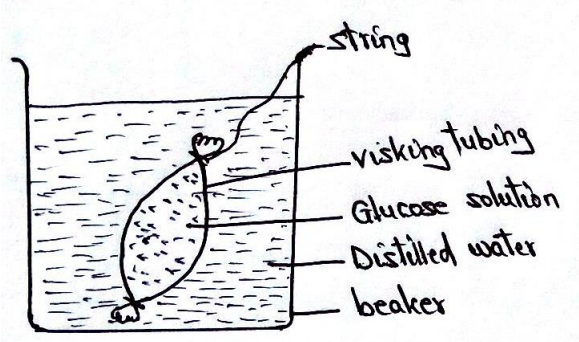
……

c) Mention two adaptations of a respiratory surfaces to their functions (2mks)

……

……

6. An experiment was set up as shown below



Contents of the beaker (A) was tested for presence of reducing sugars at start of experiment and after 30 minutes using Benedict's solution.

Results were recorded as shown in the table below.

	Observation	**Conclusion**
At start	Contents (A) took colour of Benedict's solution	
After 30 minutes	Contents turned blue-green-yellow to orange	

a) Complete the table above (2mks)

b) Name the biological process that;

i) Was being investigated in the set up (1mk)

……

ii) Account for the observations made in the table (3mks)

……

……

……

……

……

……

7. Name the;

a) Material that strengthens xylem tissue (1mk)

……

b) Tissue that is removed when the bark of a dicotyledonous plant is ringed (1mk)

……

c) The blood vessel with the highest concentration of: (2mks)

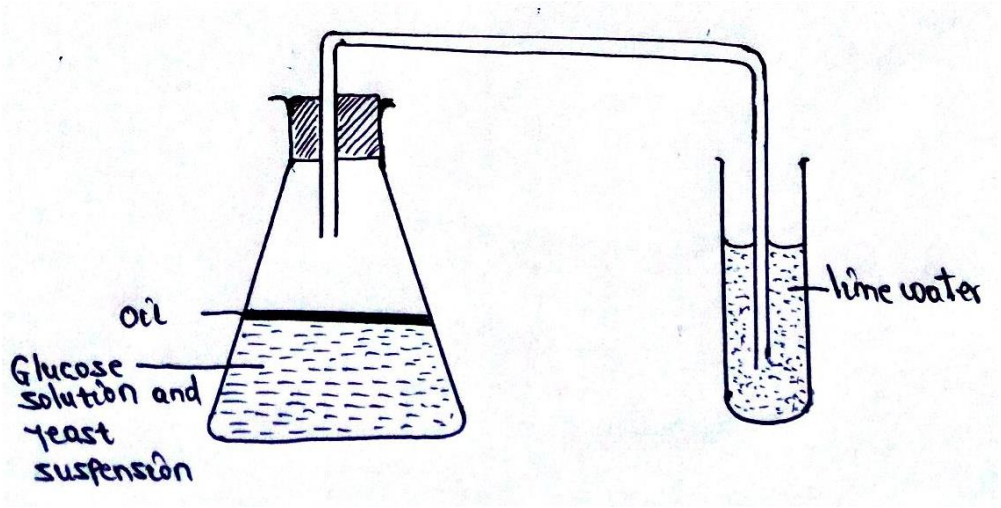
i) Glucose

……

ii) Carbon(IV) oxide

……

8. The following diagram below shows a set up that was used to demonstrate fermentation. Glucose solution was boiled and oil added on top of it. The glucose solution was then allowed to cool before adding the yeast suspension.



a) Why was the glucose solution boiled before adding the yeast suspension? (1mk)

……

b) What was the importance of cooling the glucose solution before adding the yeast suspension (1mk)

……

c) What was the use of the oil in the experiment (1mk)

……

d) What observation would be made in test tube B at the end of the experiment (1mk)

……

e) Suggest a control for this experiment (1mk)

……

……

9. a) Name the type of respiration that is most efficient (1mk)

……

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

……

c) What is oxygen debt (2mks)

……

……

10. a) Differentiate between photolysis and carbon (IV) oxide fixation (4mks)

……

……

……

……

b)Explain why some enzymes such as pepsin and rennin are normally produced as pepsinogen and prorennin. (2mks)

……

……

……

c)Name the cells that secrete HCL in the stomach (1mk)

……

d) Briefly describe the digestion of carbohydrates in the mouth (3mks)

……

……

……

……

……

11. Explain why it is normally difficult for a mammal to lose excess heat on a hot humid day (2mks)

……

……

……

b) State two advantages of birds excreting uric acid rather than ammonia (2mks)

……

……

12. You are provided with the following specimen:

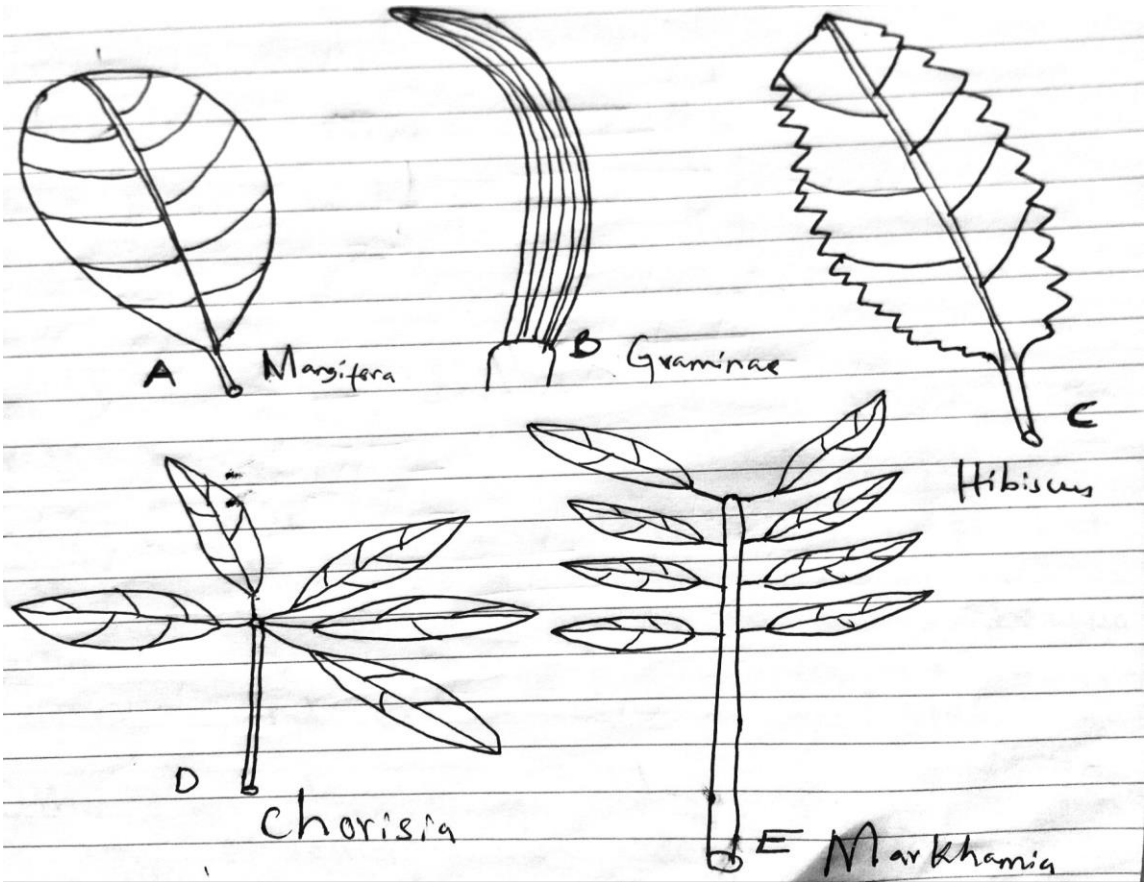
Labelled A, B, C, D and E. Using the following features in that order, construct a dichotomous key that can be used to identify the below organism (4mks)

i) Type of leaf

ii) Leaf venation

iii) Leaf margin type

iv) Leaf palmate and pinnate



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SECTION B (40MKS)

Answer question 13 (compulsory), choose other question 14 or 15

13. An experiment was carried out to investigate the effect of temperature on the rate of reaction catalyze by an enzyme. The results are shown in the table below.

Temperature (^{0}C)	Rate of reaction in mg of products per unit time
5	0.2
10	0.5
15	0.8
20	1.1
25	1.5
30	2.1
35	3.0
40	3.7
45	3.4
50	2.8
55	2.1
60	1.1

a) On the grid provided draw a graph of rate of reaction against temperature (6mks)

b) When was the rate of reaction 2.6mg of product per unit time (2mks)

c) Account for the shape of the graph between;

i) 5^{0}C and 40^{0}C (2mks)

ii) 45^{0}C and 60^{0}C (3mks)

d) Other than temperature name two ways in which the rate of reaction between 5^{0}C and 40^{0}C could be increased (2mks)

e) i) Name one digestive enzymes in the human body which works best in acidic condition (1mk)

ii) How is the acidic condition for the enzyme named in (e) (i) above attained (2mks)

f) The acidic conditions in (e) (ii) above is later neutralized

i) Where does the neutralization take place? (1mk)

ii) Name the substance responsible for neutralization? (1mk)

ESSAY

14. a) Describe the blood clotting process (5mks)

    b) Describe how the mammalian heart is adapted to its function of pumping blood (15mks)

15. Describe the process of urine formation (20mks)

NAME:_____ ADM NO:_____

CANDIDATE'S SIGN:_____ DATE:_____

AGRICULTURE

FORM 1

END OF TERM 1

TIME: 2HRS

END OF TERM ONE EXAMINATION

INSTRUCTIONS

- ✓ This paper consist of three sections A, B and C
- ✓ Candidate to answer **all** questions in section **A** and **B** and any other **two** questions only in section **C**

CANDIDATE SCORE

	QUESTIONS	MAXIMUM SCORE	CANDIDATES SCORE
A	1-16	50	
B	17-19	30	
C	20	10	
	21	10	
	22	10	
	TOTAL	**100**	

SECTION A (50MKS)

Answer all questions in this section on spaces provided.

1. What is Agriculture? (1mk)

……

……

2. Give the meaning of the following Agricultural terms (4mks)

   i. Apiculture

   ……

   ……

   ii. Aquaculture

   ……

   ……

   iii. Nomadic –pastoralism

   ……

   ……

   iv. Plantation

   ……

   ……

3. Give three reasons why Agriculture is Art (3mks)

   i)……

   ii)……

   iii)……

4. Differentiate between the following Horticulture terms. (2mks)

   Pomoculture and Olericulture

   ……

   ……

   ……

5. Name five branches of Agriculture (5mks)

   i)……

   ii)……

   iii)……

   iv)……

   v)……

6. a) Give the meaning of mixed farming? (1mk)

……

……

b) State three importance of mixed farming (3mks)

i)……

ii)……

iii)……

7. State three characteristics of small scale farming (3mks)

i)……

ii)……

iii)……

8. Name four methods of farming? (4mks)

i)……

ii)……

iii)……

iv)……

9. State four advantages of large scale farming (4msk)

i)……

ii)……

iii)……

iv)……

10. State three importance of organic farming? (3mks)

i)……

ii)……

iii)……

11. Name four human factors which influence Agriculture (4mks)

i)……

ii)……

iii)……

iv)……

12. State two effects of HIV and AIDS on Agriculture (2mks)

i)……

ii)……

13. State three ways which Government policy influence Agriculture (3mks)

i)……

ii)……

iii)……

14. Name four Biotic factors which influences Agriculture (2mks)

i)……

ii)……

iii)……

iv)……

15. State three importance of soil to crops (3mks)

i)……

ii)……

iii)……

iv)……

16. Name three aspect of rainfall (3mks)

i)……

ii)……

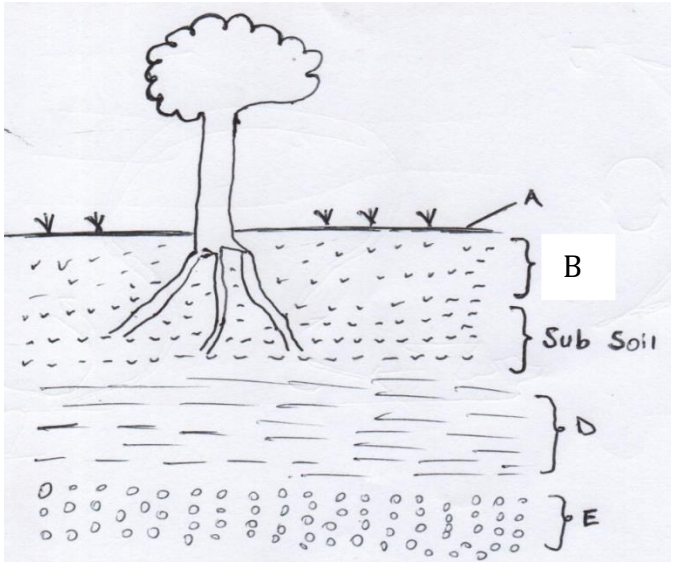
iii)……

iv)……

SECTION B

Answer all questions on the spaces provided

17. Study the diagram below and answer questions that follow.



a) Identify the type of soil formation shown above (1mk)

……

b) Name the layers A, B, D and E (4mks)

Layer A ……

Layer B ……

Layer D ……

Layer E ……

c) State four characteristics of layer B (4mks)

i)……

ii)……

iii)……

iv)……

d) Name four types of soil structures (4mks)

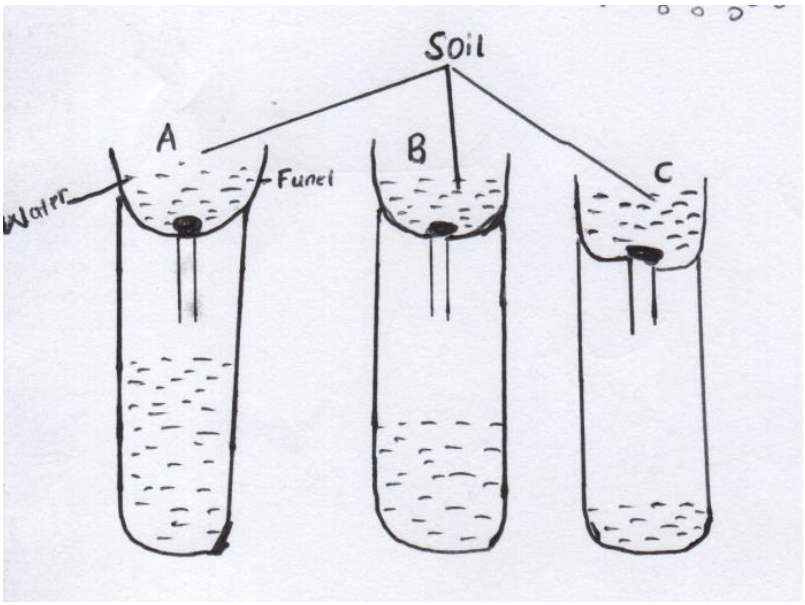
i)……

ii)……

iii)……

iv)……

18. Below is an experiment to investigate a certain aspect of soil. Study the experiment and answer questions that follows.



The amount of water drained is as shown above

a) State the aspects of soil being investigated (1mk)

……

b) Name the soil type A, B and C (3mks)

Soil type A ……

Soil type B ……

Soil type C ……

c) Which of the soil type is most suitable for growing rice (1mk)

……

d) Which of soil type is good for growing maize (1mk)

……

e) State four characteristics of soil type A (4mks)

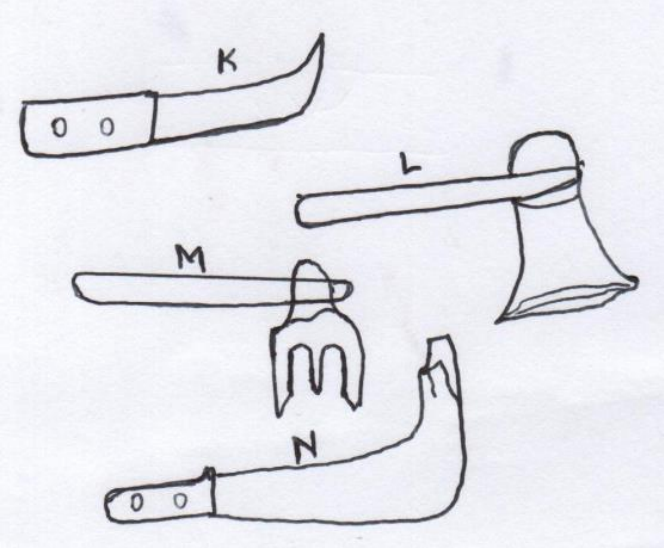
i)……

ii)……

iii)……

iv)……

19. Below are farm tools and equipment used in the farm



a) Identify the tools shown above (2mks)

Tool K ……

Tool M ……

Tool L ……

Tool M ……

b) State the use of tool K and L (2mks)

Tool K ……

Tool L ……

c) State three maintenance of tool K (3mks)

i)……

ii)……

iii)……

SECTION C (20MKS)

Answer any two questions on space provided

20. State and explain five importance of Agriculture in growth of country economy (10mks)

i) ……

……

……

……

ii)……

……

……

……

iii)……

……

……

……

iv)……

……

……

……

v)……

……

……

……

21. a) State the influence of strong winds on crop production (6mks)

i) ……

……

……

……

ii)……

……

……

……

iii) ……

……

……

……

b) State the effects of high temperatures on crop production (4mks)

i)……

……

ii)……

……

iii)……

……

iv)……

……

22. a) State three types of weathering (3mks)

i)……

ii)……

iii)……

b) Describe various ways in which biotic factors influences Agriculture (7mks)

……

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NAME:_____ ADM NO:_____

CANDIDATE'S SIGN:_____ DATE:_____

AGRICULTURE

FORM 2

END OF TERM 1

TIME: 2HRS

END OF TERM ONE EXAMINATION

INSTRUCTIONS

- ✓ This paper consist of three sections A, B and C
- ✓ Candidate to answer **all** questions in section **A** and **B** and any other **two** questions only in section **C**

CANDIDATE SCORE

	QUESTIONS	MAXIMUM SCORE	CANDIDATES SCORE
A	1-15	30	
B	16-21	30	
C	22	20	
	23	20	
	24	20	
	TOTAL		

SECTION A (50MKS|)

Answer all questions in this section on spaces provided.

1. State two ways in which agriculture contributed to the industrial development (1mk)

   i)……

   ii)……

2. State four deficiency symptoms of phosphorous in plants (2mks)

   i)……

   ii)……

   iii)……

   ……

   iv)……

3. State four reasons why minimum tillage is encouraged in crop production (2mks)

   i)……

   ii)……

   iii)……

   iv)……

4. State four advantages of drip irrigation (2mks)

   i)……

   ii)……

   iii)……

   iv)……

5. Below are lists of plant elements / minerals. Study them carefully and answer the following questions.

   - Nitrogen
   - Sulphur
   - Magnesium
   - Iron
   - Copper
   - Boron
   - Zinc
   - Molybdenum
   - Carbon
   - Phosphorous

   a) Of which of the above are macro-nutrients? (1mk)

   ……

b) Of which of the above are primary macro-nutrient? (1mk)

……

c) Of which of the above are micro-nutrients? (1mk)

……

d) Of which of the above are liming elements? (1mk)

……

6. a) State three factors which should be considered when constructing a compost pit (1½mks)

i)……

ii)……

iii)……

b) Why should the following be added when preparing compose manure.

i. Top soil (1mk)

……

……

ii. Previous compost/farm yard manure (1mk)

……

……

iii. Wood ash (1mk)

……

……

7. State three ways in which government policy influences agriculture (1½mks)

i)……

ii)……

iii)……

8. State the functions of Boron in crop production (1mk)

……

……

9. Differentiate between straight and compound fertilizers (½mk)

……

……

……

……

10. Name any two methods which can be used to detect mineral nutrient deficiency in crops.

(2mk)

i)……

ii)……

11. Under which condition does opportunity cost not exists (1mk)

……

12. State the importance of soil testing (2mks)

i)……

ii)……

13. State three advantages of using seeds as planting materials (½mk)

i)……

ii)……

iii)……

iv)……

14. Name the part used to propagate the following crops (3mks)

a) Sisal ……

b) Irish potato ……

c) Maize ……

d) Pyrethrum ……

e) Pineapples ……

f) Bananas ……

15. a) State four factors to consider when sitting a nursery (2mks)

i)……

ii)……

iii)……

iv)……

b) Name two types of matalic pipes commonly used in the farm (1mk)

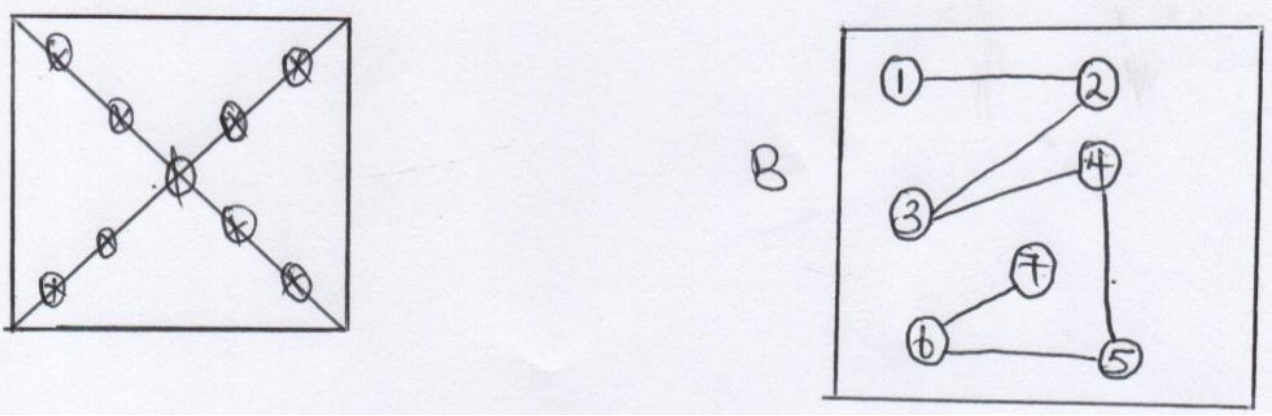
i)……

ii)……

SECTION B (30MKS)

Answer all questions in this section on spaces provided

16. Below are methods used in soil sampling study them and answer the questions below



a) Identify the method A and B (2mks)

Method A ……

Method B ……

b) State four precautions taken when carrying the methods above (4mks)

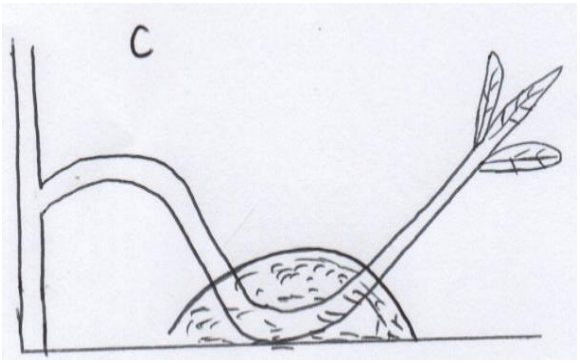
i)……

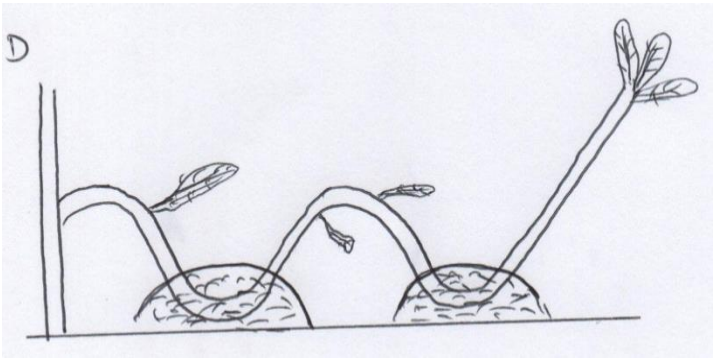
ii)……

iii)……

iv)……

17. Identify the types of layering shown (2mks)





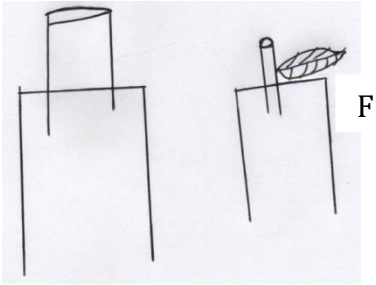
Layering C ……..

Layering D ……..

18. a) A farmer was advised to use 20kg of nitrogen, 30kg of phosphate and 15kg of potassium for growing crops. If the farmer has calcium ammonium nitrate 21% N_1 single supper phosphate 20% P_2O_5 and muriate of potash 50% K_2O in the store, calculate how much of CAN 21% N_1, SSP 20% P_2O_5, 50% K_2O will the farmer require. (6mks)

b) Money maker variety of tomatoes are spaced at 100cm x 60cm, calculate the number of plants in area of 4m x 3m (3mks)

19. The diagram E and F shows the cuttings, inserted into the sleeves of polythene bags.

E  F

a) In which diagram has the practice been done correctly? (1mk)

……

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

……

c) Describe the procedure of preparing the cuttings above (3mks)

……

……

……

……

d) What precautions taken when preparing the cuttings above (1mk)

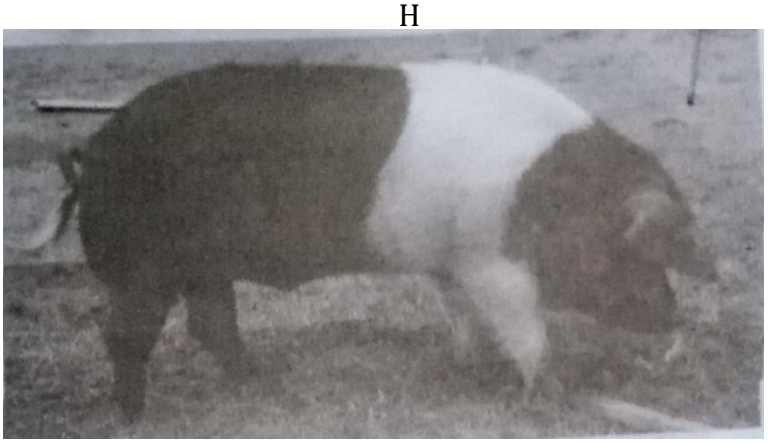
……

……

20. Identify the breeds of livestock shown below (2mks)

G

H



J

K

Breed G ……

Breed H ……..

Breed J ……

Breed K ……..

b) State physical characteristics of

Breed H (1mk)

……

Breed K (1mk)

……

21. The diagram below represent a bag of fertilizer observed in a shop. Study it carefully and answer questions that follow.

Kinoti chemicals

20-20-10

50 kgs

N0 hooks

a) Classify the fertilizer according to the nutrients contained (1mk)

……

b) What is the fertilizer ratio of the fertilizer contained in the bag (1mk)

……..

c) Give reason why hooks are not used? (1mk)

……

……

SECTION C

Answer any two questions on spaces provided.

22. a) State and explain four practices carried out on seedling in a nursery (8mks)

b) State six factors to consider when timing planting of crops. (6mks)

c) State six characteristics of a fertile soil (6mks)

23. a) State the properties of nitrogenous fertilizer (6mks)

b) Describe the procedure of soil sampling (6mks)

c) State and explain four factors that influence the spacing of maize in the field (8mks)

24. a) Describe importance of a nursery in crop production (6 mks)

b) Describe the factors to consider when selecting a nursery site for tomatoes (10 mks)

c) State four methods of fertilizer application on maize in the field (4 mks)

NAME:_____ ADM NO:_____

CANDIDATE'S SIGN:_____ DATE:_____

AGRICULTURE

FORM 3

END OF TERM 1

TIME: 2HRS

END OF TERM ONE EXAMINATION

INSTRUCTIONS

- ✓ This paper consist of three sections A, B and C
- ✓ Candidate to answer **all** questions in section **A** and **B** and any other **two** questions only in section **C**

CANDIDATE SCORE

	QUESTIONS	MAXIMUM SCORE	CANDIDATES SCORE
A	1-13	30	
B	14-17	30	
C	18	20	
	19	20	
	20	20	
	TOTAL		

SECTION A (30MKS|)

Answer all questions in this section on spaces provided.

1. a) What is seed dormancy? (1mk)

   ……

   ……

   b) State 4 methods of breaking seed dormancy (2mks)

   i)……

   ii)……

   iii)……

   iv)……

2. State two reasons for in breeding in livestock (2mks)

   i)……

   ii)……

3. State three factors to consider when selecting breeding stock (1½mk)

   i)……

   ii)……

   iii)……

4. Give two ways that Agriculture has boosted Industrial development (2mks)

   i)……

   ii)……

5. State three characteristics of plants to use for green manure (1½mks)

   i)……

   ii)……

   iii)……

6. Name the tools used for following operations (2mks)

   i. Cutting wool from sheep

      ……

   ii. Pruning hard branches of coffee

      ……

   iii. Releaving cattle off bloat

      ……

   iv. Tightening barbed wire while fencing

      ……

7. a) Name four signs of parturitions in cattle (2mks)

i)……

ii)……

iii)……

iv)……

b) Highlight four control measures of tsetse flies (2mks)

i)……

ii)……

iii)……

iv)……

8. Differentiate between the following term (4mks)

a) Maintenance ration and production ration

……

……

……

……

b) Flushing and steaming up

……

……

……

……

9. List four disadvantages of Natural mating (2mks)

i)……

ii)……

iii)……

iv)……

10. Mention three control measures of liver fluke. (1½mks)

i)……

ii)……

iii)……

11. Mention three types of records a farmer growing maize should keep. (1½mks)

i)……

ii)……

iii)……

12. a) Name two breeds of camels (1mk)

i)……

ii)……

b) Mention four factors that make Camels suit semi-arid areas of Kenya (2mks)

i)……

ii)……

iii)……

iv)……

13. List four reasons for docking young Lambs (2mks)

i)……

ii)……

iii)……

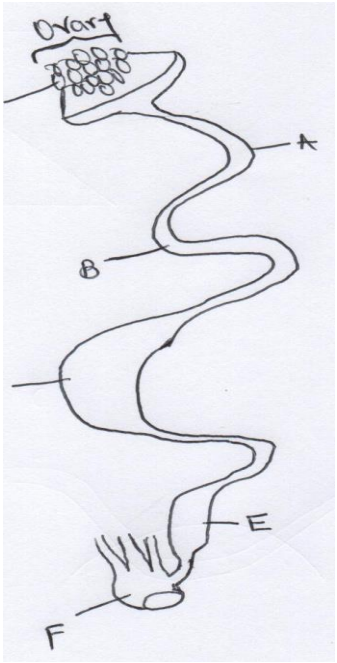
iv)……

SECTION B (30MKS)

14. Study the reproductive organ of a hen shown below and answer the questions that follow.

D

C



i. Name the part marked A, B, C and F (2mks)

A ……

B ……

C ……

F ……

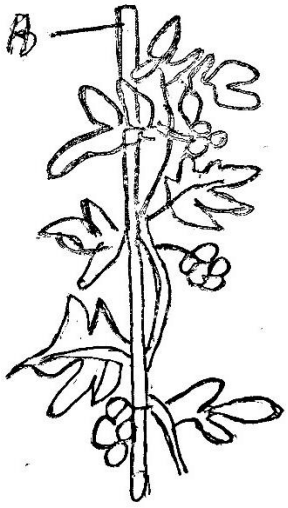
ii. State the activities that takes part on the parts marked B and D during egg formation (3mks)

B ……

D ……

E ……

15. Study the diagram below and answer the questions that follow.



i. Name the practice shown above (1mk)

……

ii. Give reasons for the practice named in (i) above (4mks)

i)……

ii)……

iii)……

iv)……

iii. Other than tomatoes name two other plants where the practice named above can be done. (2mks)

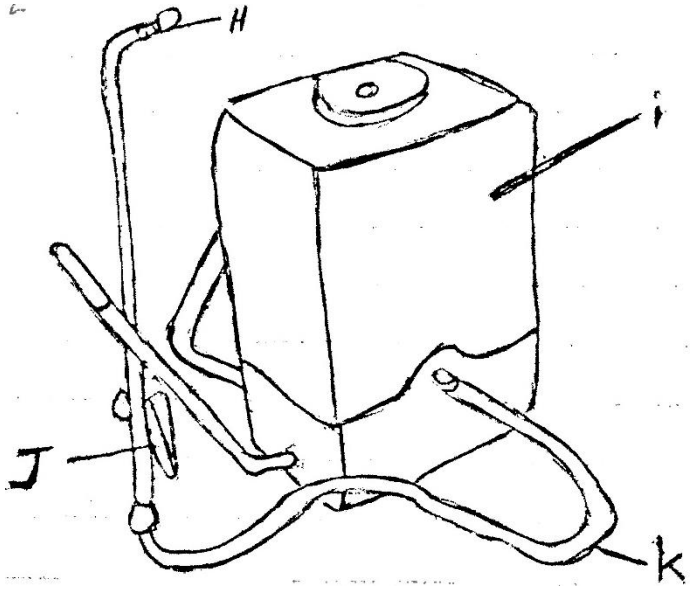
i)……

ii)……

16. a) Calculate plant population for maize in two hectare of land using spacing of 90cm x 60cm (4mks)

b) A farmer wants to apply 60kgs of N in her two hectare potato farm. How much of ammonia (20%N) does she require? (4mks)

17. Study the diagram below and answer the questions that follows.



i. Name the parts marked H, I, J and K (4mks)

H ……

I ……

J ……

K ……

ii. State the function of the farm equipment shown above (1mk)

……

iii. State three maintenance practices carried out on the equipment named above (3mks)

i)……

ii)……

iii)……

iv. Give two uses of a spade (2mks)

i)……

ii)……

SECTION C (50MKS)

Answer any two questions from this section

18. a) Explain four ways in which HIV/AIDS limit agriculture production (8mks)

b) Explain six importance of Agriculture to the economy of a country (12mks)

19. a) State six functions of water in an animals (6mks)

b) State four advantages of timely planting (4mks)

c) State and explain five factors that should be considered when designing a crop rotation programme. (10mks)

20. a) State five advantages of embryo transplant in livestock production (5mks)

b) Describe the procedure for establishing a fish pond. (10mks)

c) State the structural requirements of a deep litter House (5mks)

FORM ONE CHEMISTRY

NAME_____**CLASS**_____ **ADM NO**_____

STUDENT SIGNATURE _____

DATE_____

233

CHEMISTRY

MARCH

TIME : 2HRS

CHEMISTRY FORM 1

TIME: 2 HRS

INSTRUCTIONS

1. *Write your name and admission number in the spaces provided above*

2. *Sign and write the date of examination in the spaces provided.*

3. *Answer all the questions in the spaces provided.*

4. *All working must be clearly shown where necessary.*

For examiner's use only

Question	Maximum score	Candidate's score
1 – 20	100	

1. (a) Define the term chemistry (2mks)

……

……

(b) List four branches of chemistry (4mks)

……

……

……

……

(c) Name three main branches of science (3mks)

……

……

……

2. Define the following terms (5mks)

(a) Mixture

……

……

(b) Compounds

……

……

(c) Elements

……

……

(d) Atom

……

……

(e) Molecule

……

……

3. State two properties of

(a) Solid (2mks)

……

……

(b) Liquids (2mks)

……

……

4. What is a non-conductor? (1mk)

……

……

5. Define the following terms

(a) A drug (1mk)

……

……

(b) Drug abuse (1mk)

……

……

6. (a) Name three commonly abused drugs (3mks)

……

……

……

(b) Mention three negative effects of prolonged use of khat. (3mks)

……

……

……

7. Name three roles chemistry plays in the society. (3mks)

……

……

……

8. List three careers one can join after studying chemistry (3mks)

……

……

……

9. List three scientific skills that can be acquired when performing chemistry experiments. (3mks)

……

……

……

10. List five laboratory safety rules (5mks)

……

……

……

……

……

11. List three apparatus that are used to measure accurate volume (3mks)

……

……

……

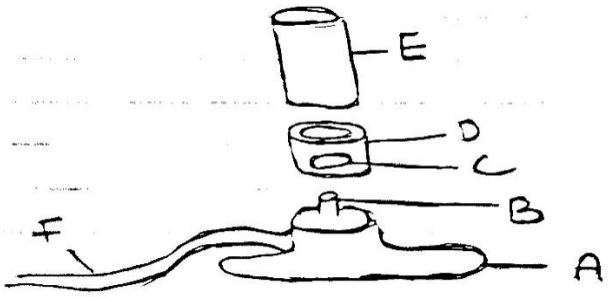
12. Draw and give the use of the following apparatus used in the chemistry (6mks)

(a) Thistle funnel

(b) Separating funnel

(c) Dropping funnel

13. The diagram below represents a Bunsen burner



(a) Give the name of the parts labeled A,B,C,D,E and F on the diagram (6mks)

A _____

B_____

C_____

D_____

E_____

F_____

(b) A Bunsen burner can produce two different types of flames under different conditions.

(i) Name the two types of flames produced by a Bunsen burner (2mks)

……

……

(ii) Give 3 differences between the two flames in (i) above (3mks)

……

……

……

(iii)Draw and label the most suitable Bunsen burner flame preferred for heating in the laboratory (3mks)

14. Give the most suitable method of separating the following mixtures (5mks)

(a) Water and Ethanol

……

(b) Kerosene from Water

……

(c) Coloured pigments

……

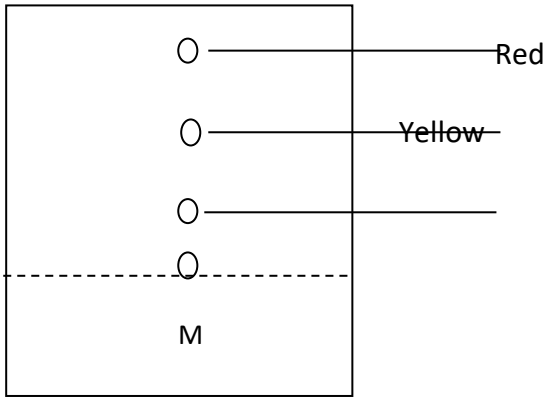
(d) Iodine from a mixture of sand and Iodine

……

(e) Iron fillings from Sulphur Powder.

……

15. The chromatography below show the constituents of a flower extract using organic solvent



(i) Name a possible organic solvent you can use for this experiment (1mk)

……

(ii) State two properties that make the red pigment to move the furthest distance from M. (2mks)

……

……

(iii) On the diagram indicate the solvent front. (1mk)

16. Write down the chemical symbols of the following elements (5mks)

Element	Chemical Symbol

(i) Copper ……

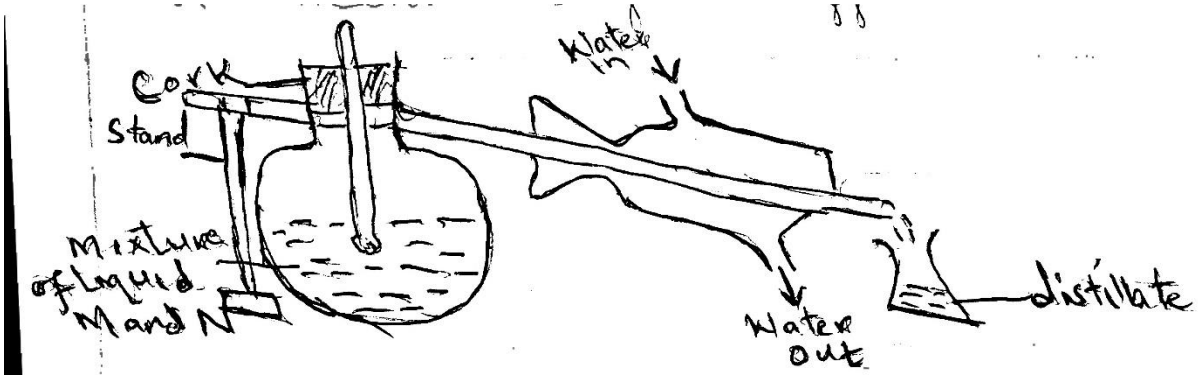
(ii) Zinc ……

(iii) Silver ……

(iv) Aluminium ……

(v) Mercury ……

17. In a experiment to separate a mixture of two organic liquid M and N with boiling point of 56˚c and 118˚c respectively, a student set up the apparatus as shown



(a) Identify 3 mistakes in the setup (3mks)

……

……

(b) What method would the students use to test the purity of distillate obtained (2mks)

……

……

(c) What is the purpose of the thermometer (1mk)

……

……

(d) Give two applications of fractional distillation (2mks)

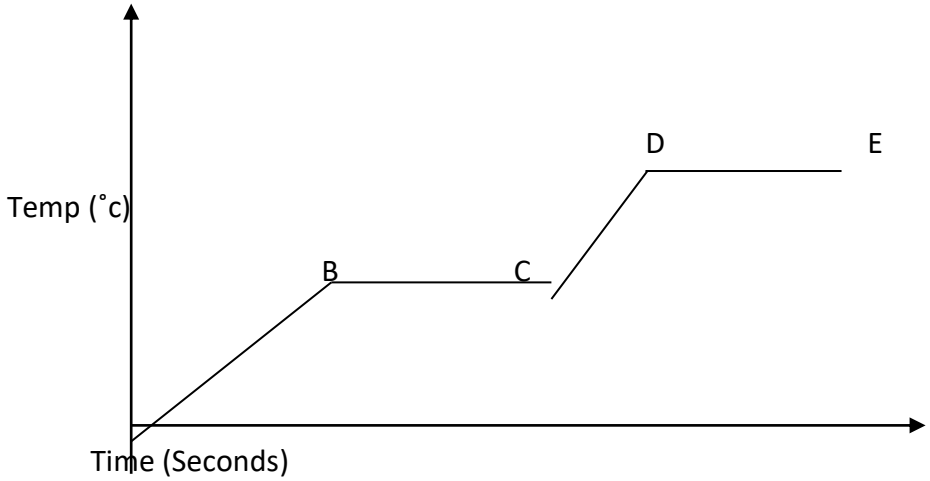
……

……

18. Give three differences between chemical changes and physical changes (3mks)

Chemical change	Physical change

19. The graph shown below is heating curve of solid substance. Use it to answer questions below



(a) Using kinetic theory of matter explain what happens in the following regions (6mks)

(i) AB

……

……

(ii) BC

……

……

(iii) CD

……

……

20. Explain the following

(a) Boiling tube is usually more suitable for boiling liquids than a test tube (2mks)

……

……

……

……

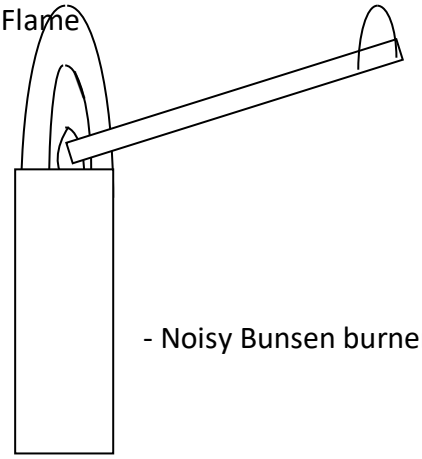
(b) Round bottomed flask is used for fractional distillation and not a flat bottomed flask (1mk)

……

……

……

(c) - Flame



- Noisy Bunsen burner

When glass tube is held in a noisy Bunsen flame as shown a small flame appears at the end of the glass tube. Explain (2mks)

……

……

……

……

NAME: _____ ADM NO.:_____

SCHOOL: _____ SIGNATURE: _____

FORM 2

CHEMISTRY

END OF TERM 1

TIE: 2¼HRS

END OF TERM ONE EXAMINATION

INSTRUCTIONS

1. Answer all the questions in this paper.

Mathematical tables and silent calculator may be used.

All questions should be answered in English

FOR EXAMINERS USER ONLY

QUESTION	MAXIMUM SCORE	CANDIDATE SCORE
1	10	
2	5	
3	9	
4	8	
5	8	
6	3	
7	4	
8	3	
9	9	
10	6	
11	8	
12	5	
13	11	
14	6	

15	5	
Total	100	

1. (a) What is a Flame (1mk)

……

……

(b) In term of colour, size and zones differentiate between luminous and non-luminous flames (3mks)

Flames	Colour	Zones	Size
Luminous			
Non-luminous			

(c) Name two apparatus for approximate measure of volume and two apparatus for accurate measure of volume

Approximate measure of volume (1mk)

……

……

Accurate measure of volume (1mk)

……

(d) What Is a drug (1mk)

(e) Give two reasons why most laboratory apparatus are made of glass (2mks)

(f) Name the apparatus below. (1mk)

……

2. (a) What is sublimation (1mk)

……

……

(b) Name two substances that undergo sublimation (1mk)

……

……

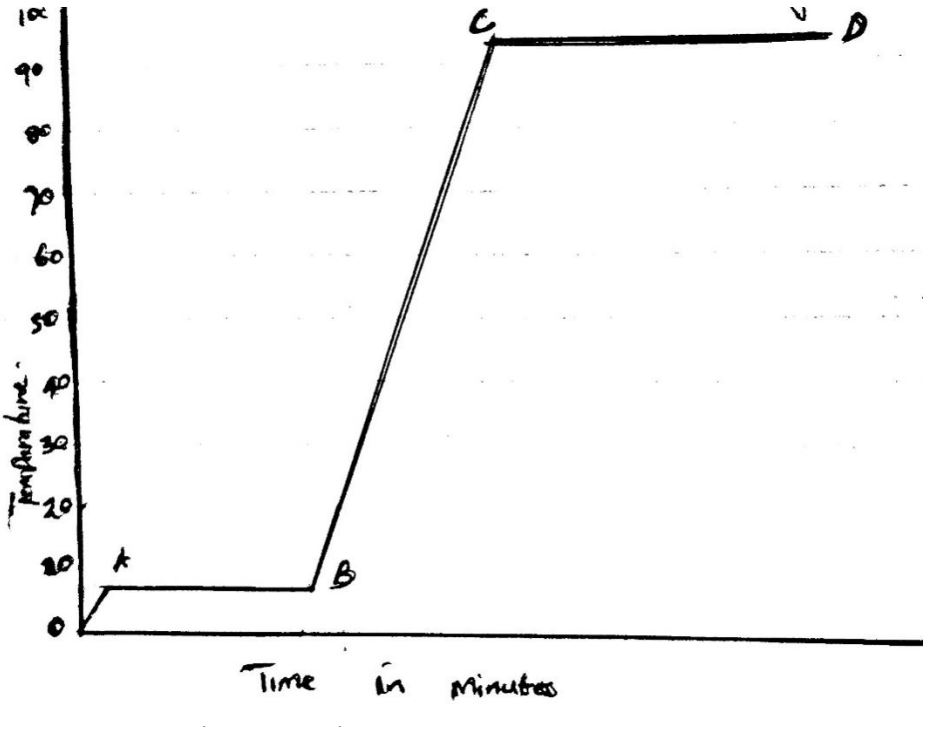
(c) A mixture contains chloride, sand and common salt. Name 3 processes in order that can be used to separate the mixture (3mks)

……

……

……

3. (a) The diagram below shows a heating curve of solid A. use it to answer questions that follow.



(1mk)

……

(b) What is the state of substance A at room temperature? (1mk)

……

(c) Name the process represented by region AB (1mk)

A ……

B ……

(d) The table below shows some chemistry processes. Indicate on the table the type of change that takes place when they occur. (3mks)

Process	Type of change
(i) Heating ice	
(ii) Heating hydrated copper (II) sulphate	
(iii) Heating copper (II) Nitrate	

(e) Name the elements in the following compounds

(i) Magnesium Nitrate (1½mk)

……

(ii)Sodium Carbonate (1½mk)

……

4. (a) What is an acid base indicator. (1mk)

……

(b) The table below show some substances and their PH

Substance	PH
A	7
B	14
C	5
D	10
E	2

Which substance is likely to be;

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

……

(ii) Sodium chloride (1mk)

……

(c) Magnesium carbonate reacts with Hydrochloric acid to form a colourless solution T, gas W that forms a white precipitate with lime water and a Liquid S.

(i) Name T,W and S (3mks)

T ……

W ……

S ……

(ii) Write a word equation to the reaction (1mk)

……

(iii) Explain why a reaction between Lead Carbonate and Sulphuric (VI) acid stops after a while. (1mk)

……

……

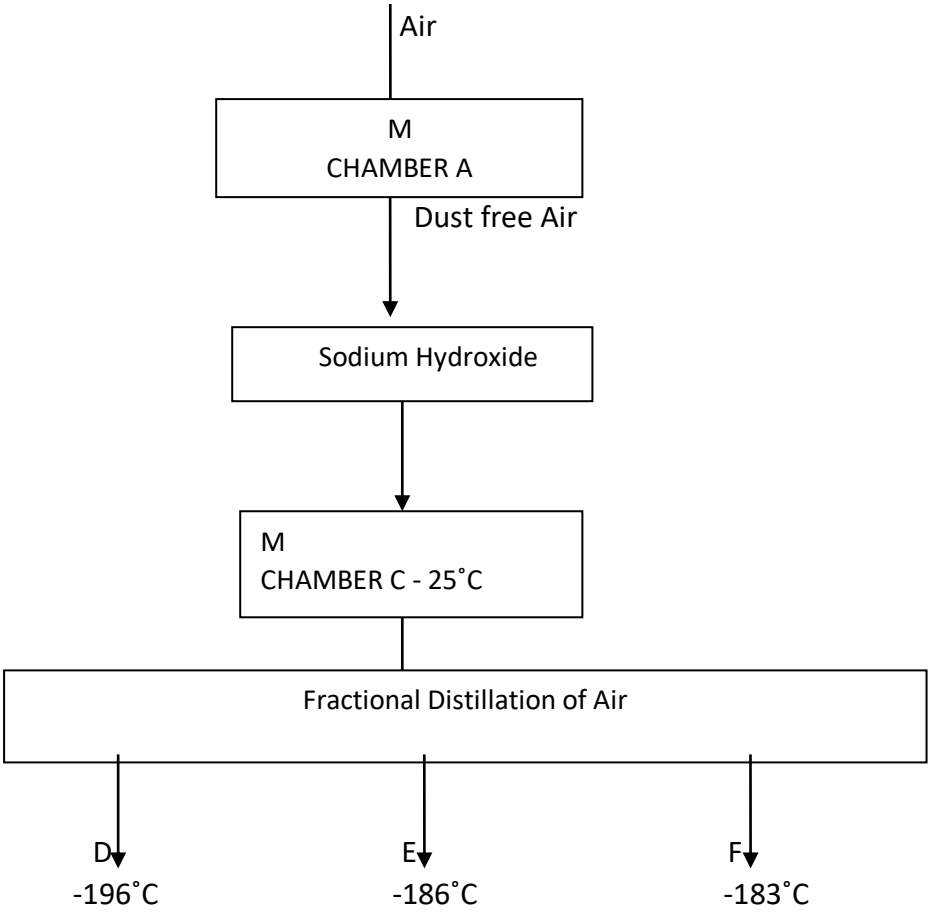
5. Air is a mixture and not a compound, give two reasons

(a) To support this statement (2mks)

……

……

(b) The scheme below shows some steps in fractional distillation of Liquid Air. Use it to answer the questions that follows



(i) Name the process that takes place in chamber A (1mk)

……..

(ii) What is the purpose of sodium hydroxide (1mk)

……..

(iii) Name the substance…. In chamber C (1mk)

……..

(iv) Name D, E and F (3mks)

……..

……

……

6. (i) Write the chemical formular of Rust (1mk)

……

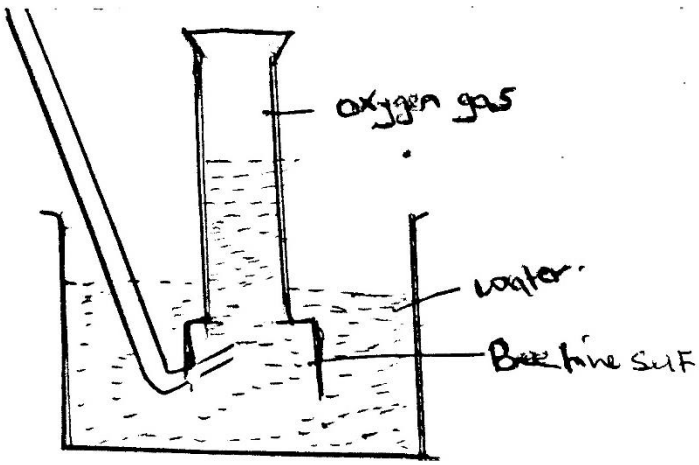
(ii) State two factors that increases the rate of rusting (1mk)

……

(iii) State two ways of preventing rust (1mk)

……

7. In an experiment to prepare oxygen, Manganece (IV) oxide was added to hydrogen peroxide to increase the rate of reaction.



(i) What name is given to a substance like Manganece (IV) oxide (1mk)

……

(ii) Oxygen gas is collected using the method shown below.

……

(a) Name the method (1mk)

……

(b) Why is it possible to collect the gas using the method above. (1mk)

……

(c) How can the gas collected be oxygen? (1mk)

8. The table below show some oxides and their nature. Complete the table (3mks)

Oxide	Nature
Sodium oxide	
Aluminium oxide	Amphoteric
	Acidic
Water	

9. (i) What are hydrocarbons (1mk)

……

……

(ii) Name the two products of burning an hydrocarbon (2mk)

……

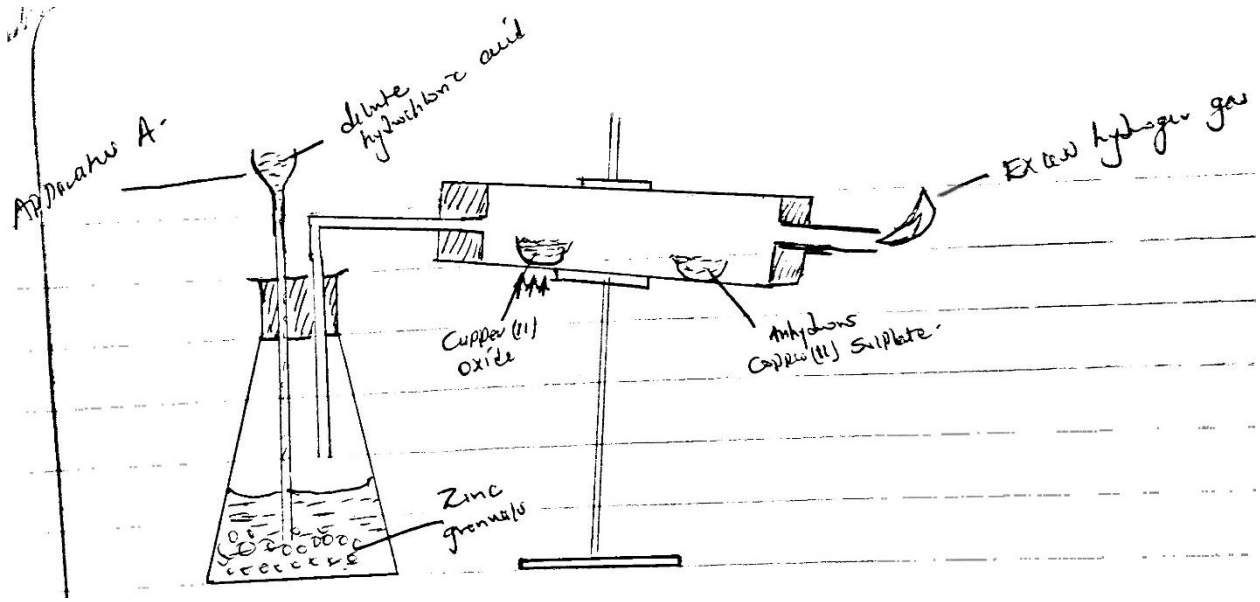
……

(iii) The diagram below shows some steps and properties of hydrogen gas. Study it and use it answer the questions that follows

……

……

9.



(a) Name apparatus A (1mk)

……

(b)State the observations made in

(i) Copper (II) oxide (1mk)

……

(ii) Anhydrous copper (II) Sulphate (1mk)

……

(c) Name the property of hydrogen gas when it reacts with Copper (II) oxide. (1mk)

……

(d) Write a chemical equation for the above reaction (1mk)

……

(e) Hydrogen gas is collected by upwards delivery, state one use of hydrogen based on the same property that makes it collected using the above method. (1mk)

……

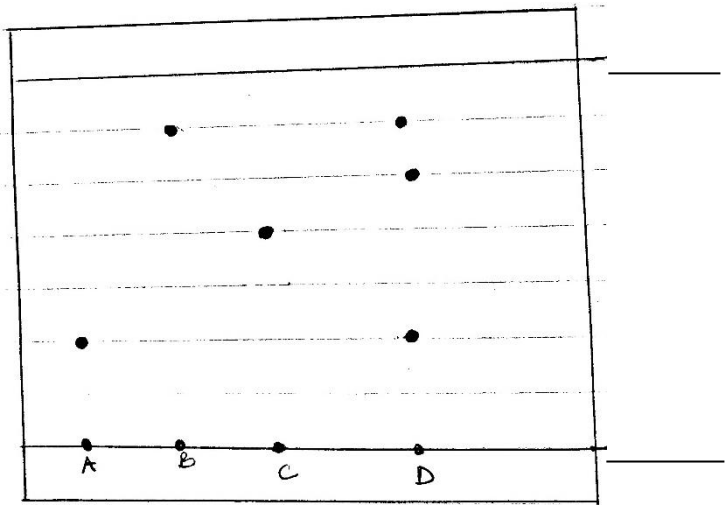
10. Name two physical properties that determines the;

(a) Chromatograph of a substance (2mk)

……

……

(b) The diagram below shows the results obtained after chromatography of 3 pure pigments A, B and C together with a mixture D. study it and use it to answer the questions that follows



(i) Which pure pigment is the most soluble (1mk)

……

(ii) How many components makes up mixture D (1mk)

……

(iii) Name two pure pigments in mixture D (2mks)

……

……

11. (a) Other than location state two differences between electrons and protons (2mks)

……

……

(b) An element can be represents as $^{39}_{19}Q$

(i) What does 39 represent (1mk)

……

(ii) What does 19 represent (1mk)

……

(iii) How may Neutron does Q have (2mks)

……

(c) Write the formula of Ion of Q (2mks)

……

……

12. Write the chemical formula of the following compounds (5mks)

(i) Potassium chloride

……

(ii) Magnesium chloride

……

(iii) Sodium sulphate

……

(iv) Copper (II) nitrate

……

(v) Aluminium oxide

……

13. The grid below shows part of the periodic table. Letters do not represent the actual symbols of the elements, use it to answer the questions that follows

A								
B								
C	**D**		**E**	**F**	**G**	**H**	**I**	**J**

(a) Give the name of the families to which

(i) A belongs (1mk)

……

(ii) I belongs (1mk)

……

(b) Write the electronic arrangement of element E (1mk)

……

(c) Select an element that forms a divalent cation (1mk)

……

(d) Using dots (•) or cross (x) to represent electrons draw the atomic structure of the atom of F.

(2mks)

(e) Select an element that will react rapidly with cold water (1mk)

……

(f) An element form anion L^+ with the following electron configuration 2:8:8. Indicate the position of L in the arid (2mks)

(g) What is the nature of the oxide of C (1mk)

……

(h) Write the formula of the oxide of E (1mk)

……

14. (a) What are isotopes (1mk)

……

(b) Name the two isotopes of carbon (2mks)

……

……

(c) Chlorine has two isotopes ^{35}CI and ^{37}CI. If their percentage abundance is 75% and 25% respectively, Calculate the relative atomic mass (R.A.M) of Chloride (3mks)

15. Write balanced chemical equation for the reactions outlined below. (5mks)

(i) Sodium metal and water

……

……

(ii) Magnesium metal and oxygen

……

……

(iii) Sodium Hydroxide and dilute hydrochloric acid.

……

……

(iv) Zinc metal and dilute Sulphuric (VI) acid

……

……

(v) Calcium carbonate and dilute Nitric (V) acid

……

……

NAME: _____ ADM NO.:_____

SCHOOL: _____ SIGNATURE: _____

FORM 3

CHEMISTRY

END OF TERM 1

TIE: 2¼HRS

END OF TERM ONE EXAMINATION

INSTRUCTIONS

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

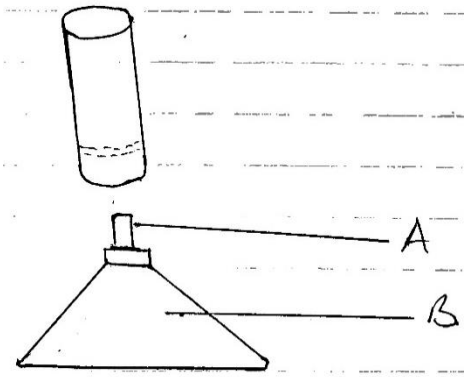
b) Answer all the questions in the spaces provided.

c) All questions should be answered in English

FOR EXAMINERS USE ONLY

QUESTIONS	MAXIMUM	CANDIDATE'S SCORE
1-21	100	
TOTAL SCORE	**100**	

1. The following is an apparatus used in the laboratory



a) Name the apparatus (1mk)

……

b) Explain how the parts labelled A and B are suited to their functions

A ……

B ……

c) Draw and name two apparatus for accurate measurement of volume (2mks)

……

……

2. Study the information in the table below and answer the questions that follow.

Ions	**Electron arrangement**	**Atomic radius**	**Ionic radius**
D+	2, 8	0.175	0.095
E2+	2, 8, 8	0.191	0.133
F2-	2, 8, 8	0.196	0.221
G-	2, 8	0.085	0.107
H3+	2, 8	0.072	0.061

a) Identify the;

i) Trivalent cation (1mk)

……

ii) Divalent anion (1mk)

……

b) Write the electron arrangement of elements E and G

E ……(1mk)

G ……(1mk)

c) In terms of atomic and ionic radii, identify one metallic and non-metallic elements and give a reason.

i) Metal (1½mks)

……

……

ii) Non-metal (1½mks)

……

……

3. Describe how a mixture of ammonium chloride sodium sulphate and lead carbonate can be separated (3mks)

……

……

……

……

4. In the preparation of lead (II) carbonate salt; excess lead (II) oxide was reacted with dilute nitric (V) acid. The products were filtered and sodium carbonate solution added to the filtrate. The mixture of the products was filtered again and the residue washed with distilled water, then dried between filter papers.

a) Why was excess lead (II) oxide used? (1mk)

……

……

b) Write an equation of the reaction between lead (II) oxide and dilute nitric (V) acid. (1mk)

……

……

c) Explain why the residue was washed with distilled water. (1mk)

……

……

d) Write an ionic equation that produced lead (II) carbonate salt (1mk)

……

……

e) Identify the spectator ions in the equation of the reaction in (d) above (1mk)

……

……

f) What is the name given to the process of preparing lead (II) carbonate described over. (1mk)

……

……

5. a) State the Charles's law of gases (1mk)

……

……

b)The volume of a sample of nitrogen gas at a temperature of 291K and 1.0×10^5 pascals was 3.5×10^{-2}. Calculate the temperature at which the volume of the gas would be 2.8×10^{-2} at 1.0×10^5 pascals. (2mks)

6. Carbon (IV) oxide gas is prepared in the laboratory by reacting calcium carbonate with dilute hydrochloric acid.

a) Write a chemical equation for the reaction (1mk)

……

b) Explain why dilute sulphuric (VI) acid is not suitable for the above reaction. (2mks)

……

……

……

7. Six solutions were tested with universal indicator and their Ph value recorded.

Solution	Ph value
J	11.0
K	2.0
L	6.0
M	7.0
N	12.0
O	3.0

a) Define universal indicator (1mk)

……

……

b) Classify the solutions above as;

i) Weakest base (½mk)

……

ii) Strongest base (½mk)

……

iii) Weakest acid (½mk)

……

iv) Neutral solution (½mk)

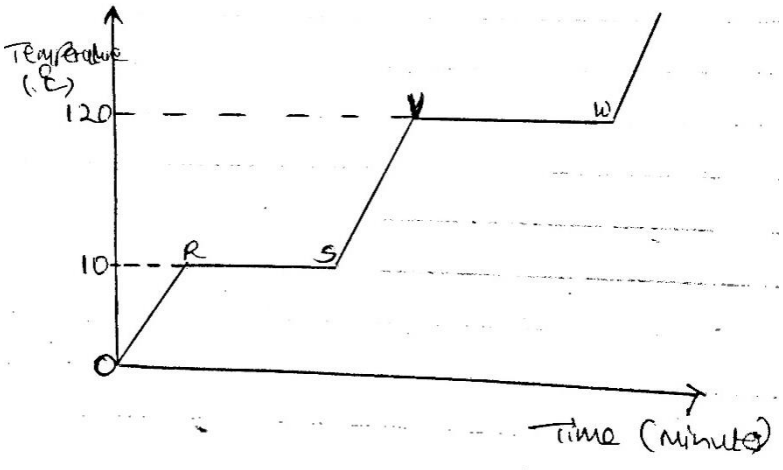
……

c) State two uses of bases/alkalis (2mks)

……

……

8. The graph below was obtained by a student during an experiment of a certain solid



a) From the graph, determine the melting point and boiling point of the substance.

i) Melting point (½mk)

ii) Boiling point (½mk)

b) Explain why there is no change in temperature at regions RS and VW, yet heating continues (2mks)

……

……

……

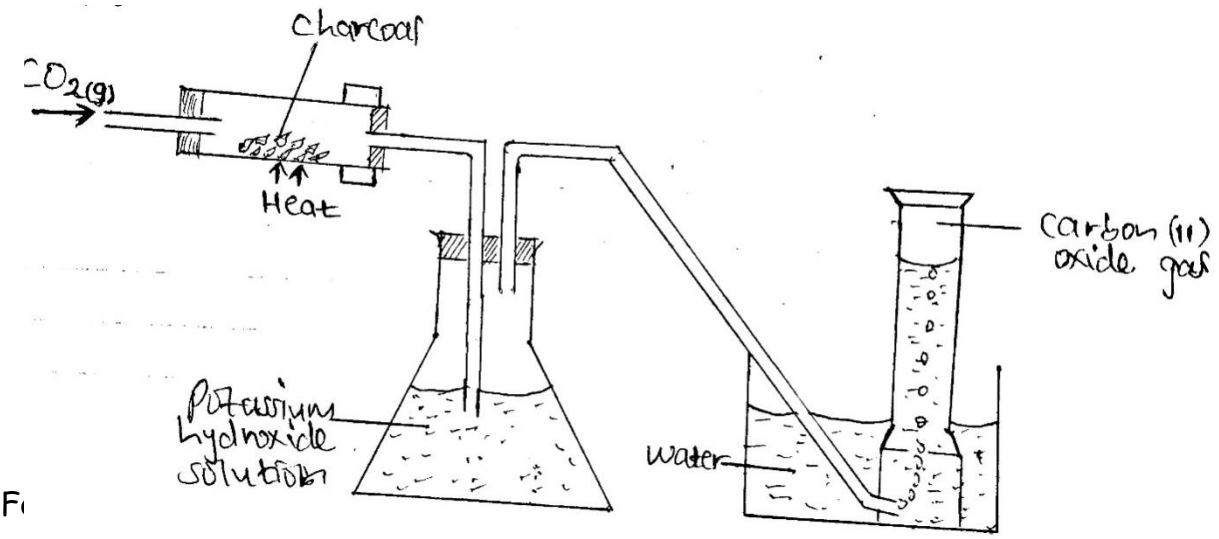
c) On the same axes, sketch a graph of the curve which would be obtained if some salt was added to the solid before heating begun. (1mk)

9. Calculate the;

a) Mass of sodium oxide formed when 3.45g of sodium burns in air. (Na =23, O=16)(2mks)

b) Moles of nitrogen gas in 0.56g of nitrogen gas at s.t.p (Molar gas volume 22.4dm3, (N=14) (2mks)

10. The set up below was used to prepare dry carbon (II) oxide gas. Study it and answer the questions that follow.



a) State the role of the following substances during the experiment.

i) Carbon (IV) oxide gas (1mk)

……

ii) Charcoal (carbon) (1mk)

……

iii) Potassium hydroxide solution (1mk)

……

b) Identify two mistakes committed in the set up above (2mks)

……

……

c) Write the equation of the reactions taking place in the combustion tube (1mk)

……

d) State one use of carbon (VI) oxide gas (1mk)

……

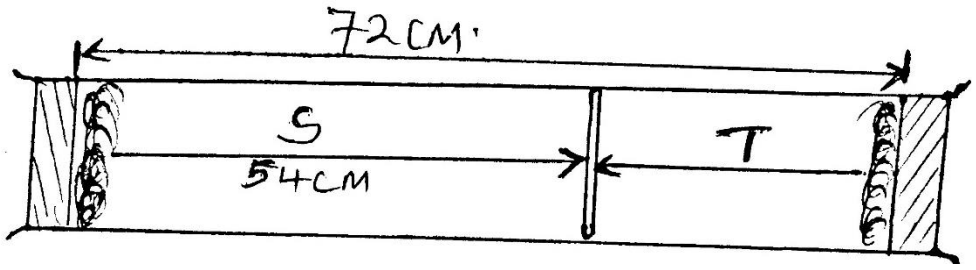
e) Explain why carbon (II) oxide is regarded as a very poisonous gas. (2mks)

……

……

……

11. The Diagram below shows two gases S and T diffusing from two opposite ends, which met and reacted after 18 seconds.



a) Which of the gases is lighter? Give a reason (2mks)

……

b) Calculate the rate of diffusion of each gas;

i) Gas S (1mk)

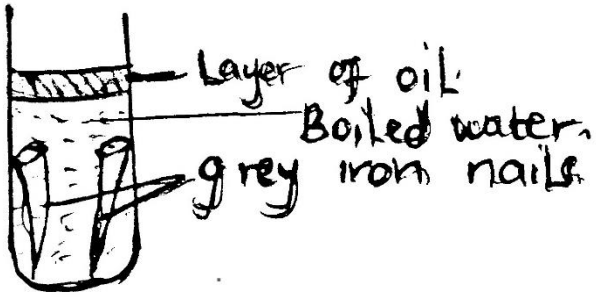
ii) Gas T (1mk)

c) Given that the molecular mass of gas T is 17, calculate e the molecular mass of gas (2mks)

12. a) Write down chemical formula of rust (1mk)

……

b)The experiment below was performed by form 1 student



State and explain the observation made after 3-5 days (2mks)

……

……

……

c) i) What is a redox reaction (1mk)

ii) Using ( ) to show where a reaction occurs and a cross (x) were no reaction occurs, complete the table below (3mks)

Metal oxide / Metal	Al_2O_3	ZnO	CuO
Al	X		
Zn			✓
Cu		X	

13. How many chloride ions are present in 1.7g of magnesium chloride crystal.

(L=6.0×10^{23}, Mg =24, Cl =35.5) (2mks)

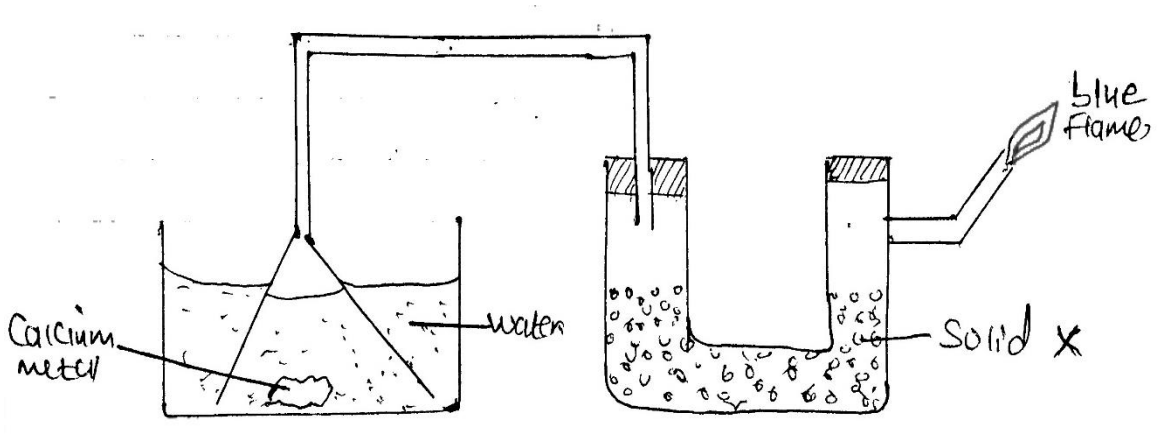
14. Element P has atomic number b and Q atomic number 9.

a) Write the formula of the compound formed when elements P and Q react (1mk)

……

b) Using dots (·) and crosses (X) diagrams, show the bonding in the compound of P and Q (1mk)

15. The set up below was used to investigate the reaction between metals and water.



a) Identify solid X and state its purpose (1mk)

……

b) White a chemical equation for;

i) The reaction of calcium metal with water (1mk)

……

ii) The reactions that produces the blue flame (1mk)

……

c) State and explain the observation made on red and blue litmus papers when put into the solution in the beaker at the end of the experiment (2mks)

……

……

……

d) State the role of hydrogen gas in the manufacture of margarine (1mk)

……

……

16. Study the table below and then answer the questions that follow

Substance		**A**	**B**	**C**	**D**	**E**	**F**
Melting point (^{0}C)		801	113 119	-39	5	-101	1356
Boiling point (^{0}C)		1410	445	457	54	-36	2860
Electrical conductivity	Solid	Poor	Poor	Good	Poor	Poor	Poor
	Liquid	Good	Poor	Good	Poor	Poor	Poor

a) Identify with a reason the substance that has;

i) A metallic structure (1mk)

……

ii) A giant atomic structure (1mk)

……

iii) A molecular structure and exist in liquid state at room temperature and pressure. (1mk)

……

……

b) Give a reason why element B has two melting points (1mk)

……

……

c) Substance A and C conduct electric current in different states. Explain how they differ in their mode of conductivity. (2mks)

……

……

……

17. A compound weighing 42g was found to contain 12g of magnesium, 6g of carbon and the rest is oxygen.

a) Determine the empirical formula of the compound (2mks)

b) If the relative molecular mass of the compound is 84, determine its molecular formular.

(1mk)

18. The follo0wing is a table of some elements

Element	**Electronic configuration**	**Ionization energy kJmol^{-1}**
W	2,2	1800
X	2,8,2	1450
Y	2,8,8,2	1150

a) What is the general name given to the group in which the elements belong (1mk)

……

b) Explain why W has the highest ionization energy (2mks)

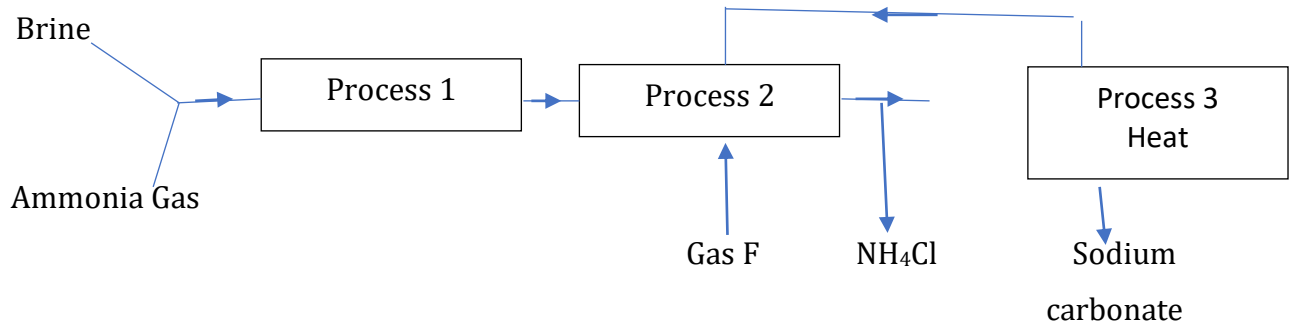
……

……

……

c) Draw the ionic structure of element Y (1mk)

19. Below is a simplified scheme of Solvay process



a) Identify gas F (1mk)

……

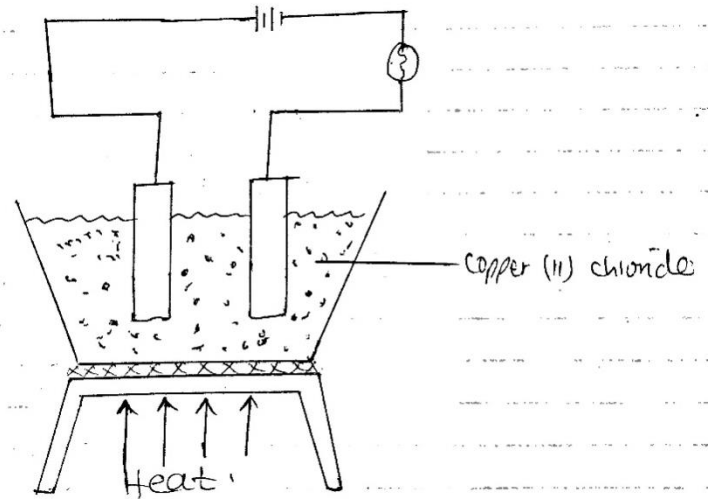
b) Name one substance recycled in the scheme above (1mk)

……

c) Write a chemical equation for the reaction in process 3. (1mk)

……

20. A student set up an experiment below to investigate the conductivity of molten copper (II) chloride.



a) What is the purpose of heat (1mk)

……

b) Label the cathode and anode (1mk)

……

c) Name the ions present in the electrolyse (1mk)

……

d) Write an equation of the reaction at the Anode. (1mk)

……

e) State the observation made at the cathode. (1mk)

……

21. A form 3 student carried a Titration practical between 0.1M HCl and a solution of NaOH whose concentration was unknown.

- The student titrated 25cm^3 of NaOH into a 250ml conical flask and added phenolphthalein indicator.
- She titrated HCl against NaOH until the pure colour turned colourless.
- The reading in the burette was 12.5
- Using the information above complete the table below

	I	II	III
Final Burette reading	12.5		37.5
Initial burette reading	0	12.5	
Volume of HCl used		12.5	12.5

a) Calculate the average volume of HCl used (1mk)

b) How many moles of HCl were used (1mk)

c) Given the equation in reaction between NaOH and HCl is

$NaOH + HCl \longrightarrow NaCl + H_2O$

Calculate the moles of NaOH used (2mks)

d) Calculate the morality of NaOh (1mk)

NAME:

_____CLASS:_____

ADM NO:_____ DATE:_____

ENGLISH

TIME: 2½HRS

MARCH

END OF TERM ONE EXAMINATION

ENGLISH FORM 1

TIME: 2½HOURS

INSTRUCTIONS TO CANDIDATES

1. Write your details in the spaces provided above.
2. Answer all the questions in this paper.
3. Answer the questions in English

EXAMINER'S USE ONLY

QUESTION	MARKS	CANDIDATE'S SCORE
1	20	
2	10	
3	20	
4	10	
5	20	
6	20	
TOTAL	100	

1. COMPOSITION (20MKS)

Write a composition beginning with the following statement.

As I left home that sunday afternoon, I never thought that my life would change…….

2. CLOZE TEST (20MKS)

Fill in each blank space with the most suitable word

A long time ……1……., the Gikuyu Society was matriarchal. ……2…….was ruled by women. The founder ……3……..,Gikuyu and Mumbi, had only daughters.Worried that he might not have any male heirs, Gikuyu turned to God for assistance. ……4…….provided nine handsome ……5…….to marry Gikuyu's daughters. The girls then became family and ……6……..heads. Thus, the nine clans among the Agikuyu bore feminine names.

The matriarchal system ……7…….therefore established, and the Agikuyu have since referred to themselves as ……8……of Mumbi. In those days, women held the top leadership. ……9…….were the only decision makers. The men worked in the field under the supervision of ……10……..

3. COMPREHENSION (20MKS)

Read the following passage and answer questions that follow

TURN THE POINTING FINGER

A cancer it has been called. The comparison is suitable, for corruption, like cancer, is **insidious.** Cancer begins in a few cells in your body, and unless it is detected in time and arrested, it spreads to other areas. Similarly, corruption may begin with just two people and before we know it, it becomes a ways of life for most of us. We are so quick to point fingers at others accusing them of corruption without ever turning the spotlight on ourselves. Until we accept the role each of us plays in **perpetrating** this evil and resolve to change, corruption is here to stay.

Part of the problem is that we tend to **justify**our corrupt acts on moral grounds. Take a hospital situation for instance. You take a beloved one there who is seriously sick. You observe that the doctor is not in any hurry to attend to your patient, but promptly sees those, though less ill have "seen him or her on the side".

You tell yourself that is it immoral to sit and watch your beloved die when you are in a position to save the situation. So you do "the necessary." But have you ever stopped to think what happens to those who do not have money to bribe the doctors?

Corruption also manifests itself in other ways. For example, some of us feel that the cost of essential services such as water and electricity is unfairly high. We, therefore, think it is all right to **tamper with** the

meters to make them indicate minimal consumption. The bolder ones among us will even **collude** with the officers concerned to make the records of such meters vanish into thin air. The next time you engage in this practice, stop and ask yourself if these services would still be available if all of us behaved like you. Also, think of the consequences whenyour forty days as a thief are over; for indeed you are a thief.

What about those who will offer bribes even before they are solicited for. They apply for a job somewhere and because they do not have confidence in their own qualifications, they take a "present" to the would-be employers. Others believe that qualifications, impressive as they may be, do not count for much. What matters is whom you know or see in advance.Unfortunate are those who know nobody and have no money. Most of us would agree that this state of affairs is totally undesirable and should be stopped. If you and I do not stop it, who do we expect to? Let merit be the basis on which jobs and other opportunities are obtained.

Over the years, there has been a chorus about how corrupt our police force is. Well, as the saying goes, it takes two to tangle in this dance of corruption. Many are the traffic offenders who will be quick to offer a bribe to a police officer immediately their vehicles are stopped. They opt to take the easy way out rather than face traffic charges in court. "It saves time and money," they say. Is it any wonder then that we have so many road accidents? If they abided by traffic rules, they would have no need to bribe and would save something more precious-human lives.

We are also quick to complain that our courts are awash with the decay of corruption. What we forget is that the judges and magistrates do not bribe themselves. It is you and I who approach them, wanting to influence the outcome of our cases. We are convinced that regardless of how smart our lawyer is (if we have one) we cannot get a fair trial though we may be as innocent a an infant. But how will you like it if one day you suffer an injustice in court because somebody offered more money than you did? Justice is meant to take its due course, not to be bought like a kilogram of meat which many cannot afford.

Are you a doctor, a patient, a police officer, a motorist, a passenger, a judge or magistrate, a lawyer or a defendant? Whoever you are, turn the beam of light on yourself. Surely, there is a way, direct or indirect, in which you have fed and fattened the monster called corruption. You may not participate in any corrupt acts but when you passively watch your neighbor steal electricity or a driver bribe a police officer and fail to report the matter to the relevant authorities, you are equally guilty.

Questions

<u>Read the following passage and answer the questions that follow</u>

a) In what way is corruption like cancer? (2mks)

……

……

……

b) According to paragraph one what must we do to stamp out corruption? (2mks)

……

……

……

c) What excuse do some people give for bribing doctors? (2mks)

……

……

……

d) Who will suffer if we encourage bribery in hospitals? (2mks)

……

……

……

e) Why is it wrong to tamper with electricity and water meters. (2mks)

……

……

……

f) Rewrite the following sentence in the past tense **(1mk)**

Over the years there have been a chorus about how corrupt our police force is.

……

……

g) What must drivers do to avoid the need to bribe? (1mk)

……

……

h) Explain who is to blame for corruption in courts (2mks)

……

……

……

i) Explain if the title is appropriate to the content of the story. (3mks)

……

……

……

……

j) Explain the meaning of the following words as used in the passage (2mks)

i) Insidious

……

ii) Perpetrating

……

4. ORAL LITERATURE (10MKS)

Read the following story and answer the questions that follow

Once upon a time, a young woman went to meet her Warrior love out in the wilderness. He directed her to a place in the forest where he would meet her. "When you reach a fork along the path, take the right path." The young woman set off but when she arrived at the fork, she followed the left path forgetting what the warrior had told her. After a while, she came across an Ogre who threatened to eat her up. The girl answered in a song.

Not here, my dear
Let us go to the water hole
Where you can eat me
And have a drink
Oh, my dear warrior, where are you?

The Ogre led the young woman on and when they arrived at another spot, he said to her, "I am going to eat you here." The young woman again broke into a song, urging him not to eat her yet. They went further on and each time, the Ogre threatened to eat her, she sang so that the warrior could hear her. Still, the warrior did not hear her. When they reached a cave by the river, the Ogre prepared a place where he could kill her. When he brought the leaves, she objected to ordinary leaves saying she preferred sweet smelling leaves. Eventually, the sweet-smelling leaves were brought. The Ogre laid the leaves on the ground and lit a big fire. All this while, the young woman was singing the same song. Just as the Ogre was about to eat her, the warrior arrived and shouted at the Ogre saying: "It is now your flesh that will be laid on those leaves." The tables was turned on the Ogre.

Questions

a) Classify the narrative above. (1mk)

……

……

b) Why did the young woman end up meeting the Ogre? (2mks)

……

……

……

c) How did the young warrior come to know that his love, the young woman, was in trouble?

(1mk)

……

……

d) In the story, the Ogre's name is written beginning with a capital letter. Mention the reason for this.

(2mks)

……

……

……

e) "She came across an Ogre". (Rewrite the statement in plural) (1mk)

……

……

f) Other than the story you have identified in (1) above, list three other types of narratives.

(3mks)

……

……

……

5. ORAL SKILLS (20MKS)

a) Provide another word which is pronounced the same way as those below. (4mks)

i) Peace ……

ii) Eight ……

iii) No ……

iv) Whole ……

b) Underline the silent letters(s) in the words below. (3mks)

i) Tomb

ii) Hour

iii) Knead

c) Classify the words below according to the pronunciation of the vowel sound. (4mks)

Chip, leave, keep, dip, seen, pit, these, lid

/i:/	/i/

d) During a reading lesson, the teacher asked the students to silently read a passage in the course book. Afterwards, the teacher remarked that some students had read improperly. Mentioned three mannerisms that the students had shown for the teacher to remark so.

(3mks)

……

……

……

……

e) Read the genre below and answer the questions that follow.

A: My house has no door.

B: The brain

A: No

B: An avocado

A: No. If I tell you the answer, what will you give me?

B: I will give you a gizzard.

A: The answer is an egg.

Questions

i) Classify the genre above. (1mk)

……..

ii) Who says the parts labeled. (2mks)

A: _____

B:_____

iii) What is the name of the part:

"The answer is an egg"? (1mk)

……

iv) List two functions of the genre you have identified in (i) above. (2mks)

……

……

6. GRAMMAR (20MKS)

a) **Fill in the blank spaces in the sentences below using an appropriate abstract noun formed from the word in brackets. (3mks)**

i) Maria's ……(kind) earned her respect among her peers.

ii) ……(corrupt) is a vice which should be fought by everyone.

iii) Kimani's ……(sick) affected Amani.

b) **Use 'a', 'an' or 'the' to fill in the gaps in the sentences below. (4mks)**

i) The king appointed him ……heir to the throne.

ii) My brother loves playing ……Piano.

iii) There was ……man standing at the door. ……man was in a blue suit.

iv) The course will take ……year.

c) **Use the plural forms of the words in the brackets to fill in the gaps in the sentences below. (4mks)**

i) The ……(thief) were identified by the ……(chief) of their villages.

ii) There were only six ……(fox) in the cage.

iii) The boys forgot their ……(laggage) in the school bus.

iv) The ……(sheep) were grazing in the field.

d) **Punctuate the following sentences correctly (3mks)**

i) peter works for a company in kigalirwanda

……

ii) mercy the cateress is a hardworking lady

……

iii) how did you find life in nyeri

……

e) **Rewrite the sentences below while correcting the errors (2mks)**

i) My names are Susan Muthoni

……

ii) The preacher repeated the statement again

……

f) Use an appropriate pronoun to complete the sentences below. (2mks)

i) The car in the garage is ……

ii) ……mother is a nurse.

g) Fill in the blank spaces in the following sentences using an appropriate form of the verb given in brackets. (2mks)

i) The girls ……(sweep) the room yesterday morning.

ii) Jane ……(go) to the clinic every Monday.

NAME:

_____CLASS:_____

ADM NO:_____ DATE:_____

ENGLISH

TIME: 2½HRS

MARCH

END OF TERM ONE EXAMINATION 2020

ENGLISH FORM 2

TIME: 2½HOURS

INSTRUCTIONS TO CANDIDATES

4. Write your details in the spaces provided above.
5. Answer all the questions in this paper.
6. Answer the questions in English

EXAMINER'S USE ONLY

QUESTION	MARKS	CANDIDATE'S SCORE
1	20	
2	10	
3	20	
4	30	
5	20	
TOTAL	100	

1. COMPOSITION (20MKS)

Imagine that your uncle's family is travellingto Mombasa for weekend; and you have been invited to accompany them. Write a letter to your uncle accepting the invitation.

2. CLOZE TEST (10MKS)

Fill in the blank spaces with the most appropriate word

It was about one and ……1……..half years since the emergency had ……2……declared in the Mt. Kenya Reserve. The situation had ……3……worse in the Rift Valley also. The Great Sweep had followed the emergency. Every Kikuyu, Embu and Meru as the passbooks disclosed, had his or ……4……movements controlled. This, however, was done whether one was ……5……..or not. Those who were guilty of aidingthe Mau Mau movement ……6……being swept from all over the country and taken back to the central province. It was like herding the cattle back into ……7……boma because they had broken through it.

Soon after the declaration of the emergency, only a few ……8……..or women had been caught and detained. Nevertheless, this had not ……9……the Mau Mau movement. The tirest fighters had become even tougher. It was their ……10……they were fighting for and had sworn to fight the intruder to the end.

3. COMPREHENSION (20MRKS)

Read the passage below and answer the questions that follow

Let us do away with gender-defined roles

When God made women out of man according to the Biblical story of creation), He did not restrict her from doing certain types of jobs, nor did He forbid man from doing any kind of chores. The only problem with us today is that we think like those who lived in an age where men's roles and women's roles were clearly specified.

Consequently, it is rare to find a man at home doing chores like washing the dishes, preparing supper for the family or even cleaning the house while the women of the house sits to watch the news or a programme she enjoys on television.This mindset has also been passed down to children, where you will find a girl working tirelessly around the house while her brother is comfortably stretched out on the sofa watching a movie. Why can't we train our children to do what needs to be done irrespective of their gender?

Personally, I was brought up in a home where chores are divided equally among those present, and no amount of protesting could exonerate me from my assigned chores, which is why I find this gender

sensitivity somewhat discriminative. I once broached the issue of sharing chores with a friend of mine and his reaction was unpredictable, "You expect me to cook, wash the dishes, clean the house and look after the baby? These are things I can't do no matter how much I love her! My job is to put food on the table and secure our children's future," he responded passionately.These are biases so deeply ingrainedthat it seems odd if a man tells you that he is a nurse. The question that naturally comes to mind will be, "Isn't that a woman's job?" because you expect a nurse to be a woman in a pretty white or small stripped dress and a white cap. However, the truth is that men are just as capable of providing nursing care as their female counterparts.

And turning to politics, how many of our constituencies have female representatives in parliament? Just a handful. And how many countries in the world have women presidents or prime ministers? Another handful. Many women have joined politics hoping to succeed where men have failed but quit after being frustrated by men's obvious lack of trust in their abilities. But from those who have persevered, we cansee that women do better than men since they start this from the basic level of the home, where they take care of their families and do everything to keep them going.

Another very peculiar field is football. Fans flock pubs to watch male players juggle the ball and make their fancy moves and sometimes fights erupt after heated arguments about football games like the World Cup, premier League and other tournaments. But I have never heard people fight over the Women's World Cup or anybody disappointed after a women's team he supports took a thrashing from an opponent.

Careers like engineering have also been affected by this negative trend. It is getting increasingly rare to find a woman in overalls lying under a heavy truck checking for engine trouble or repairing the brakes. This is considered a man's job and many people believe a woman cannot do it properly.

I believe is it time we got rid of these outdated beliefs and started appreciating women for who they are. We should give them a chance to prove themselves and open up more opportunities for them. Men should also realize that to do perfectly, one requires brain, not brawn,and if this continues, it will do more harm than good. Besides, what a man can do, a woman can do, sometimes even better. Giving women an opportunity, will create a balance and bring out the best in everyone.

(Adapted from: *Daily Nation* 24thFebruary 2010, *Living Magazine* page 2-Gichuru Hebson)

Questions

a) According to the passage, what seems to cause conflicts in gender roles today? (1mk)

……

……

b) What is the author's opinion of defined gender roles (1mk)

……

……

c) How has his upbringing contributed to this opinion? (1mk)

……

……

d) Make notes on duties of men and women as brought out in the passage (5mks)

……

……

……

……

……

……

……

……

e) Identify any three careers that are considered male dominated in our society today (3mks)

……

……

……

……

f) In your opinion, should there be gender defined duties for boys and girls? (2mks)

……

……

……

g) According to the passage, what should be done to get rid of the outdated practice of defined gender roles? (3mks)

……

……

……

……

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

i. Exonerated

……

ii. Ingrained

……

iii. Peculiar

……

iv. Brawn

……

4. ORAL SKILLS (30MKS)

a) Choose the correct words to fill the blanks *(6mks)*

i. The beautiful lady with shinny ……named Nora as her …… (hare, heir,hair)

ii. If Peter lets the bird ……., he might ……it forever. (Lose, loose, loss)

iii. When you ……too quickly, you could run out of …… (breath, breadth, breathe)

iv. The young farmers keep ……for their ……farming. (diary, daily, dairy)

v. The tailor bought a ……to make a ……for the beautiful girl. (Clothe, cloth, clothes)

vi. They……the cattle in the ……cattle ……(deep, dipped, dip)

b) Use the following words to construct two sentences. (4mks)

One as a noun and the other on its verb form

i. Project

……

……

ii. Air

……

……

c) Identify the silent letters in the following words (5mks)

i. Fascinate

ii. Wrist

iii. Slaughter

iv. Handkerchief

v. Fasten

d) Indicate the correct intonation for the following sentences (3mks)

i. Can I take you home?

……

ii. How did she travel to Nairobi?

……

iii. I have been working very hard for the coming examination.

……

e) Pick the odd one out according to the pronunciation of words in each group in reference to the letters underlined (2mks)

Charade Church Chauffeur Chasis

……

Axe Xenon Tax Maximum

……

f) Read the poem below and answer the questions that (10mks)

I had a dream last night I dreamt.
I had to pick a mother out.
I had to pick a father too.
At first, I wondered what to do,
There were so many there, it seemed,
Short and tall and thin and short.
But just before I sprang a wake,
I knew what parent I would take.

And this surprised and made me glad,
They were the ones I always had.

Questions

a) Describe the rhyme scheme of the above poem. (2mks)

……

……

……

b) Apart from rhyme identify three aspects of style based on pronunciation. (3mks)

……

……

……

c) Which words would you stress in line 7 and why? (3mks)

……

……

……

……

d) How would you say the last line of the poem (2mks)

……

……

……

5. GRAMMAR (20MKS)

a) Rewrite the following sentences according to the instructions given in brackets.

(3mks)

i. My sister cooked lunch at two o'clock (Begin: Lunch…)

……

ii. The child saw a Lion in the forest (change into the negative)

……

iii. There were dresses of girls in the shop (Use the possessive noun)

……

b) Fill in the blank spaces with an appropriate preposition (3mks)

i. There was a snake ……the hole.

ii. We went to Mombasa ……air.

iii. ……rearing livestock, Musa also keeps fish.

c) Complete the sentences below using an appropriate form of the word given in brackets.

(4mks)

i. The sick girl looked ……(help)

ii. The village was ……(access) due to the bad roads.

iii. His poor ……(pronounce) affected his delivery of the acceptance speech.

iv. Such an ……(occur) would scare the people.

d) Punctuate the following sentences. (2mks)

i. watch out there is a speeding car

……

ii. if it rains we will not travel James noted

……

e) Fill in each gap in the following sentences with the progressive form of the verb in brackets (2mks)

i. The men ……(argue) on top of their voices.

ii. My family ……(plan) to have a holiday at the coast in August.

f) Fill in the blank spaces with the correct form of the adjectives given in brackets (3mks)

i. Njoki is the ……(bright) of her two friends.

ii. This flower is ……(pretty) than that one.

iii. Biashara market is the ……(far) of all the markets you have mentioned.

g) Use an appropriate quantifier phrase to complete the sentences below. (3mks)

i. ……money was spent in constructing the railway line.

ii. ……people attended the rally.

iii. Serve me ……juice, please.

NAME: _____ CLASS:_____

ADM NO:_____ DATE:_____

ENGLISH

TIME: 2½HRS

MARCH

END OF TERM ONE EXAMINATION

ENGLISH FORM 3

TIME: 2½HOURS

INSTRUCTIONS TO CANDIDATES

7. Write your details in the spaces provided above.
8. Answer all the questions in this paper.
9. Answer the questions in English
10. Answer either 4A or 4B

EXAMINER'S USE ONLY

QUESTION	MARKS	CANDIDATE'S SCORE
1	20	
2	10	
3	20	
4	20	
5	15	
6	15	
TOTAL	100	

6. COMPOSITION (20MKS)

Write a composition ending with the following words.

.....it then dawned on him that Martin was not a good friend as he always posed.

7.

8. CLOZE TEST (10MKS)

Fill in the blank spaces with the most appropriate word

The police frequently .....1.....our slum village in search of hidden illicit brews. It was one of .....2.....raids that constable Amkatwende earned himself unexpected honour .....3.....respect for his detective skills. .....4.....Chang'aa brewers in the village had devised several smart ways of hiding their liquor in spots .....5.....even the nosiest cops would not dream of looking. A new favourate trick was to put the Chang'aa.....6.....twentylitrejerrycans,close them tightly, tie strong sisal ropes .....7.....and necks and dangle them down pit .....8..... This of course necessitated boring extra holes covered and disguised .....9.....soil, refuse or even grass. No policeman in his right .....10.....was going to start looking for hidden *Chang'aa*down a toilet pit, surely.

9. ORAL SKILLS (20MKS)

a) Construct a sentence to bring out two different meanings of the following words (4mks)

i) Refuse

.....

ii) Wound

.....

b) By the use of appropriate arrows, show which of these sentences has a rising or a falling intonation (4mks)

Student: Could I come in please?

.....

Teacher: Yes you may

.....

Student: Do you mind if I joined you?

.....

Teacher: I am afraid not.

……

c) You have just completed your national examination. You then come across an advertisement on TV broadcasting at a media college near your home. You are interested and decide to make a visit to get more information. Complete the dialogue between you and the receptionist.

Receptionist: Good morning. Can I help you?

You:_____

_____

_____(2mks)

Receptionist: Are you interested in the January intake?

You:_____

_____

_____(1mk)

Receptionist: Fine O.K will we have ……um……the short intensive full-time courses this term.

You:_____

_____

_____(1mk)

Receptionist: Yes. Each course lasts for three weeks.

You:_____

_____

_____(1mk)

Receptionist: Well, its about twenty hours a week

You:_____

_____

_____(2mks)

Receptionist: The whole course will cost you Ksh 18,000. We require a deposit of ksh 6,000 and Ksh 500 registration fee.

You:

_____

_____

_____(1mk)

d) For each of the following words, write another word that is pronounced the same as the one given. (4mks)

i) Miner ……

ii) Suite .....

iii) Throws .....

iv) Flew .....

10. ANSWER EITHER QUESTION 4A OR 4B

4a) Read the following excerpt below and answer the questions that follow (20mks)

Blossoms of the Savannah H.R Ole Kulet

They were walking back to homestead talking animatedly when they were accosted by a tall heavyset young man with a thick dark beard and moustache. He wore a pair of faded jeans and a dirty blue shirt. On his face was a wide impudent grin. Taiyo glanced at the young man and looked away. She moved closer to Resian and nudged her to change direction. But the man walked directly in to Taiyo. One seeing the man approaching, a heavy knobkerrie in his hand, Resian almost fainted.

"Please do not harm us," she pleaded. 'We do not have any money with us."

"Who told you I want any money: the man jeered as he strode menacingly towards them. "Are you not the *intoiyenemengalana* from Nakuru town?" he asked laughing contemptuously. "I want to have a good look at you and know what kind of stuff you are made of!" He roughly grabbed Taiyo's arm.

"Leave my sister alone!" Resian hissed indignantly lifting her eyes and glaring into his. "Let go her arm at once!"

"Let go of my hand," Taiyo demanded, trembling with anger. "We are not the kind of women you have in mind!"

"What women!" the man retorted acidly. "Soon, you will be able to differentiate decent women from *intoiyenemengalana."*

Taiyo tried to wrestle her arm from the man's grip without success. But suddenly, he seemed to change his mind. With a sour smile, he spat and glared at the girls.. Then, releasing Taiyo's hand, he told them: "You have not seen the last of me. Soon you will come to know that there is no place in our society for women of your ilk." He turned and disappeared down the road as suddenly as he had appeared.

The two girls sighed heavily and shook their heads as they watched him walk away. Although they had put up brave faces, they were terribly shaken. "Thank God his intension was not to rape us," Resian said tears streaming down her face. "We would have been helpless in the hands of such a brute."

Questions

a) Where are the girls coming from? (2mks)

……

……

……

b) What are the girls discussing before they are accosted by the man. (3mks)

……

……

……

c) "Soon you will be able to differentiate decent women from *Intoiyenemengalana*". What does the man mean by this? (2mks)

……

……

……

d) Identify two character traits of the man in this passage. Illustrate your answer (4mks)

……

……

……

……

e) Give another word to replace the underlined word in the sentence below (1mk)

"Who told you I want any money?" the man jeered as he strode menacingly towards them.

……

……

f) Explain two stylistic devices evident in this excerpt. (4mks)

……

……

……

……

g) Using two illustrations from the excerpt, explain the plight of women in Nasila (4mks)

……

……

……

……

4B) A DOLLS HOUSE

Read the following extract and answer the questions that follow (20mks)

Nora: Yes, tremendous! A barrister's profession is such as uncertain thing, especially if he won't undertake unsavoury cases; and naturally Torvald has never been willing to do that, and I quite agree with him. You may imagine how pleased we are! He is to take up his work in the Bank at the New year, and then he will have a big salary and lots of commissions. For the future we can live quite differently-we can do just as we like. I feel so relieved and so happy, Christine! It will be splendid to have heapsof money and not need to have any anxiety, won't it?

Mrs. Linde: Yes, anyhow I think it would be delightful to have what one needs.

Nora: No, not only what one needs, but heaps and heaps of money.

Mrs. Linde: (Smiling) Nora, Nora, haven't you learned sense yet? In our schooldays you were a great spendthrift.

Nora: (Laughing) Yes, that is what Torvald says now. (Wags her ginger at he). But "Nora, Nora" is not so silly as you think. We have not been in a position for me to waste money. We have both had to work.

Mrs. Linde: You too?

Nora: yes, odds and ends, needlework, crotchet-work, embroidery, and that kind of thing. (dropping her voice) And other things as well. You know Torvald left his office when we were married?There was no prospect of promotion there, and he had to try and earn more than before. But during the first year he over-worked himself dreadfully. You see, he had to make money every way he could, and he worked early and late; but he couldn't stand it, and fell dreadfully ill, and the doctors said it was necessary for him to go south.

Mrs. Linde: You spent a whole year in Italy, didn't you?

Nora: Yes, It was no easy matter to get away, I can tell you. It was just after Ivar was born; butnaturally we had to go. It was a wonderfully beautiful journey, and it saved Torvald's life. But it cost a tremendous lot of money, Christine.

Mrs. Linde: So I should think.

Nora: It cost about two hundred and fifty pounds. That's a lot, isn't it?

MrsLinde: Yes, and in emergencies like it is lucky to have the money.

Nora: I ought to tell you that we had it from papa.

Mrs. Linde: Oh, I see. It was just about that time that he died, wasn't it?

Nora: Yes; and, just think of it, I couldn't go and nurse him. I was expecting little Ivar's birth every day and I had my poor sick Torvald to look after. My dear, kind father – I never saw him again. Christine. That was the saddest time I have known since our marriage.

Mrs. Linde: I know how fond you were of Him. And then you went off to Italy?

Nora: Yes; you see we had money then, and the doctors insisted on our going, so we started a month later.

Mrs. Linde: And your husband came back quite well?

Nora: As sound as a bell!

Mrs. Linde: But – the doctor?

Questions

a) Explain what happens immediately after this extract (2mks)

……

……

b) Identify and illustrate any character trait of the following as brought out in the excerpt?

(6mks)

i) Nora

……

……

ii) Mrs. Linde

……

……

iii) Torvald

……

……

c) Explain what Nora implies when she says: But "Nora, Nora" is not so silly as you think

(3mks)

……

……

……

……

d) Dropping her voice, Nora says "And other things as well" What do you think she means

(3mks)

……

……

……

e) Identify and illustrate any two themes that stand out in the extract (4mks)

……

……

……

……

f) Give the meaning of the following words and phrases as used in the extract (2mks)

i) A barrister

……

ii) Unsavoury cases

……

11. POETRY

Read the poem below and answer the questions that follow

Like the tout loading heavy luggage onto a bus
Heavily heaves as he hosts the lawyer,
The doctor, the engineer
And even the robber into the bus of academic pursuit
To differentiate destinies
He is the teacher, the role model
The conveyer belt of knowledge

Cynically repeats the chain
Encountering and vicious cycle of stubborn clients.
Taking long and short strides
To hold the academic hand of sojourners
To assist them across this busy road
Some stop mid-road
And he painfully has to drag them

He is immensely wealthy

For he has a rich bank account

Of books and biros

Chalk and chalks

Pens, pencils and paper.

While others count money in bank sheets

He counts marks in mark sheets

For he is a punching bag for the politician,

A dartboard for the parent over pupils' laziness

A milking cow for the trade unionist, the taxman…

The landlord…

He is important

For he receives claps and handshakes

And a million "thank you,"

Plus a kick in the back

From a cynical, thankless society

Undeterred, the teacher moves on.

Questions

a) Who is the persona in the poem? (2mks)

……

……

……

b) How does the speaker compare the teacher to a tout? (2mks)

……

……

……

c) Identify and explain one character trait of the teacher. (2mks)

……

……

……

d) Underline the prepositional phrase in the following line.

He counts marks in mark sheets. (1mk)

……

e) Identify the tone used by the persona in stanza three (2mks)

……

……

……

f) Make notes on the challenges encountered by the teacher. (3mks)

……

……

……

……

g) Explain the meaning of the following line. (1mk)

Undeterred, the teacher moves on

……

……

h) State and appropriate title for the poem (2mks)

……

……

12. GRAMMAR (15MKS)

a) Rewrite the following sentences according to the given instructions. (3mks)

i) It is unhealthy to eat a heavy supper. (End:…is unhealthy)

……

ii) James invited us to his house (Change to the passive)

……

iii) Maria rarely comes to school late. (Use 'seldom' instead of rarely)

……

b) Fill in each of the blank spaces with the correct form of the word in brackets (3mks)

i) Their ……(enemy) has lasted for four years.

ii) In our school, we are taught to be ……(respect) to authority.

iii) Defamation is a ……(punish) offence.

c) Fill in the blank spaces with appropriate preposition (3mks)

i) The dog came ……us menacingly.

ii) ……the warnings, the boy still sneaked from school.

iii) The carriers loaded the goods ……..the carrier of the lorry.

d) Use an appropriate demonstrative determiner to fill in the gaps in the sentences below. (3mks)

i) ……oranges are unripe.

ii) ……shirt here is Kimathi's.

iii) I like ……rock over there.

e) Explain two meanings brought out in the sentence below. (2mks)

I saw her dress

……

……

f) Combine the following sentences into one sentence.

Jim stole from the supermarket

Jim has been jailed

……

……

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

SCHOOL ..... STUDENTS SIGN.....

DATE :.....

FORM ONE

PHYSICS 232

END OF TERM ONE EXAMINATION

TIME : 2 ½ HOURS

INTRODUCTIONS TO CANDIDATES

Write your name, Admission number and school

- This paper has two sections, answer all the questions in the spaces provided
- Follow the instructions given carefully
- All workings must be clearly shown.

FOR EXAMINERS USE ONLY

SECTION	QUESTION	MAXIMUM SCORE	CANDIDATES SCORE
A	1-25	6OMKS	
B	26	7	
	27	5	
	28	9	
	29	5	
	30	7	
	31	7	
		100MKS	

SECTION 1

ANSWER ALL QUESTIONS (6OMKS)

1. Define physics (1mk)

---

2. Name two branches of physics (2mks)

---

3. Give two career opportunities for someone who has done physics upto form four level (2mks)

---

4. State two laboratory rules (2mks)

---

5. Define the following quantities of measurements and give their S.I unit

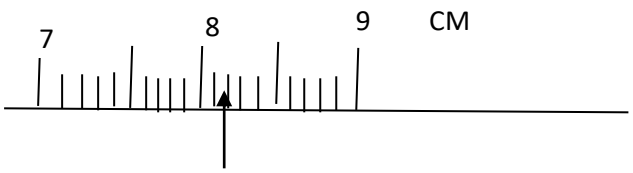
   i. Length (2mks)

---

   ii. Volume (2mks)

---

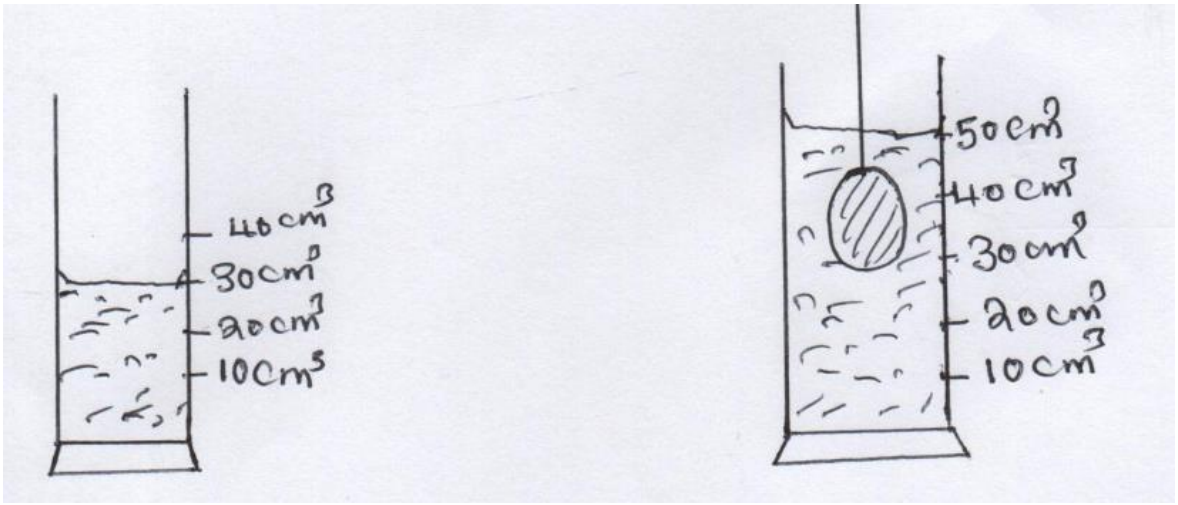
6. State the reading shown by the arrow below (1mk)



7. A sheet of paper measures 25cm by 15cm. calculate its area in mm^2 (3mks)

8. A sphere of diameter 7.0CM is moulded into a thin uniform wire of diameter 0.35cm. calculate the length of the wire in metres (take $\pi = \frac{22}{7}$) (4mks)

9. Use the set up below to answer the questions that follows



a) Find the volume of the stone (2mks)

b) Calculate the density of the stone given that it's mass is 250g (2mks)

10. A tank measures 20cm long, 10m wide and 2m high. Calculate the mass of water in the tank when it is full. Density of water is 1000kg/m^3 (3mks)

11. Give two effects of force (2mks)

---

12. Describe the following forces (2mks)

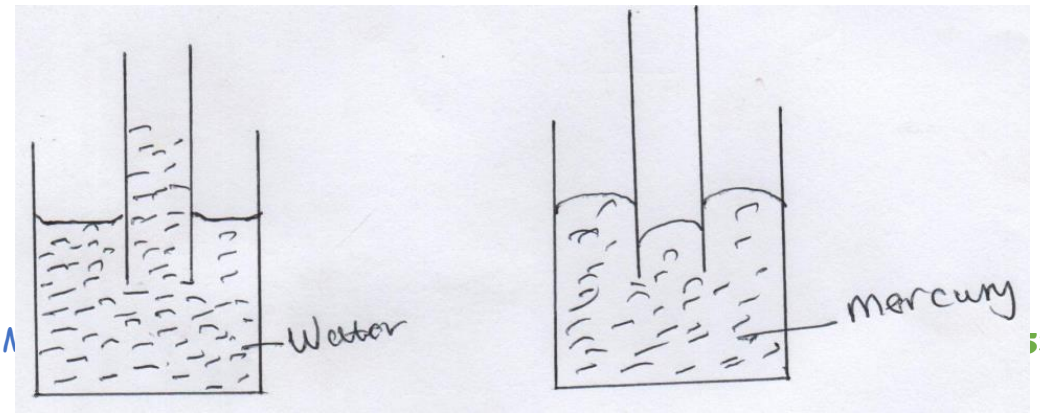
i. Upthrust

---

ii. Tension

---

13. The diagram below shows water and mercury in a narrow tube. State the reason why the levels are different (2mks)



14. Explain why a steel needle placed carefully on the surface of water does not sink (2mks)

---

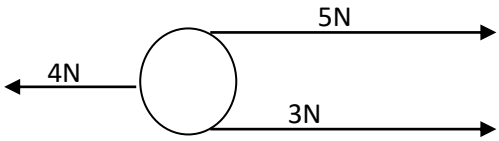
15. Give three differences between mass and weight (3mks)

---

16. Differentiate between vector and scalar quantities, give one example of each (3mks)

---

17. Give the resultant force in the following (2mk)



---

18. Define pressure and give its S.I unit (2mks)

---

19. The initial reading in a burette containing water is 25cm^3 twenty drops of water each of average volume 0.25cm^3 falls from the burette. Find the final burette reading (3mks)

20. Name two instruments in a physics laboratory that are used to measure the volume of a liquid (2mks)

---

21. Explain why it is not suitable to determine the volume of an irregular charcoal using displacement method (2mks)

---

22. Differentiate between a basic quantity and a derived quantity (2mks)

---

23. The mass of a book is 250g. calculate its weight given that gravitation strength is 10N/kg (3mks)

24. Define force and give its S.I unit

(2mk)

---

25. Give two factors that affect pressure in liquids (2mks)

SECTION 11 (40MKS)

ANSWER ALL QUESTIONS

26. The mass of an empty density bottle is 20g. it is 45g when full of water and it weighs 60g when full of liquid X. Calculate

A) Mass of water

(1mk)

B) Mass of liquid X

(1mk)

C) Volume of water, given its density is 1g/cm3 (2mks)

D) Volume of the bottle

(1mk)

E) Density of liquid X (2mks)

27. You are provided with the following

- Eureka can
- A small beaker
- A stone
- A measuring cylinder
- Some water

Describe how you will use the apparatus above to measure the volume of the stone (5mks)

---

28. A brick 30cm long, 20cm wide and 10cm thick has a mass of 500g. Determine.

a) The weight of the brick (1mk)

b) The greatest area occupied by the brick when placed on the ground (2mks)

c) The least area occupied by the brick when placed on a flat surface (2mks)

d) The maximum pressure exerted by the brick on a flat surface (2mks)

e) The least pressure exerted by the brick on a flat surface (2mks)

29. In an experiment to estimate the diameter of a cylindrical wire, a thin thread wraps round a cylinder exactly 30 times.

Calculate

a) The circumference of the cylinder if the length of the thread is 50cm. (2mks)

b) The radius of the wire (3mks)

(take $\pi = \frac{22}{7}$)

30. $100cm^3$ of fresh water of density $1000kg/m^3$ is mixed with $100cm^3$ of sea water of density $1030kg/m^3$. Calculate

a) Mass of fresh water (2mks)

b) Mass of sea water (1mk)

c) Total mass (1mk)

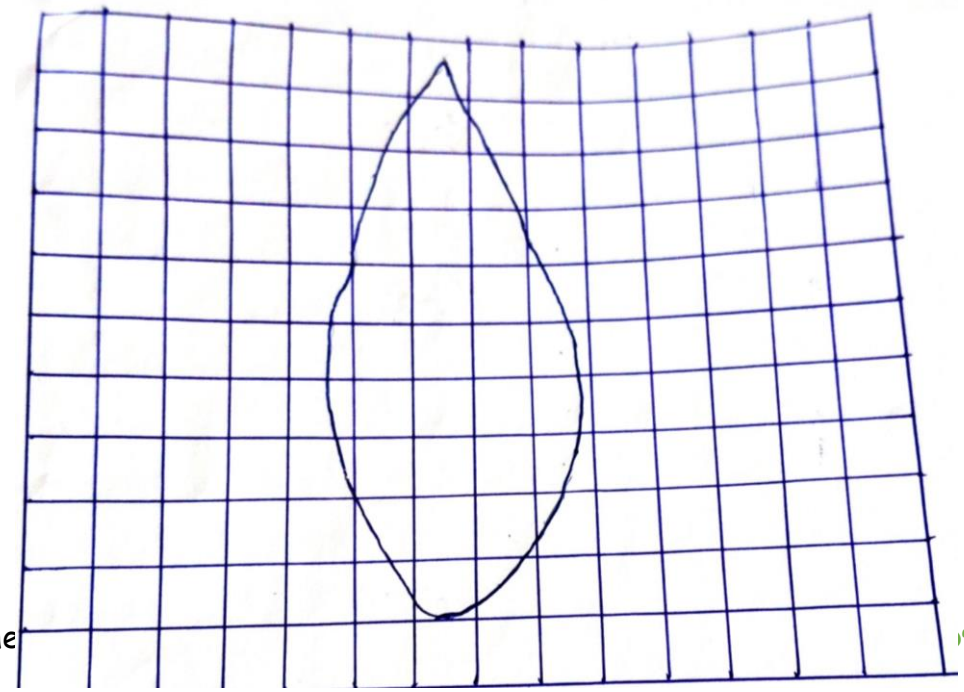
d) Total volume (1mk)

e) Density of the mixture (2mks)

31. A) Define area and give its S.I unit (2mks)

---

b) The following is an outline of a leaf use it to answer the questions given. One square measures 1cm by 1cm.



i) State the number of complete squares

(1mk)

---

ii) State the number of in complete squares

(1mk)

---

iii) Calculate the area of the leaf (3mks)

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

SCHOOL ..... STUDENTS SIGN.....

DATE :.....

FORM TWO

PHYSICS 232

END OF TERM ONE EXAMINATION

TIME : 2 ½ HOURS

INTRODUCTIONS TO CANDIDATES

Write your name, Admission number and school

- Write your name, Admission number, in the spaces provide.
- This paper consists of TWO sections: A and B
- Answer ALL questions in section A and B in the spaces provided.
- ALL working MUST be clearly shown.
- Mathematical tables and electronic calculators may be used.

FOR EXAMINERS USE ONLY

SECTION	QUESTION	MAXIMUM SCORE	CANDIDATES SCORE
A	1-25	5OMKS	
B	26	07	
	27	06	
	28	08	
	29	07	
	30	08	
	31	06	
	32	08	
		100MKS	

SECTION 1

ANSWER ALL QUESTIONS (5OMKS)

1. The figure 1 below shows a micrometer screw gauge used to measure the diameter of a piece of wire.

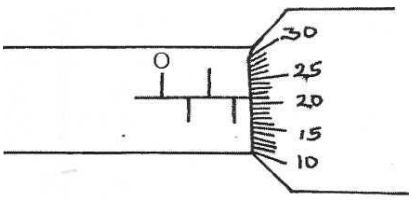


Figure 1

i. Determine the reading on the scale of the micrometer screw gauge (2mks)

ii. If the micrometer screw gauge has an error such that if the jaws are closed without any object, it reads 0.04mm below the centre line of the sleeve, determining the actual cross sections area of the of wire. (2mks)

2. Distinguish between heat and temperature. (2mks)

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……

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3. State one disadvantage of using a pin hole camera to take photographs (1mk)

……

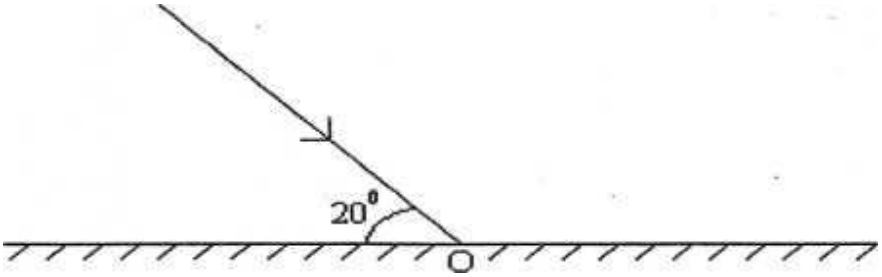
4. In an oil drop experiment a student estimated the dimeter of the oil patch to be 0.16m, given that the volume of the oil drop was $0.048cm^3$.

i. Determine the thickness of the oil patch

ii. State an assumption made in the above calculations (1mk)

……

5. A ray of light makes an angle of 20^0 with a plane mirror as shown in figure 2 below.

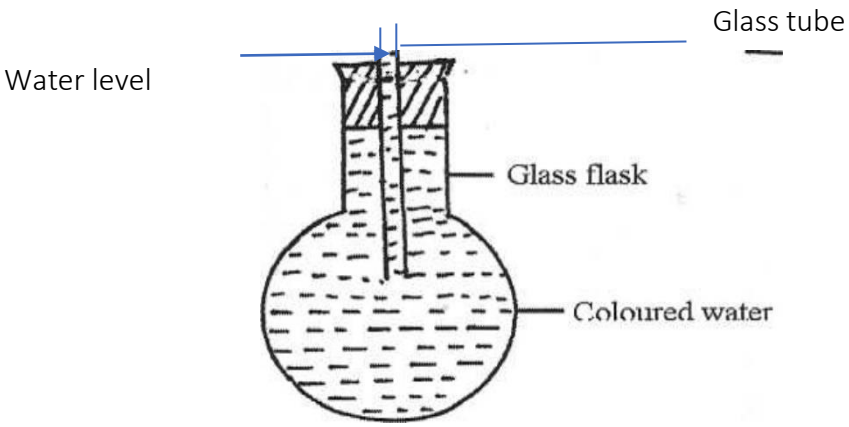


Determine the angle of reflection (2mks)

6. Give a reason why fuel tanks of Kenya Pipeline Company are silvery painted (1mk)

……

7. The figure 3 below shows a flask filled with coloured water. The rubber cork is pushed in until the in water rises a short distance in the glass tube.



State and explain what is observed when the flask is placed in a hot water bath (2mks)

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8. Two identical sphered A and B each standing on an insulating base are in contact. A negatively charged rod is brought near sphere A as shown in figure 4

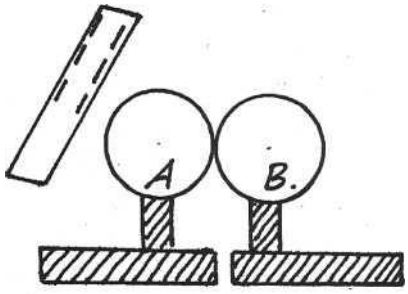

Figure 4

State and explain the charged acquired by A and B (2mks)

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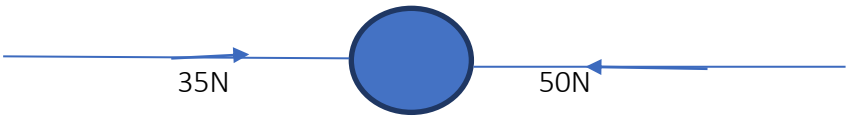
9. Sketch a diagram to show the direction and magnitude of the resultant force for two forces acting as shown in figure 5 below

(1mk)



10. In an experiment to demonstrate Brownian motion, smoke was placed in an air cell and observed under a microscope. Explain the observation. (2mks)

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11. What property of light is illustrated by formation of shadows? (1mk)

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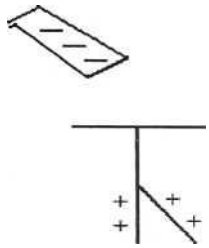
12. State and explain the observation on the leaf of a positively charged when a negative charge is brought close to cap as shown in figure below. (2mks)



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13. Suggest a reason why a person who has lost one leg is provided with crutches.

(1mk)

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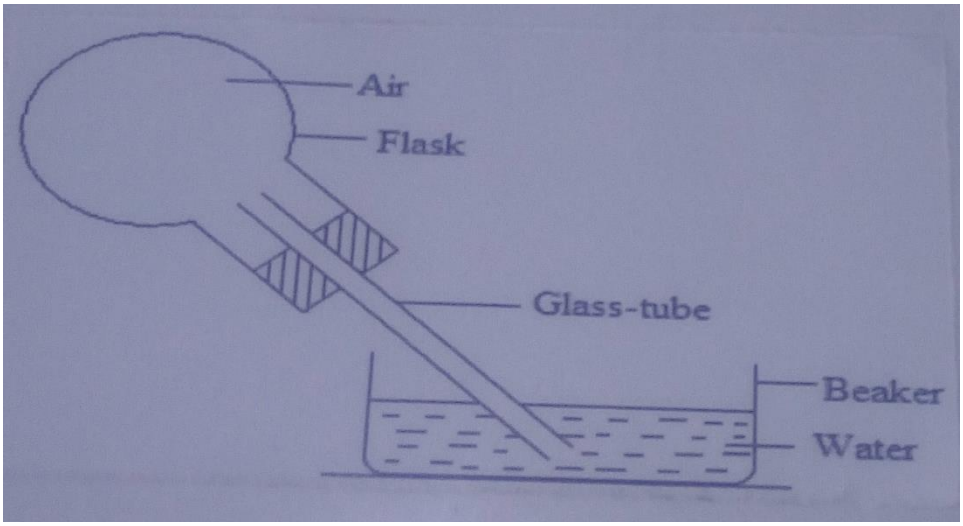
……

14. Figure 7 below shows a flash with a glass tube dipped into a beaker containing water at room temperature. The cork fixing the glass tube is tight.



State with reason what would be observed if cold water is poured on to the flash (2mks)

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15. i) Convert 27^0C TO Kelvin (1mk)

ii) What is meant by absolute zero temperature? (1mk)

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16. Figure 8 shows a clinical thermometer which is not graduated

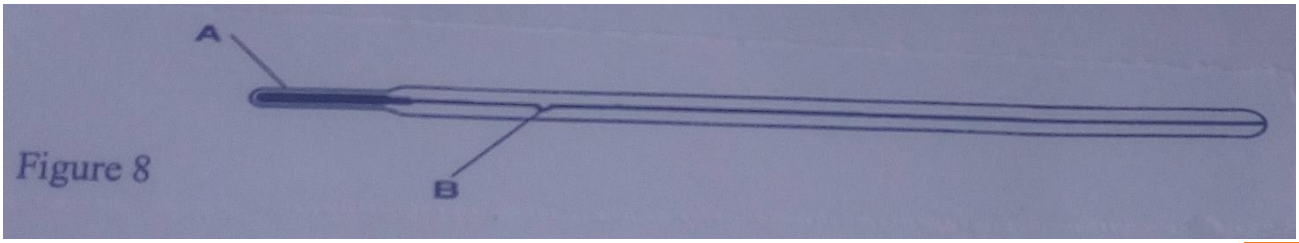

Figure 8

a) Name the parts indicate with letters: A and B (2mks)

A .....

B .....

b) Mark the appropriate scale range in degrees Celsius (2mks)

17. The reading on a mercury barometer at Mombasa is 760mm. Calculate the pressure at Mombasa. (Density of mercury is 1.36×10^{4} Kgm^{-3}) (3mks)

18. Name two advantages which a lead accumulator has over a dry cell (2mks)

.....

.....

19. A girl observed her in a concave mirror of a focal length 90cm. If the mirror is 70cm away. State two characteristics of the image observed. (2mks)

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20. Why is topping of an accumulator done with distilled water and not sulphuric acid? (1mk)

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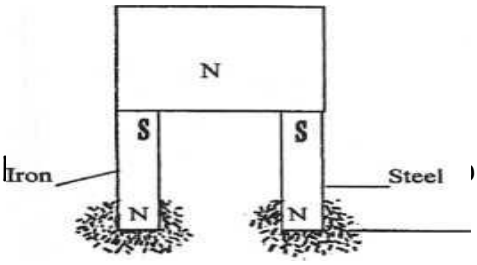
21. The figure 9 below shows iron and steel rods placed in contact with a magnet.



State with a reason what is observed when this magnet is removed from the rods (2mks)

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……

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22. Why is concave mirrors used as a saloon mirror? (1mk)

……

……

23. An old man warming himself next to a Jiko received heat mostly by radiation. Explain why. (2mks)

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……

……

24. You are provided with two iron bars M and N one is magnetized and the other is not. Explain how you would identify the magnetized bar. (2mks)

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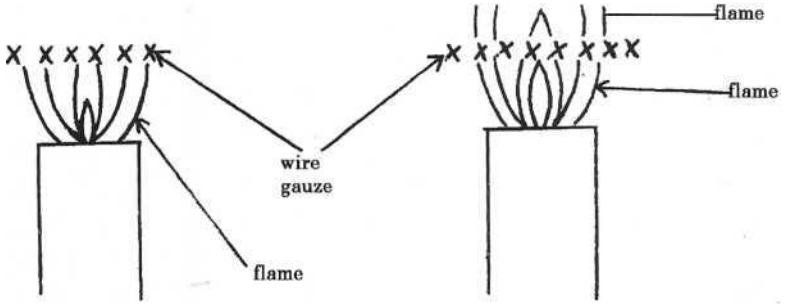
25. When a Bunsen burner is lit below wire gauze, it is noted that the flame initially burns below the gauze as shown in the figure below. After sometimes the flame burns below as well as shown in the figure below. After sometime the flame burns below as well as above the gauze.



Explain this observation (2mks)

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SECTION B (50MKS)

Answer all questions in this section in the spaces provided

26. a) The water level in a burette is 27cm^3. If 88 drops of water fall from the burette and the average volume of one drop is 0.25cm^3.what is the final water level in the burette? (2mks)

b) In an experiment to determine the density of sand using a density bottle, the following measurements were recorded.

Mass of empty density bottle = 38.3g

Mass of density bottle of water = 64.7g

Mass of density bottle with some sand = 66.6g

Mass of density bottle with sand filled up with water = 84.2g

Take density of water as 1g/cm^3

Use the above data to determine the:

a) Mass of water that completely filled the bottle (1mk)

b) Volume of water that completely filled the bottle (2mks)

c) Volume of the density bottle (1mk)

d) Mass of sand (1mk)

27. a) One of the factors that affect the surface tension of a liquid is the presence of impurities. State the other factor. (1mks)

……

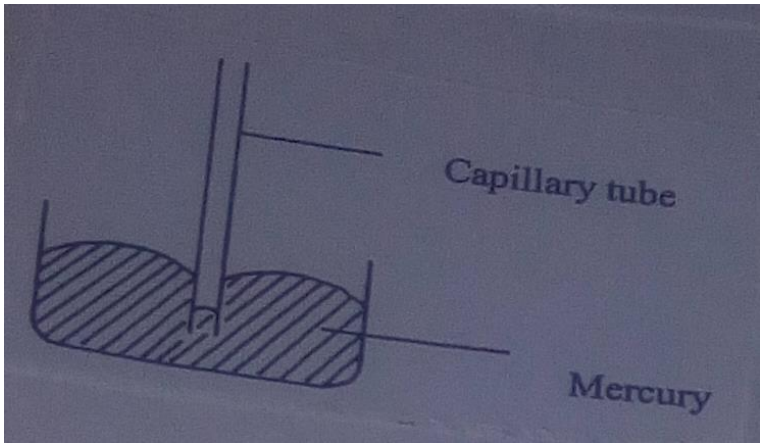
b) A solid weighs 20.5N on the surface of the moon. The force of gravity on the moon is $1.86Nkg^{-1}$. Determine the mass of the solid (3mks)

c) State the reason why wick lamps are usually made of cotton (1mk)

……

……

d) The diagram below shows the behavior of mercury in a capillary tube. Explain the behaviour (1mk)



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28. a) Use simple sketches to show the three states of equilibrium

Name the states (3mks)

(i)

(ii)

(iii)

b)Kathurima was carrying a heavy luggage using one hand. It was observed that the leans away from the luggage. Explain this observation. (2mks)

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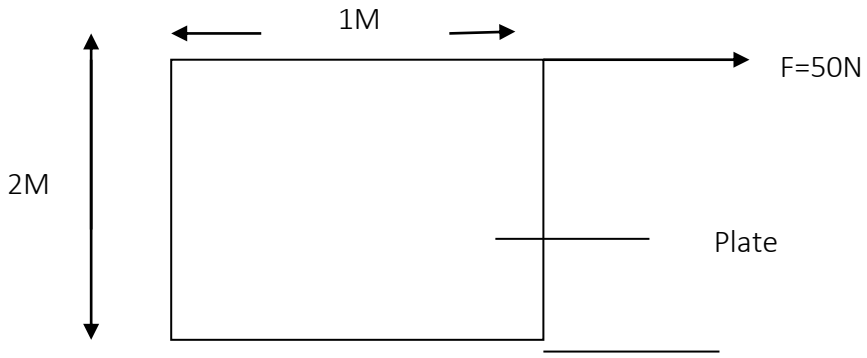
……

c) The figure 8 below shows a metal plate 2m long.1m wide and negligible thickness.A horizontal forces of 50 Nis applied at point A just makes the plate tilt.



Calculate the weight of the plate (3mks)

29. a) i) Define the term pressure and state its SI units (1mk)

……

……

ii) It is not possible to use a drinking straw in a vacuum. Explain (1mk)

……

……

b) Explain why brakes fail in hydraulic braking system when air gets into the system. (1mk)

……

……

c) The diagram below shows the principles of the hydraulic car jack

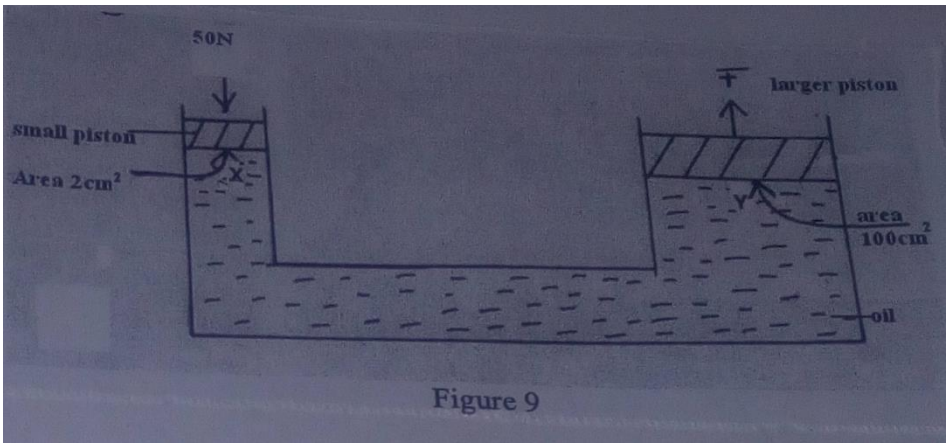


Figure 9

i. If a force of 50N is applied to the smaller piston; calculate the pressure produced in the oil at X (2mks)

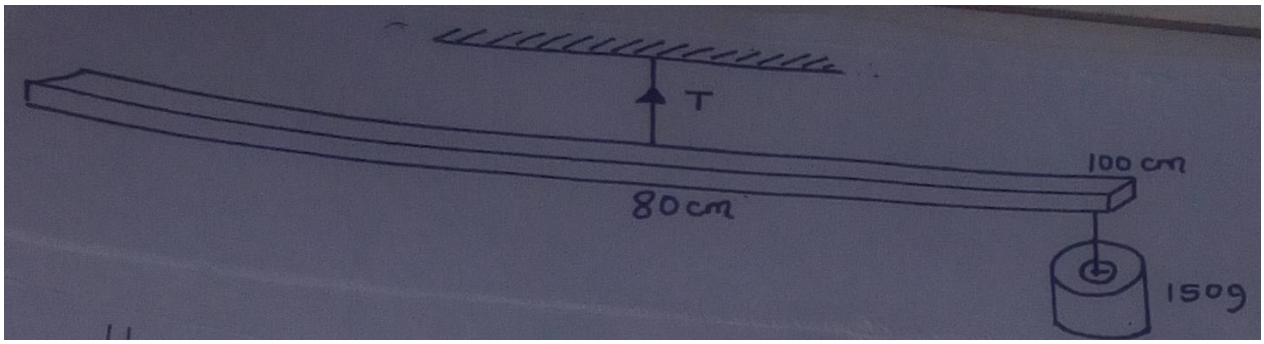
ii. Determine the force produced at larger piston Y (2mks)

30. a) State the principle of moments (1mk)

……

……

b) A uniform metre rule of uniform width 2.5cm and thickness 0.5cm. Figure 10 below, is suspected at the 80cm mark and kept balanced by hanging a mass of 150g at 100cm mark.



Calculate;

i. The mass of the metre rule (2mks)

ii. The density of the material of the metre rule (2mks)

c) Explain why it is easier to loosen a nut using a spanner that has a longer arm than a shorter arm (2mks)

……

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d) On what principle does a bottle opener work on? (1mk)

……

……

31. a) State the basic law of magnetism (1mk)

……

……

b) Explain why repulsion between two ends of magnets is the only sure test of polarity. (2mks)

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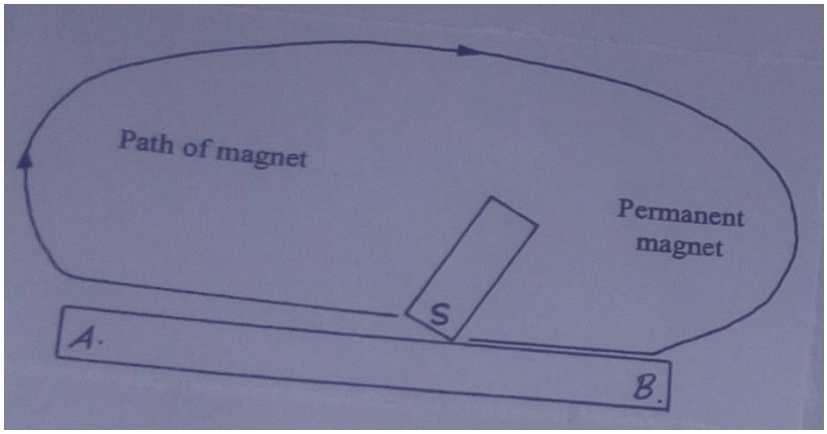
c) Figure 11 below shows a method of magnetization



Ferromagnetic material is being magnetized, what pole is acquired by the pole at B?

(1mk)

……

……

……

d)You are provided with two iron bars X and Y one is magnetized and the other is not. Explain how you would identify the magnetized bar. (2mks)

……

……

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……

32. i) Other than local action, state another defect of a simple cell and explain how it reduces the current product. (2mks)

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……

ii)Explain why light in a classroom are wired in parallel and not in series? (2mks)

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iii)State the purpose of Manganese (IV) oxide in a dry cell (1mk)

……

……

iv)A current of 0.5A flows in a circuit. Determinethe quantity of charge that crosses a point in 2 minutes (3mks)

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

SCHOOL ..... STUDENTS SIGN.....

DATE :.....

FORM 3

PHYSICS 232

END OF TERM ONE EXAMINATION

TIME : 2 ½ HOURS

INTRODUCTIONS TO CANDIDATES

Write your name, Admission number and school

- This paper consists of two sections A and B
- Answer ALL question in section A and B in the spaces provided
- All workings MUST BE shown clearly
- Use the CONSTANTS given

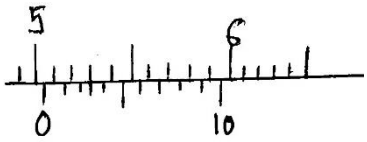
FOR EXAMINERS USE ONLY

SECTION	QUESTION	MAXIMUM SCORE	CANDIDATES SCORE
A	1-16	49 MKS	
B	17	9	
	18	9	
	19	16	
	20	8	
	21	9	
		100MKS	

SECTION A: 49 MARKS

ANSWER ALL THE QUESTIONS IN THIS SECTION

1. The vernier callipers shown below has a zero of 0.04cm. it was used to measure the diameter of a cylinder



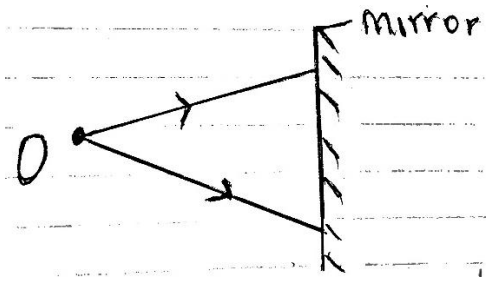
a) What is the measured diameter ? (1mk)

---

b) What is the actual diameter of the cylinder ? (2mks)

---

2. The figure (1) below shows two rays from an object , 0, onto a mirror



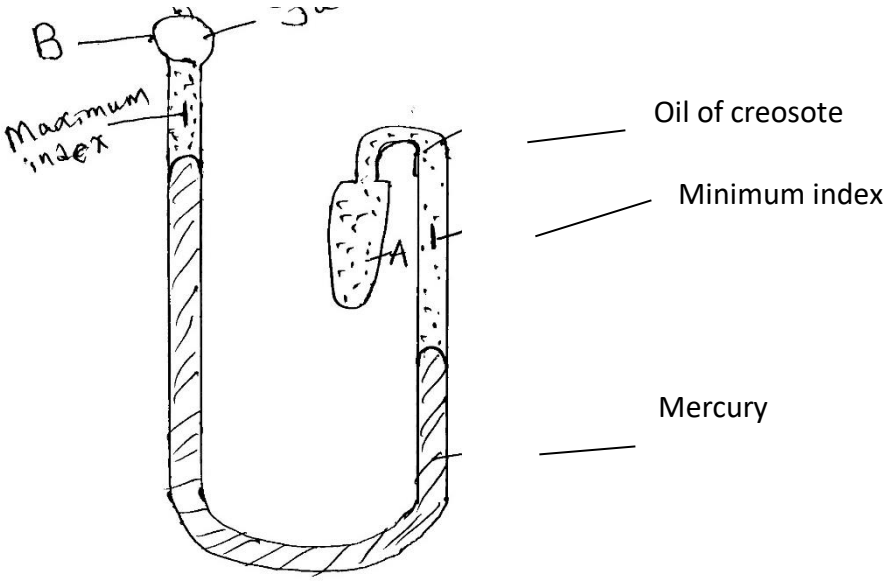
Complete the ray diagram to show the position of the image of the object O in the mirror (2mks)

3. Explain why on a cold morning a metal bench is colder, when touched than a wooden bench (2mks)

---

4. The figure (2) shows the main features of a six's maximum and minimum thermometer

Oil of creosote



a) Give a reason why the vapour above B has to be saturated

(1mk)

---

b) Explain how the thermometer records the maximum and minimum temperatures of a place

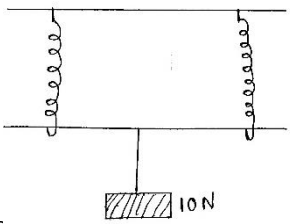
(2mks)

---

c) How is the index returned to the mercury level after each reading ? (1mk)

---

5. Each spring in the figure (3) below has a spring constant of 2.0N/CM. the springs are used to support a load of 10N in the middle of the springs



a) Calculate the extension of eac.. sp...g (3mks)

b) Suggest two factors on which the spring constant of a spring depends upon (2mks)

---

6. Explain why soft iron keepers are suitable for storing bar magnets (2mks)

---

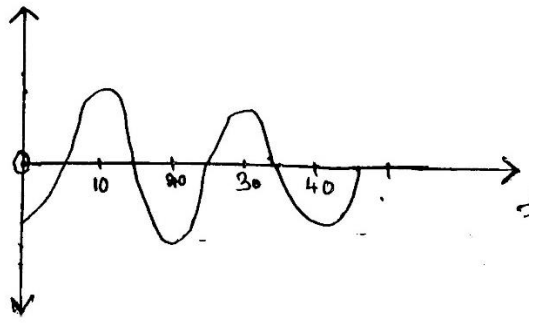
7. Describe an experiment to show how to make a magnet by single stroke method (4mks)

---

8. A matchstick rubber at one end with soap starts moving immediately in one direction when placed on the surface of water. Explain this observation (2mks)

---

9. The wave shown in the figure (4) below has a speed of 2.5m/s



Determine :-

i) The periodic time for the wave (1mk)

---

ii) The frequency of the wave (2mks)

---

iii) The wave length of the wave (2mks)

---

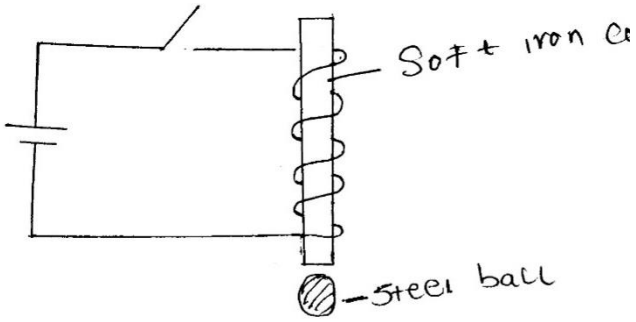
10. A) State the principle of moments (1mk)

---

b) A boy of mass 40kg sits at a point 2.0m from the pivot of a see-saw. Find the weight of a girl who can balance the see-saw by sitting at distance of 3.2m from the pivot on the opposite site.
(Take g= 10N/Kg) (3mks)

11. A scout standing a distance in from a tall building blows a whistle and hears its echo 1.7 seconds later. Determine the distance M. Given that the speed of sound in air is 340M/S (3mks)

12. A small electromagnet, used for lifting and releasing a small steel ball is shown in the figure (5) below.



a) Explain why soft iron is a better material than steel to use for the core (2mks)

---

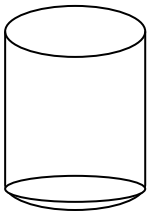
b) In order to lift a slightly larger ball, it is necessary to make a stronger electromagnet state two ways in which the electromagnet could be made powerful. (2mks)

---

13. State two physical quantities that remain constant while pure ice is being converted into water (2mks)

---

14. The figure (6) shows a uniformly shaped cylinder



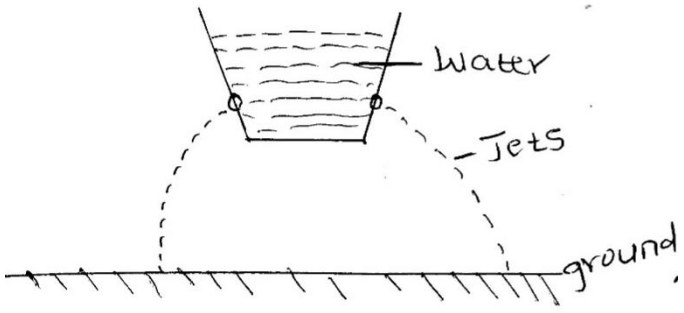
Locate the centre of gravity of the cylinder (2mks)

15. a) state the bernoullis principal (1mk)

---

b) Water flows through a tube of length 40cm and cross –sectional area 10cm2 in 4S. Calculate the rate of water flow in M^3/S (2mks)

16. A metallic container full of water and with jets flowing from it as indicated in the figure (7) below is released from 3.0m above the ground to fall freely



The jets cease during the fall, explain (2mks)

SECTION B: 51 MARKS

(Answer all the questions in this section)

17. In an experiment to determine the density of sand using a density bottle the following measurements were recorded :-

Density of water = 1 g/cm3

Mass of empty density bottle = 42.5g

Mass of density bottle full of water = 66.3g

Mass of density bottle with some sand = 67.5g

Mass of density bottle with some sand and filled with water= 84.3g

Use the above information to determine the:-

a) Mass of the water that completely filled the bottle

(1mk)

b) Volume of water that completely filled the bottle

(1mk)

c) Volume on the density bottle

(1mk)

d) Mass of sand

(1mk)

e) Mass of water that filled the space above the sand

(1mk)

f) Volume of the sand

(2mk)

g) Density of the sand

(2mk)

18. a) Distinguish between a primary and a secondary cell

(1mk)

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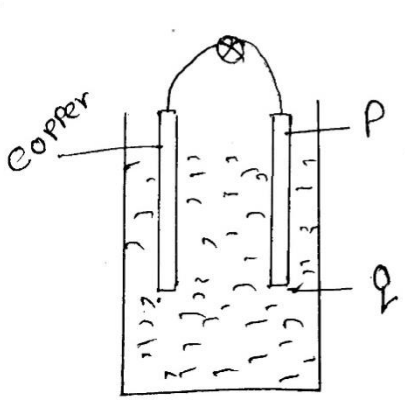
b)The figure (8) below shows the essential parts of a simple cell



i) Name the parts labeled

P---------- (1mk)

Q---------- (1mk)

ii) Explain why the bulb goes off after only a short time (2mks)

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c) Explain why used –up dry cells may endanger human life if thrown away carelessly (1mk)

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d) Current through a certain lamp is 2A what charge would flow through it in 5 minutes (2mks)

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e) Explain why lights in a house are wired in parallel and not in series (1mk)

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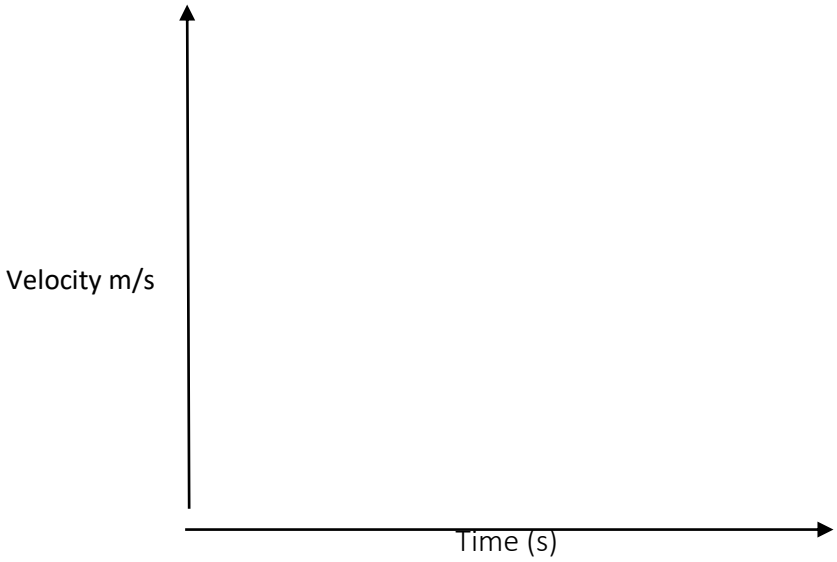
19. A car moves with a uniform velocity of $12ms^{-1}$ for 8.0s. It then accelerates at $2.0ms^{-2}$ for 4.0s and then travels for a further 2.0S with uniform velocity. Finally the car decelerates uniformly to stop in 15s .

a) Sketch a velocity time graph of the car's motion on the axis provided. (4mks)



For the sketch, find the:-

i. Distance travelled in the first 5s (2mks)

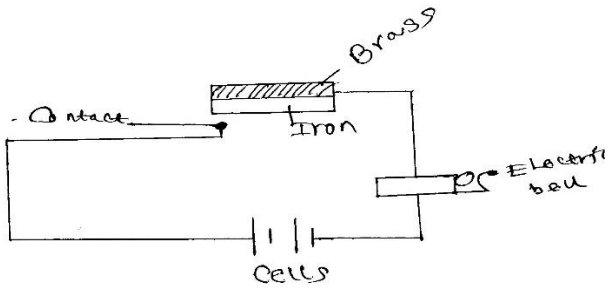
ii. Distance travelled in the last 10s (2mks)

iii. Total distance travelled (2mks)

iv. Average velocity for the journey (3mks)

b) A liquid is poured into a beaker to depth of 12cm. to an eye looking vertically down through the water surface, the bottom of the beaker appears to be raised by 3.8cm. calculate the refractive index of water (3mks)

20. a) The figure (9) below shows a diagram of a simple fire alarm to answer the questions below.



i. Describe why the bell rings during a fire outbreak (2mks)

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ii. When would the bell stop ringing? Give a reason for your answer (3mks)

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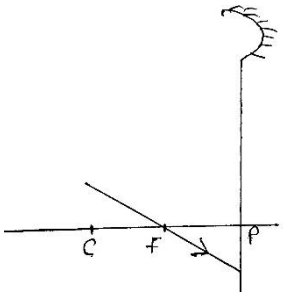
b). The diagram below shows a curved mirror



i. Name the type of mirror (1mk)

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ii. Complete the ray to show how it will be reflected

(1mk)

iii. Write an expression of the relationship between the distance FP and CP

(1mk)

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21. A) Distinguish between elastic and inelastic collusions

(1mk)

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c) A ball of plasticine of mass 20g falls vertically on top of a trolley of mass 0.90kg moving horizontally at a speed of 3.2 M/S. if the plasticine sticks on the ttolley, and both moves with a velocity of VM/S . Determine :-

i. The initial momentum (2mks)

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ii. Final momentum (1mk)

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iii. The velocity VM/S (2mks)

C) i) Machines at a textile industry experiences electrostatic forces at certain points. Suggest a method that can be used to reduce these forces (1mk)

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ii. Explain what would happen if a glass rod is rubbed with a duster and then brought near the cap of a negatively charged electroscope (2mks)

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FORM ONE

END OF TERM ONE EXAMINATION

TIME: $2^1/_2$ HOURS

TERM 1

END OF TERM 1 EXAMINATION

INSTRUCTIONS TO CANDIDATES

- ✓ Answer five questions in spaces provided

1. a) Give reasons for studying Christians religious Education. (8mks)

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b) Identify reasons why the Bible is referred to as "the word of God". (7mks)

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c) State **five** areas where the Bible is used in the society today. (5mks)

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2. a) Identify **SEVEN** versions of the Bible used in Kenya. (7mks)

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b) Give reasons why the Bible is referred to as a Library. (6mks)

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c) State **SEVEN** different occasions when Christians use the bible (7mks)

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3. a) Outline **SEVEN** historical books in the Bible. (7mks)

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b) Identify the effects of the Bible translation into African languages. (7mks)

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c) State various ways in which the bible is misused in Kenya today. (6mks)

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4. a) Outline the order of the first account of creation (Gen 1:2-4) (7mks)

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b) Identify the responsibilities given to human beings by God in biblical creation stories.

(7mks)

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c) State ways in which Christian care for Gods creation today. (6mks)

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5. a) Give **SEVEN** ways through which man continues with God's work of creation.

(7mks)

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b) Identify **SEVEN** causes of sin according to Genesis 3. (7mks)

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c) State **six** causes of evil in Kenya today. (6mks)

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6. a) Identify the results of evil according to the African traditional society. (7mks)

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b) State the characteristics of a covenant. (7mks)

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c) State the promises God gave to Abraham. (6mks)

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CRE

FORM TWO

END OF TERM ONE EXAMINATION

TIME: $2^1/_2$ HOURS

TERM 1

END OF TERM 1 EXAMINATION

INSTRUCTIONS TO CANDIDATES

- ✓ Answer five questions in spaces provided

1. a) State **seven** ways in which human beings act as co-creators with God. (7mks)

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b) From the story of the fall of human beings in Genesis chapter 3, state the effects of sin.

(7mks)

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c) Give **six** ways in which the church helps to bring back members who have fallen from the faith.

(6mks)

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2. a) Identify **SEVEN** reasons why Elijah faced danger and hostility as a Prophet of God(1Kings 18:17-46)

(7mks)

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b) State the teachings about God from Mt. Camel contests. (7mks)

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c) Give **six** leadership qualities that Christians learn from the leadership of Elijah.

(6mks)

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3. a) Identify ways in which King Solomon promoted Idol worship in Israel. (7mks)

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b) State **six** consequences of King Solomon's failure as King of Israel. (6mks)

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c) Give **seven** lessons that modern political leaders in Kenya can learn from King Solomon.

(7mks)

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4. a) Outline the message of angle Gabriel to Mary in Luke 1:26-38. (7mks)

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b) Identify what the magnificent reveals about the nature of God. (6mks)

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c) State **seven** reasons why Christians sing in the church in Kenya today (7mks)

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5. a) Identify **SEVEN** challenges John the Baptist faced in his ministry. (7mks)

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b) Describe the temptations of Jesus in the wilderness Luke 4:1-9) (7mks)

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c) State ways in which Christians can be tempted today. (6mks)

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6. a) Identify **SEVEN** reasons why divorce is rare in traditional African communities.

(7mks)

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b) State **SEVEN** places where worship is carried out in traditional African communities.

(7mks)

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c) List **six** duties of diviners in traditional African communities (6mks)

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NAME:……ADM NO.:……..

CLASS:…… DATE……..

CRE

FORM THREE

END OF TERM ONE EXAMINATION

TIME: $2^1/_2$ HOURS

TERM 1

END OF TERM 1 EXAMINATION

INSTRUCTIONS TO CANDIDATES

- ✓ Answer any five questions in spaces provided

1. a) State the Instructions given by God to the Israelites concerning the Passover.

   (7mks)

   b) Identify the problems that Moses faced as he led the Israelites during the Exodus.

   (7mks)

   c) Give six leadership qualities that a Christian can derive from Moses. (6mks)

2. a) Describe the contest between Prophet Elijah and the Prophet of Baal at Mount Carmel (1 King 18:17-40) (7mks)

   b) From the story of Naboth's vineyards; state the commandment which King Ahab and Queen Jezebel broke. (6mks)

   c) Outline the lessons Christians learn about social justice from the story of Naboth'svineyard.

   (7mks)

3. a) State the teaching of John the Baptist as he prepared the way for the coming of Messiah.

   (7mks)

   b) Relate the healing of the centurion servant (Luke 7:1-10) (7mks)

   c) Identify six ways in which Christian play the role of John the Baptist today.

   (6mks)

4. a) State seven events that took place following Jesus' death on the cross. (7mks)

   b) Describe how Jesus celebrated the last supper with his disciples (Luke 22:14-23)

   (8mks)

   c) Give five reasons why Christians take part in the Lord's Supper. (5mks)

5. a) Outline the events that took place on the day of Pentecost (act 2:1-42) (7mks)

   b) Identify ways the Holy Spirit manifested himself on the day of Pentecost. (6mks)

   c) State the activities of the church in Kenya that show that Holy Spirit is working among Christians.

   (7mks)

6. a) Give seven reasons why birth rituals are performed in Traditional African Communities.

   (7mks)

   b) Identify seven importance of children in Traditional African Communities. (7mks)

   c) Outline six methods used to solve the problems of childlessness in Traditional African Communities.

   (6mks)

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FORM 1

HISTORY AND GOVERNMENT

END OF TERM 1

TIE: 2½HRS

END OF TERM ONE EXAMINATION

FORM 1

HISTORY AND GOVERNMENT

TIME: 2½HRS

INSTRUCTIONS

3. The paper contain two sections A and B
4. Answer all the questions in this paper.

SECTION A (25MKS)

1. Define the term History (1mk)

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2. Define the term government (1mk)

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3. Name **two** periods in History (2mks)

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4. State **two** aspects of social history (2mks)

   ……

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5. Give **two** examples of monarchical government (2mks)

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6. Identify **one** form of oral tradition (1mk)

   ……

7. Define an archaeological site (1mk)

   ……

8. State **one** example of an audio visual media (1mk)

   ……

9. Name **one** theory of the origin of early human (1mk)

   ……

10. List **two** archaeological sites in Tanzania (2mks)

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11. Name **two** sub species of Australopithecus (2mks)

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12. Identify the latest type of tools made and used by human during the new stone age period (1mk)

    ……

13. Name the hominid that discovered the use of fire (1mk)

……

14. State **two** importance of rock art during the Stone Age period. (2mks)

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15. Identify the first crop to be grown by human (1mk)

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16. State **two** forms of irrigation carried out in Egypt (2mks)

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17. State **two** inventions that made agriculture successful in Mesopotamia (2mks)

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SECTION B (75MKS)

18. a) State **three** advantages of the use of linguistics as a source of history and government (3mks)

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b) Explain **four** importances of studying history in secondary schools (8mks)

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19. a) State **four** features of homo sapiens sapiens (4mks)

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b) Describe the culture of human during the Old Stone Age period (6mks)

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20. a) List down **two** reasons why Africa in regarded to as the original homeland of humankind (2mks)

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b) State **six** reasons why human domesticated animals (6mks)

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21. a) Identify **five** uses of tools by the early humans (5mks)

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b) Explain **five** advantages of domesticating animals (10mks)

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22. a) Name **two** aspects of culture of early human that developed during the late stone age period (2mks)

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b) Explain **five** importances of the invention of fire by the early human (10mks)

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23. a) State **two** theories of the origin of agriculture (2mks)

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b) Explain **three** factors that favored development of early agriculture in Egypt (6mks)

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24. a) State **three** arms of government (3mks)

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b) Explain **four** importances of studying government in Kenyan schools (8mks)

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FORM 2

HISTORY AND GOVERNMENT

END OF TERM 1

TIE: 2½HRS

END OF TERM ONE EXAMINATION

FORM 2

HISTORY AND GOVERNMENT

TIME: 2½HRS

INSTRUCTIONS

1. The paper consist of Three sections A, B and C
2. Answer all the questions in section A.
3. Answer only Three questions from Section B
4. Answer only Two questions from section C.

SECTION A (25MKS)

Answer all the questions in this section.

1. Define political history (1mk)

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2. Identify two historical sites in Ethiopia (2mks)

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   ……

3. State one reason why early agriculture was carried out along viler valleys (1mk)

   ……

4. Identify two theories of the origin of agriculture (2mks)

   ……

   ……

5. Identify the dispersal point of the Luo. (1mk)

   ……

6. State two economic activities of the Mijikenda during the pre-colonial period. (2mks)

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7. State the main basic political unit among the cushite (1mk)

   ……

8. Identify two written sources of information on East African coast during the pre-colonial period. (2mks)

   ……

   ……

9. Name one Arab family used in ruling of the East Coast of Africa (1mk)

   ……

10. Define the term dual citizenship (1mk)

    ……

11. State two levels of conflict (2msk)

    ……

    ……

12. State the reason why barter trade is called silent trade (1mk)

……

13. State two roles of the Tuaregs (2mks)

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14. Identify two vehicles without wheels (2mks)

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15. State one negative effect of road transport (1mk)

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16. Identify two disadvantages of the use of fire and smoke signals as a form of communication (2mks)

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17. State one example of print media (1mk)

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SECTION B (45MKS)

Answer three questions from this section

18. a) State three forms of government (3mks)

b) Explain six importances of studying history in Kenyan schools (12mks)

19. a) Identify three factors for the development of trade (3mks)

b) Explain six challenges faced by the Trans Saharan traders (12mks)

20. a) State five disadvantages of animal transport (5mks)

b) Explain five social effects of modern forms of transport (10mks)

21. a) State three advantages of telecommunication (3mks)

b) Explain six negative impacts of modern means of communication (12mks)

SECTION C (30MKS)

Answer only two questions from this section.

22. a) State three circumstances that may lead to revocation of citizenship by birth. (3mks)

b) Explain six limitations of the right to life (12mks)

23. a) State three importance of national integration (3mks)

b) Explain six peaceful methods of resolving conflicts (12mks)

24. a) State three reasons why Seyyid Said transferred his capital from Muscat to Zanzibar in 1840 (3mks)

b) Explain six factors that favored the spread of Christianity in East Africa. (12mks)

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FORM 3

HISTORY AND GOVERNMENT

END OF TERM 1

TIE: 2½HRS

END OF TERM ONE EXAMINATION

FORM 3

HISTORY AND GOVERNMENT

TIME: 2½HRS

INSTRUCTIONS

5. The paper consist of Three sections A, B and C
6. Answer all the questions in section A.
7. Answer only Three questions from Section B
8. Answer only Two questions from section C.

SECTION A (25MKS)

Answer all the questions in this section.

1. Define Charles Darwin's theory of evolution (1mk)

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2. Name the first animal to be domesticated by human beings (1mk)

……

3. State the origin of the river lake Nilotes (1mk)

……

4. State **two** duties of the Orkoiyot among the Nandi in the pre-colonial period (2mks)

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5. List **two** natural factors that facilitated the coming of the early visitors to the East African Coast (2mks)

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6. State **one** human right without limitation (1mk)

……

7. State **one** symbol of national unity (1mk)

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8. Identify **one** regional trade that flourished in Eastern Africa (1mk)

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9. State **two** features of the Macadamized roads (2mks)

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10. State **two** disadvantages of the use of bronze (2mks)

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11. Identify the main reason for the decline of Gedi asan early urban centre (1mk)

……

12. State **one** significance of the golden stool among the Ashante (1mk)

……

13. Define the term promulgation (1mk)

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14. State **two** characteristics of indirect democracy (2mks)

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15. State **two** strategic reasons for the scramble for and partition of Africa (2mks)

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16. Identify **two** communities in Kenya who offered mixed reaction against colonial rule (2mks)

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17. State **two** communities in Senegal where the assimilation policy of administration was successful (2mks)

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SECTION B (45 MARKS)

Answer any three questions from this section

18. a) State **three** disadvantages of oral traditions as a source of information on History and Government (3mks)

b) Describe the culture of human during the Late Stone Age period (12mks)

19. a) Identify challenges facing Johannesburg as a modern urban centre (5mks)

b) Describe the impact of the scientific inventions on Agriculture (10mks)

20. a) State **five** social impacts of partition of Africa (5mks)

b) Explain **five** results of the Majimaji revolt (10mks)

21. a) State **five** terms of the second Anglo-German agreement of 1890 (5mks)

b) Explain **five** reasons why the Maasai collaborated with the British (10mks)

SECTION C (30MKS)

Answer any two questions from this section

22. a) State **three** economic responsibilities of a Kenyan citizen (3mks)

b) Explain **six** factors that promote national unity (12mks)

23. a) State **five** characteristics of a good constitution (5mks)

b) Explain **five** advantages of a written constitution (10mks)

24. a) Name t**hree** types of democracy (3mks)

b) Explain **six** importance of human rights. (12mks)

NAME: _____ ADM NO.:_____

CLASS : _____ SIGNATURE: _____ DATE: _____

FORM 1

BUSINESS STUDIES

END OF TERM 1

TIE: 2½HRS

END OF TERM ONE EXAMINATION

INSTRUCTIONS

1. Answer all the questions in the spaces provided

2. Give **four** examples of goods (4mks)

   i) ……

   ii)……

   iii)……

   iv)……

3. Define the following terms as used in business studies (4mks)

   a) Business

   ……

   ……

   b) Business studies

   ……

   ……

   c) Production

   ……

   ……

   d) Distribution

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4. List **four** characteristics of basis wants (4mks)

   i) ……

   ii)……

   iii)……

   iv)……

5. Name **four** types of utilities (4mks)

   i) ……

   ii)……

iii)……

iv)……

6. State **four** aids to trade (4mks)

i) ……

ii)……

iii)……

iv)……

7. Highlight **four** reasons of starting a business (4mks)

i) ……

ii)……

iii)……

iv)……

8. Outline **four** characteristics of economic resources (4mks)

i) ……

ii)……

iii)……

iv)……

9. Give the reward for each of the following factors of production (4mks)

i. Land ……

ii. Capital ……

iii. Labour ……

iv. Entrepreneurship ……

10. Give **four** examples of services (4mks)

i) ……

ii)……

iii)……

iv)……

11. State **four** types of business activities (4mks)

i) ……

ii)……

iii)……

iv)……

12. List **four** examples of natural resources. (4mks)

i) ……

ii)……

iii)……

iv)……

13. Outline **four** characteristics of direct production (4mks)

i) ……

ii)……

iii)……

iv)……

14. Highlight **four** characteristics of land as a factor of production (4mks)

i) ……

ii)……

iii)……

iv)……

15. State **four** reasons why business studies is important to the society (4mks)

i) ……

ii)……

iii)……

iv)……

16. Classify each of the following into either generic or enterprise competition. (4mks)

a) A coffee seller competing with a tea seller ……

b) A television station competing with a radio station in entertaining customers

……

c) Nation newspaper competing with standard newspaper ……

d) Tuskys supermarket competing with Budget supermarket ……

17. Classify each of the following items into basic or secondary wants (4mks)

a) Drinking water ……

b) Clothes ……

c) Shoes ……

d) Vehicle ……

18. Classify the following items as either consumer or producer good (4mks)

a) Tractor ……

b) A TV in a hotel ……

c) A personal car ……

d) Student's exercise book ……

19. State the factor of production associated with the following items (2mks)

a) Building ……..

b) Manager ……..

SECTION B (30MKS)

20. Outline **five** differences between goods and services. (10mks)

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21. State and explain any **five** characteristics of human wants (10mks)

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22. State and explain **five** subjects (disciplines) that comprises business studies (10mks)

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NAME: _____ ADM NO.:_____

CLASS : _____ SIGNATURE: _____ DATE: _____

FORM 2

BUSINESS STUDIES

END OF TERM 1

TIE: 2½HRS

END OF TERM ONE EXAMINATION

INSTRUCTIONS

1. Answer all the questions in the spaces provided

SECTION A

1. State the term given to each of the following statements (4mks)
   a) Movement of goods and services from producers to consumers ……..
   b) Creation of goods and services ……..
   c) Using a good or service ……..
   d) Satisfaction derived from a good or service ……..
2. State **four** categories in which the various types of business partners may be classified (4mks)
   i) ……..
   ii)……..
   iii)……..
   iv)……..
3. Highlight **four** ways in which the government creates an enabling environment for the conduct of business in the country (4mks)
   i) ……..
   ii)……..
   iii)……..
   iv)……..
4. Outline **four** roles of transport in the facilitation of trade (4mks)
   i) ……..
   ii)……..
   iii)……..
   iv)……..
5. Outline any **four** importances of business studies to the learner (4mks)
   i) ……..
   ii)……..
   iii)……..
   iv)……..
6. State four ways in which Kenya may benefit from its natural resources endowment (4mks)
   i) ……..
   ii)……..
   iii)……..
   iv)……..

7. State the type of utility created by each of the following activities (4mks)
   a) Delivering milk to a customer ……
   b) Keeping money in the bank ……
   c) Selling bread to a student ……
   d) Making uniform for students ……
8. Outline any **four** external factors that may affect business positively (4mks)
   i) ……
   ii)……
   iii)……
   iv)……
9. Highlight **four** circumstances under which a credit note may be issued (4mks)
   i) ……
   ii)……
   iii)……
   iv)……
10. Mutiga bought 20 crates of soda each at sh. 500. He was allowed a discount of 10%. The cash discount was quoted as follows; 10% 1 mouth, 5% 2 month otherwise net. If he paid within two months, calculate the amount of money he paid. (4mks)

11. From the following sentences, indicate the type of business activity (4mks)
   a) Activity involved getting goods from their natural setting ……
   b) Buying and selling of goods and services with a view of making profit ……
   c) Building of structures (bridges) ……
   d) Smelting iron ore to make iron ……

12. For each of the following production activities indicate whether its direct or indirect type of production. (4mks)

Activity	**Type of Production**
a) A wife washing her husband's cloths	
b) A man repairing his chair at home	
c) Mugambi operating a wholesale business	
d) Kiende selling sukuma wiki	

13. Outline any **four** reasons that make a firm file its documents (4mks)

i) ……

ii)……

iii)……

iv)……

14. Outline any **four** reasons why one requires a business plan. (4mks)

i) ……

ii)……

iii)……

iv)……

15. Highlight any **four** methods of government involvement in business (4mks)

i) ……

ii)……

iii)……

iv)……

16. Name the office equipment that function the following uses (4mks)

a) Adding and subtracting figures ……

b) Cutting unwanted documents into tiny pieces for disposal ……

c) To make holes in papers for filing ……

d) Folding letters and sealing envelops ……

17. Mention the **four** essentials of transport (4mks)

i) ……

ii)……

iii)……

iv)……

18. Outline **two** reasons why it's difficult to satisfy human wants fully (2mks)

i) ……

ii)……

SECTION B

19. Outline any **five** differences between sole proprietorship and partnership forms of business units. (10mks)

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20. Explain any **five** importances of entrepreneurship in the economy. (10mks)

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21. Explain any **five** means of payment used in Home trade (10mks)

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NAME: _____ ADM NO.:_____

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FORM 3

BUSINESS STUDIES

END OF TERM 1

TIE: 2¼HRS

END OF TERM ONE EXAMINATION

INSTRUCTIONS

2. Answer all the questions in the spaces provided

SECTION A

22. Outline **four** ways through which a business opportunity may exist (4mks)

i) ……

ii)……

iii)……

iv)……

23. Outline any **four** circumstances under which downward communication would be appropriate. (4mks)

i) ……

ii)……

iii)……

iv)……

24. Highlight any **four** features of a market. (4mks)

i) ……

ii)……

iii)……

iv)……

25. Outline **four** activities that take place during the distribution of goods and services. (4mks)

i) ……

ii)……

iii)……

iv)……

26. Indicate the best documents to use in each of the following circumstances.

Circumstance	**Document**
a) To update a catalogue	
b) To reply a specific letter of inquiry	
c) To current an undercharge	
d) To show the content in a container	

27. Highlight **four** advantages of promoting sales using internet. (4mks)

i) ……

ii)……

iii)……

iv)……

28. Highlight **four** external factors that may negatively influence the operations of a business.

(4mks)

i) ……

ii)……

iii)……

iv)……

29. State **four** reasons why the government issues trade licenses. (4mks)

i) ……

ii)……

iii)……

iv)……

30. Mango bought 1500 units of a product each at sh 50. He obtained a trade discount of 10% and a cash discount of ;

5% if payment is made within one month.

2.5% if payment is made within 2 months.

1% if payment is made within three months.

Required: Calculate how much Mango paid if he paid on the 40th day. (4mks)

31. Outline **four** conditions under which a warehouse would be considered to be operating efficiently. (4mks)

i) ……

ii)……

iii)……

iv)……

32. State **four** ways through which you can improve the productivity of labour as a factor of production. (4mks)

i) ……

ii)……

iii)……

iv)……

33. State the best type of machine one would use to perform the following task.

Function	**The type of machine**
a) To destroy sensitive but unwanted documents	
b) To store large volumes of data	
c) To create postage impressions on envelops	
d) To fold documents, put them in an envelope and seal them	

34. State **four** characteristics of services (4mks)

i) ……

ii)……

iii)……

iv)……

35. State **four** circumstances under which ail transport may be used to ferry goods. (4mks)

i) ……

ii)……

iii)……

iv)……

36. State **four** advantages of localization of firms (4mks)

i) ……

ii)……

iii)……

iv)……

SECTION B

37. Explain **five** features that differentiate a public limited company from a partnership form of a business. (10mks)

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38. The table given below represents the supply schedule of Sukuma wiki (kales) for eight weeks in the months of January and February 2009.

Week	1	2	3	4	5	6	7	8
Quantity (metric tonnes)	505	485	430	375	340	290	215	195

Explain **five** causes of the trend in the table above (10mks)

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39. Explain the procedure for taking an insurance policy (10mks)

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40. Describe **five** channels of distribution that a Kenyan manufacturer would use to ensure her goods reach consumers in another country. (10mks)

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Name: …… **Adm No**: ……

School: …… **Candidate's Sign** : ……

Date: ……

312

GEOGRAPHY

TIME: 2 ¾ HOURS

END TERM 1 EXAM

Geography

FORM 1

Geography

INSTRUCTIONS TO CANDIDATES:

- This paper consist of two Sections A and B.
- Answer all questions in both sections.

1. a) i) What is Geography? (2 mks)

_____

_____

ii) Give the two Greek words from which the term Geography is derived. (2 mks)

_____

_____

b) i) Define the term environment. (2 mks)

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ii) Identify two type of environment. (2 mks)

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2. a) State any three areas of study in practical geography. (3 mks)

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b) Explain any four importance of studying geography. (8 mks)

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3. a) For each of the following statements, identify the subject which is applied.

i) Identifying the types of rocks in the earth's crust. (1 mk)

_____

ii) Studying atmospheric conditions of an area. (1 mk)

_____

iii) Study of solar energy. (1 mk)

_____

iv) Calculation of areas, distance and densities in geography. (1 mk)

_____

b) i) What is orbit? (1 mk)

_____

_____

ii) With the aid of a diagram show the order of the planets based on their distance from the sun. (8 mks)

4. a) i) Give the specific shape of the earth. (1 mk)

_____

ii) Name three forces responsible for the shape of the earth. (3 mks)

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b) State four reasons why the earth is believed to be spherical in shape. (4mks)

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5. a) One of the theories used to explain the origin of the solar system is the passing star theory. Give three weaknesses of this theory. (3 mks)

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b) List down three effects of the earth's revolution. (3 mks)

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6. a) With the aid of a well labeled diagram, describe the occurrence of a solar eclipse. (6 mks)

b) Give two differences between solar eclipse and lunar eclipse. (4 mks)

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7. a) Give the specific dates of the year when overhead position of the midday sun is on the following latitudes.

i) Tropic of cancer (1 mk)

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ii) Tropic of Capricorn (1 mk)

_____

iii) Equator (1 mk)

_____

b) If the local time in Sydney (60^0W) is 7.30 a.m. What time is it at Wajir (40^0E)? (4 mks)

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8. a) Name three minerals that makes up the earth's crust. (3 mks)

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b) State three characteristics of the mantle. (3 mks)

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9. a) List down any four elements of weather. (4 mks)

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b) State four factors that determine the amount of solar radiation reaching the earth's surface. (4 mks)

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10. a) Give the purpose for each of the following items in a weather station.

i) Stevenson screen (1 mk)

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ii) Hygrometer (1 mk)

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iii) Barometer (1mk)

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b) Name four main zones/layers of the atmosphere. (4 mks)

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11. a) With the aid of a well labeled diagram describe the formation of relief rainfall. (7 mks)

b) i) Name three high clouds. (3 mks)

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ii) Highlight four significance of weather forecasting. (4 mks)

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END

NAME……..…….ADM NO……DATE……

GEOGRAPHY:312

FORM TWO

TIME:2 1/2 HOURS

INSTRUCTION TO STUDENTS

Write your name and admission number in the spaces provided above.

Attempt all questions

All your answers must be written in the spaces provided below each question.

1.a) Define Geography (1mk)

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……

b) Draw a well labeled diagram to show the centrality of geography (4mks)

2. a) Give two reasons for the shape of the Earth (2mks)

b) State three characteristics of sedimentary rocks (3mks)

3. a) What is the longitude of city Y whose local time is 8.00am, when the local time at green which meridian 0° is 12.00 noon? (2mks)

b) Give three characteristics of the Inner core of the earth (3mks)

4. (a). (i) Differentiate between faulting and folding. (2mks)

(ii) Draw a well labeled diagram to show the parts of a normal fault. (5mks)

(b) (i) Describes the formation of Rift Valley by tensional forces by use of well labeled diagram. (7 marks)

(ii) Explain three significance of vulcanicity to Human activities. (6mks)

5a (i) differentiate between weather and climate. (2mks)

(ii) Explain four factors that influence climate. (8mks)

b) Explain two effects of climate change on the physical environment. (4mks)

6. Study the map of Kitale provided below and answer the questions that follow:-

a) i) Convert the linear scale on the map into a representative fraction (show your working) (3mks)

ii) Name the districts covered in the map (3mks)

iii) Calculate the area covered by Kitale township (2mks

b) i) What is ITCZ? (2mks)

ii) State four characteristics of the Equatorial climate (4mks)

c) You are to carry out a field study in the Rift Valley

i) Outline your preparation (4mks)

ii) What three other fault features would you study besides the rift valley. (3mks)

iii) State one hypothesis of your study (1mk)

iv) Give three follow up activities you would carry out (3mks)

7. a (i) Differentiate between direction and bearing. (2mks)

ii) State two traditional methods used to show direction on maps. (2mks)

b (i) Explain four uses of maps. (4mks)

(ii) State three marginal information a good map must have. (3mks)

c) List three ways used to locate places on a map. (3mks)

8 a (i) Define photograph. (2mks)

iii) State 3 types of ground photographs. (3mks)

b (i) List three types of graphs used for statistical presentation. (3mks)

(ii) Explain two advantages of comparative line graph. (2mks)

iii) Explain two disadvantages of a comparative bar graph. (2mks)

NAME: _____

ADM NO.:_____

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FORM 3

GEOGRAPHY

END OF TERM 1

TIE: 2¾HRS

END OF TERM ONE EXAMINATION

INSTRUCTIONS

1. This paper consist of two section A and B
2. Answer ALL the questions in section A
3. Answer question 6 and any other two questions from section B
4. All answer must be written in English
5. All diagrams and graphs must be drawn in pencil

SECTION A (25MKS)

1. a) Differentiate between local time and standard time (2mks)

   b) Explain how circumnavigation proof that the earth is spherical (3mks)

2. a) Define faulting (1mk)

   b) State **two** landforms that result from faulting (2mks)

3. a) Define a mineral (2mks)

   b) List down **two** characteristics of minerals (2mks)

4. a) State **two** significance of Trona mining to Kenya (2mks)

   b) State **two** problems facing gold mining in South Africa (2mks)

5. a) Name **two** oil producing countries in the middle East (2mks)

   b) State **four** effects of mining to the environment (4mks)

   c) Explain **three** reasons why agro-forestry in encouraged in Kenya (3mks)

SECTION B (75MKS)

Answer question 6 and any other two questions from this section

6. Study the data below and answer the questions that follow.

KENYA; LEADING IMPORT CROPS BY VALUE (KSH MILLION)

CROP/YEAR	UNMILLED WHEAT	MAIZE	RICE	WHEAT FLOUR
2000	6989	4664	1968	180
2001	7515	3342	2619	636
2002	5577	229	2104	237
2003	6099	1417	2981	168
2004	6754	4647	3659	200

a) i) Calculate the percentage increase in expenditure on importation of wheat flour between 2003 and 2004 (2mks)

ii) Draw a comparative bar graph to represent the data in the table above. (8mks)

(Use scale 10m rep. 5m)

iii) State any **two** advantages of using comparative bar graphs in data presentation (2mks)

b) Use the map of Taita Hills (1:50,000) to answer the questions that follow.

i) State the magnetic variation of the area covered by the map? (1mk)

ii) Calculate the area of the bamboo forest at the south East of the area covered by the map. (Give your answer in km^2) (2mks)

iii) Measure the distance along the road A23 from Grid square 3614 to Grid square 4419. (Give your answer in kilometres). (2mks)

iv) Name **two** types of scales shown in the map. (2mks)

v) Identify **two** types of vegetation found in the area covered by the map. (2mks)

vi) State the height of the trigonometrical station found in grid square 2222

vii) Name **two** areas that border Taita Hills in the South as shown in the map. (2mks)

7. a) i) Define the term forestry (1mk)

ii) Give **three** differences between natural forests and planted forests (3mks)

b) Explain **four** causes of forest depletion in Kenya today. (8mks)

c) State four measures that are being undertaken by the Kenya Government to conserve forests. (4mks)

d) i) Explain **three** factors farouring the exploitation of soft woods in Canada. (6mks)

ii) State **three** factors that favoured the growth of natural forests on the slopes of Mt. Kenya (3mks)

8. a) i) State any **two** forms in which minerals occur. (2mks)

ii) Name **three** areas where limestone is mined in Kenya (3mks)

b) Explain how the following factors influence the exploitation of a mineral

i. Market (2mks)

ii. The quality of the ore (2mks)

iii. Technology (2mks)

c) i) Name **two** provinces in South Africa where gold is mined (2mks)

ii) Explain **three** problems facing gold mining in South Africa. (6mks)

d) Describe the processing of diamonds in South Africa (6mks)

9. a) i) Differentiate between normal fault and a reverse fault. (2mks)

ii) Name **three** forces involved in the process of faulting (3mks)

b) Apart from fault scarp, name three other features resulting from faulting. (3mks)

c) With the aid of a well labelled diagram, explain how a fault scarp is formed. (5mks)

d) Explain **four** significance of faulting to human activities (8mks)

e) Students from a school in Meru County carried out a filed study on a faulted landscape.

i) Give **two** reasons why there was need for a pre-visit of the area of study. (2mks)

10. a) i) Distinguish between mass wasting and weathering (2mks)

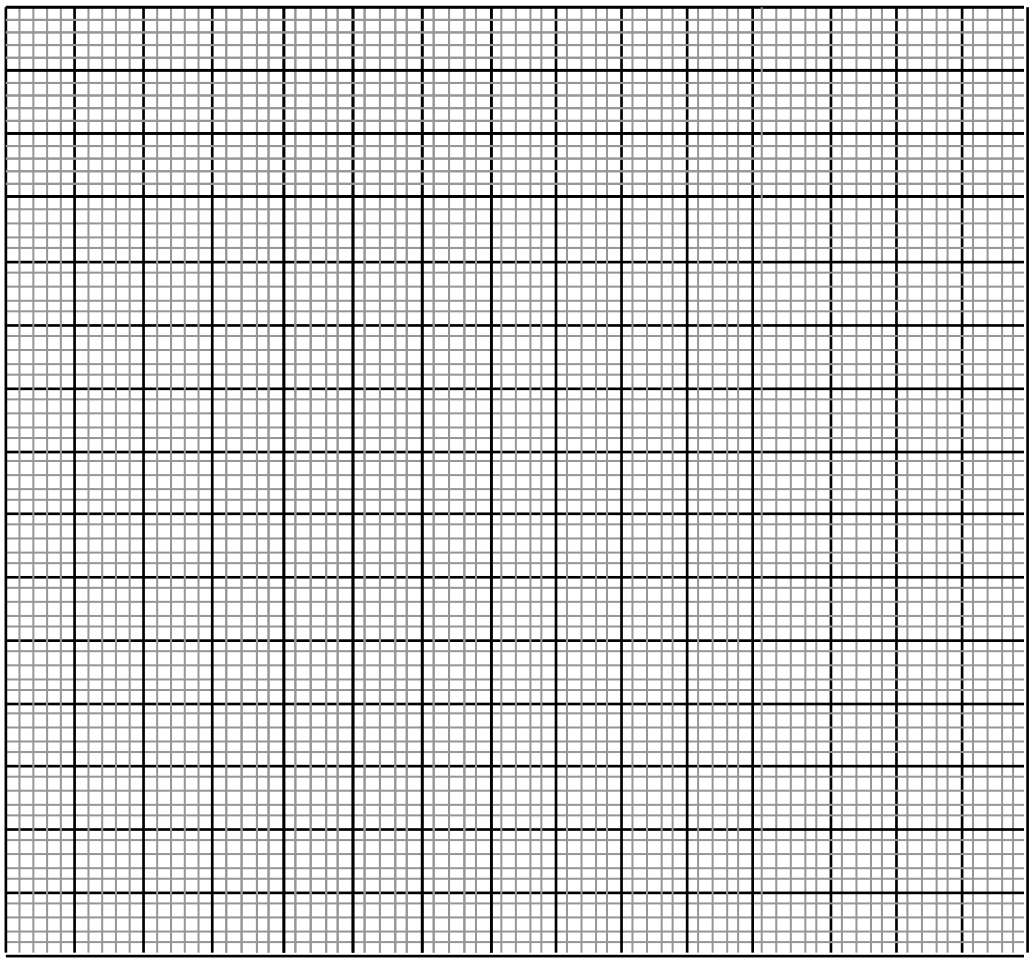
ii) Mention **four** factors that determine type and rate of weathering (4mks)

(iii) State **four** ways through which plants cause weathering (4mks)

b) i) Apart from soil creep, list **three** other types of slow mass wasting (3mks)

ii) State **four** factors that cause soil creep. (4mks)

iii) Explain **four** effects of mass wasting on the environment. (8mks)



KISWAHILI

MUHULA WA KWANZA

KIDATO CHA KWANZA

JINA ……. ADM …… CLASS ……

UFAHAMU (ALAMA 15)

Soma kifungu kifuatacho kasha ujibu maswali yanayofuata

Madhara ya sigara

Chimbuko la kuonekana kwa madhara ya tumbaku ilikuwa mwaka 1598 A.D. Madhara yake yaligundulika wakati ambapo makala ya kwanza ya kiafya iliandikwa nchini Uingereza ikieleza madhara ya sigara. Baada ya hapo zilifuatia tafiti mbalimbali zilizoendelea kugundua na kuelezea madhara yatokanayo na matumizi ya bidhaa za tumbaku kwa binadamu. Matokeo ya tafiti hizo yaliwezesha baadhi ya nchi kama vile Denmark, Uholanzi na Sweden kutunga sheria zinazozuia matumizi ya sigara. Katika sura ya pili, baadhi ya serikali zilikwazwa kiuchumi kwa kukosa pato la kodi zitokanazo na sigara na bidhaa zingine za tumbaku.

Mashirika na kampuni zinazojishughulisha na uzalishaji na uuzaji wa sigara hutenga fungu kubwa la fedha kwa ajili ya kutangaza bidhaa hiyo hatari kwa afya ya mwanadamu. Kila mwaka, Shirika la Afya Ulimwenguni hutenga siku maalumu ya kuelimisha jamii kuhusu athari za kiafya na madhara yatokanayo na matumizi ya tumbaku. **Maadhimisho** hayo hufanyika kila Mei 30 ya mwaka na kauli mbiu ya mwaka huu ilikuwa “Mkinge mwanamke kuwa mteja au kutumiwa kama mhamasishaji wa bidhaa zingine za tumbaku’.

Takwimu za shirika hilo zinabainisha kuwa asilimia 90 ya wavutaji sigara wameanzia umri wa miaka 18. Pia zimebainisha kuwa, kwa kila sekunde ipitayo, wastani wa mtu mmoja anafariki kutokana na madhara ya tumbaku. Inakadiriwa kuwa ifikapo mwaka 2025, vifo vitaongezeka kwa asilimia 70. Utafiti umebainisha ifikapo mwaka 2030, watu milioni 10 watakuwa wamefariki kutokana na kuvuta sigara.

Uvutaji sigara unasababisha magonjwa mengi kama vile saratani ya mapafu, wendawazimu, **kupooza,** matatizo ya mfumo wa hewa, kutoboka utumbo, kunyonyoka nywele, kupungua kwa nguvu za kiume, maradhi ya ngozi na kadhalika. Madhara ya tumbaku hayajitokezi mara moja. Huchukua kipindi kirefu hata miaka 30, hali inayowafanya wengi kufumbia macho tahadhari iliyopo, wakiendelea kuteketezwa na uvutaji sigara. Anayevuta sigara huathirika mapafu kutokana na moshi na tindikali – aina ya kaboni iliyomo kwenye tumbaku inayomzuia kupumua na mapafu yake huanza kutunga usaha. Hali hiyo huchangia mtu kupata athari nyinginezo kama vile kichomi, kifua kikuu na saratani. Chembechembe ya nikotini iliyomo katika tumbaku ni hatari kwa mvutaji kwani humpotezea mtu hamu ya kula na anapata maumivu makali ya tumbo.

Wakati wote, mvutaji sigara hutoa harufu mbaya mdomoni, hali ambayo haipendezi katika maisha ya mwanadamu, na pia, huwa anawadhuru wengine. Mtu huyo anapopumua huchafua mazingira kwa kupumua hewa chafu na mbaya zaidi ambayo huwadhuru watu walio karibu naye kama vile mwenza katika ndoa (mke au mume), watoto au marafiki.

Inaelezwa kuwa sigara huathiri akili ya mwanadamu kutokana na kuwepo kwa chembechembe za ulevi. Hali hiyo ipo zaidi mtu anapotumia sigara kwa mara ya kwanza kabisa. Utafiti wa kitaalamu umethibitisha watoto wanaolelewa katika mazingira ya wazazi wanaotumia sigara kuathirika mishipa inayosafirisha damu kwenda katika moyo. Hali hiyo husababisha kuharibika kwa mfumo wa usafirishaji damu mwilini kwa watoto hao na mwishowe wanakuwa wahanga wa maradhi tofautitofauti.

Katika sura ya pili ya kisaikolojia, watoto wanaokaa na wazazi wanaovuta sigara huishia kuifuata tabia hiyo na huo ndio huwa mwanzo wa kudhoofika kwa maadili. Kwa wajawazito, sigara ina madhara kama vile kuathiri ukuaji wa mimba na kondo la nyuma au *placenta* kwa Kiingereza na kushindwa kusafirisha chakula vizuri kutoka kwa mama kwenda kwa moto. Madhara mengine ni moto kuzaliwa na uzito pungufu, hivyo kuathiri ukuaji wake. Kwa hivyo, ni vyema kufahamu kuwa ingawa sigara ni bidhaa inayotumiwa kama uraibu wakati wa kuivuta, madhara yake ni janga kubwa linalopaswa kupigwa vita bila kuchoka.

Maswali

(a) Madhara ya sigara yalionekana mwaka gani ? (alama 1)

(b) Ni nchi gani zilizokuwa za kwanza kubuni sheria mpya kuhusu uvutaji wa sigara ? (alama 1)

(c) Uvutaji wa sigara una athari gani kwa anayevuta ? (alama 5)

(d) Watoto wanaathiriwa vipi na sigara ? (alama 4)

(e) Thibitisha kwamba uvutaji sigara hugharimu pesa nyingi. (alama 2)

(f) Eleza maana ya msamiati ufuatayo kama ulivyotumiwa katika kifungu. (alama 2)

(i) Kupooza

(ii) Maadhimisho

LUGHA - SEHEMU B

(a) Kwa kuzingatia jinsi ya kutamka sauti za kswahili ni nini tofauti kati ya (alama 2)

(i) Irabu

(ii) Konsonanti

(b) Eleza maana ya dhana hizi (alama 2)

(i) Kiimbo

(ii) Shadda

(c) Taja vipashio vine vya lugha (alama 4)

(d) Andika sentensi zifuatazo katika hali timilifu (alama 2)

(a) Mabati yananunuliwa

(b) Baba atakwenda dukani

(e) Kanusha sentensi zifuatazo (alama 3)

(i) Nchi za Afrika mashariki zalemewa na madeni.

(ii) Mbu amemuuma mtoto.

(iii) Baba ameandika barua ndefu.

(f) Zigeuze sentensi zifuatazo ziwe katika wakati uliopita (alama 2)

(i) Unapendelea kula nyama siku hizi.

(ii) Opiyo alipenda kujiingiza katikati kama mchuzi wa ugali.

(g) Andika kwa wingi (alama 2)

(i)Maziwa ya mtoto yalimwagwa na paka yule.

(ii)Uvivu wa Juma unakera.

(h) Akifisha sentensi zifuatazo (alama 2)

(i)nenda sokoni ukaninunulie sukari maziwa na mkate

(ii)Maadam umeshafika tuanze mkutano

(i) Kamilisha jedwali lifuatalo kwa kuandika viambishi mwafaka kulingana na kitenzi (alama 5)

Kitenzi	Nafsi	Wakati	Kirejeshi	Kitendwa	Mzizi	kiishio
Aliyelima Aliyempiga Anaoupanda Alipika Nitavileta						

(j) Taja vipera vya fasihi simulizi (alama 2)

(k) Onyesha vielezi katika sentensi zifuatazo (alama 2)
Mama amepika chai tamu sana

Nitakutembelea kesho jioni

(l) Nyambua vitenzi vifuatavyo katika kauli ya kutendwa (alama 4)
Piga -

Jenga –

Fagia –

Chora -

(m) Taja na ueleze dhima ya lugha (alama 2)

(n) Andika sentensi zifuatazo katika hali ya mazoea (alama 2)
(i) Mchoraji yule anachora picha nzuri

(ii) Mpishi atapika chakula kitamu

(o) Bainisha maneno katika sentensi zifuatazo. (alama 4)
Salaala ! Majangili wamewaua ndovu kumi leo asubuhi

Wale watafungwa

FASIHI (ALAMA 15)

Taja majukumu matano ya fasihi ya kiswahili (alama 5)

Taja tofauti ya fasihi simulizi na fasihi andishi (alama 10)

ISIMU JAMII (ALAMA 10)

Nunua sabuni mpya ya GRESHA. *It is new !* Harufu yake ni *poa,* inadumu siku yote, inalainisha ngozi. Ng'arisha nguo zako na sabuni ya GRESHA. GRESHA sabuni *poa !* Bei yake ni nafuu; shilingi 20/= tu. Kila mtu ainunua.

Maswali

(a) Hii ni lugha gani ? (alama 2)

(b) Eleza sifa za lugha hii. (alama 8)

Insha (Aalama 20)

Andika insha itakayomalizikia kwa maneno haya ……. “Nilipopokea mezani chakula kitamu nilikumbuka maisha magumu niliyoyapitia, nikatambua kuwa si rahisi kupata chakula kama hicho bila juhudi maishani.”

TATHIMINI YA PAMOJA

JINA: ..... NAMBANI YAKO:.....

SAHIHI:..... TAREHE:.....

MACHI/APRILI

MUDA: SAA 2½

CHETI CHA KUHITIMU ELIMU YA SEKONDARI

KISWAHILI KIDATO CHA PILI

MWISHO WA MUHULA WA KWANZA

MUDAL SAA 2½

MAAGIZO

- ✓ JIBU MASWALI YOTE KWENYE NAFASI ULIZOACHIWA

KWA MATUMIZI YA MUTAHINI PEKEE

SWALI	UPEO	ALAMA
INSHA	20	
UFAHAMU	15	
MATUMIZI YA LUGHA	35	
ISIMU JAMII	10	
FASIHI	20	
JUMLA	100	

SEHEMU A: INSHA (ALAMA 20)

Andika insha ifuatayo kwa kutumia maneno yasiyopungua 300

Wewe ni mkurugenzi wa elimu katika kaunti yako. Umealikwa katika kongamano la wanafunzi linalohusiana na tatito la upataji mimba baina ya wanafunzi katika shule za msingi na sekondari. Andika hotuba yako kwa wanafunzi hao huku ukieleza sababu zinazosababisha tatito hilo na jinsi ya kulitatua.

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SEHEMU B: UFAHAMU (ALAMA 15)

Soma kifungu kifuatacho kisha ujibu maswali

Idara ya polisi nchini imelaumiwa kwa muda mrefu kutokana na visa vya mauaji ya kiholela, utepetevu na ufisadi miongoni mwao. Ni kutokana na kilio cha mwananchi pamoja na mashirika yasiyo ya kiserikali ambapo serikali imejitolea sabili kubadili hali katika idara hiyo huku tume mbali mbali zilizobuniwa zikitoa mapendekezo muhimu ya kurekebisha ishara hiyo. Matokeo ya hivi punde kutoka kwa shirika la 'Transparency International' liliorodhesha idara ya polisi kama idara fisadi zaidi nchini, maoni ambayo yalisisitizwa na shirika la kutetea haki za kibinadamu. Ufisadi bado umekita mizizi katika idara ya polisi kama idara fisadi zaidi nchini, maoni ambayo yalisisitizwa na shirika la kutetea haki za kibinadamu. Ufisadi bado umekita mizizi katika idara ya polisi tangu mabadiliko yaanze upande wa trafiki na hata ndani ya polisi.

Serikali imejitolea kupambana na ufisadi unaoonekana kuwa kidonda ndugu katika idara ya polisi. Wananchi wanasema kuwa polisi ni mafisadi na kusahau kuwa ufidisadi unashirikisha watu wawili na wote wanapaswa kufunguliwa mashtaka. Ili kuleta mabadiliko muhimu katika idara ya polisi, mapendekezo yote pamoja naya tume zingine za hapo awali lazima yatekelezwe kwa mujibu wa katiba mpya. Lazima mabadiliko yaanzie juu kwani maafisa wadogo hulazimishwa kuchukua hongo ili wapelekee wakubwa wao. Ni lazima shughuli ya kuwachagua maafisa walio bora ifanyike kisheria ili mabadiliko yaanze kutoka kwa wakuu na maafisa wa polisi.

Polisi kidogo wameweza kubadili ile lugha yao ya matusi na ukali kwa raia. Raia naohawajabadilika. Wengi wao bado huwaogopa polisi na itachukua muda kwani wanadhania kuwa kikosi ni kile kile cha kitambo. Kwa upande wa polisi, hakuna mageuzi yamefanyika. Unaposafiri kuja mjini, polisi wangali wanachukua hongo kutoka kwa wenye matatu na kuwaruhusu kubeba kupita kiasi pia usalama umedorora sana kwani kumekuwa na visa vingi vya mauaji hapa mjini. Ukiangalia maafisa wa polisi, hakuna mageuzi makubwa yameshuhudiwa haswa kwa upande wa polisi, hakuna mageuzi makubwa yameshuhudiwa haswa kwa upande wa maafisa wa trafiki. Bado ni wale wale na ufisadi ungali upo.

Mabadiliko ambayo tunataka ni kuwa polisi wasikae mahali kwa muda hadi wanajuana na mafisadi na majambazi. Maafisa wa polisi wanafaa kuhudumu katika kituo kimoja kwa muda usiozidi miaka mitatu. Kwa kufuata njia hiyo mabadiliko yatapatikana. Juhudi nyingi zikielekezwa katika kubadili kikosi cha polisi wananchi wanapaswa kuhamasishwa ili nao waweze kubadilika haswa kuhusiana na mtazamo wao kwa maafisa wa polisi. Huku tukijaribu kubadili maafisa wa polisi, wananchi pia wanapaswa kuelimishwa ili waweze kubadili mtazamo wao kuhusu maafisa hao. Ni bayana kuwa ili kuweza kuleta mabadiliko ya kutamanika katika kikosi cha polisi na haswa katika kupambana na ufisadi uliokita mizizi wananchi sawia na maafisa wa polisi wana jukumu la pamoja kuleta mabadiliko hayo yatakayopelekea kuwepo kwa mlahaja mzuri kati ya maafisa wa polisi na raia. Hatimaye, kuwepo kwa huduma bora itakayochangia pakubwa kuboresha uchumi wa taifa na kuafikiwa kwa ruwaza ya mwaka 2030.

Maswali

a) Kipe kifungu hiki kichwa mwafaka (alama 1)

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……

b) Thibitisha kuwa ufisadi ni kidonda ndugu ukirejelea makala haya (alama 2)

……

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……

c) Ni vipi ufisadi katika idara ya polisi unaweza kuzikwa katika kaburi la sahau? (alama 2)

……

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……

d) Wananchi ndio wanapaswa kulaumiwa kwa ufisadi. Thibitisha (alama 2)

……

……

……

e) 'Serikali imepiga hatua katika kuleta mabadiliko katika idara ya polisi'. Onyesha kinyume cha usemi huu. (alama 2)

……

……

f) Taja manufaa yoyote mawili yanayotokana na mabadiliko katika idara ya polisi (alama 2)

……

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……

g) Eleza maana ya; (alama 4)

i) Mlahaka

……

ii) Utepetevu

……

iii) Kujitolea sabili

……

iv) Hongo

……

SEHEMU C – MATUMIZI YA LUGHA

a) i) Taja sauti zozote mbili zinazotamkiwa kwenye kaakaa gumu (alama 2)

……

……

ii)Huku ukitolea mfano, eleza aina mbili za miundo ya silabi katika Kiswahili (alama 2)

……

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……

……

b) Weka maneno yafuatayo katika ngeli zifaazo: (alama 2)

i) Ukuta ……

ii) Kibogoyo ……

c) Tunga sentensi ukitumia aina ya nomino zifuatazo;

i) Dhahania (alama 1)

……

ii) Za wingi (alama 1)

……

d) Tumia neno vibaya kama: (alama 3)

i) Kivumishi

……

ii) Kielezi

……

iii) Kiwakilishi

……

e) Ainisha vitenzi katika sentensi ifuatayo: (alama 2)

Juma alikuwa akienda kulima

f) Andika kwa hali timilifu (alama 2)

Mwalimu alikuwa hapa tangu asubuhi

……

g) Ainisha maneno katika sentensi ifuatayo:

Ala! yeye ni kiongozi mkuu mjini? (alama 3)

h) Onyesha viambishi awali na viambishi tamati katika neno lifuatalo: (alama 2)

Walichotupigia

i) Akifisha (alama 3)

mama aliwauliza nyinyi ndio mlituletea sahani vijoki na sufuria

……

j) Andika kwa wingi (alama 2)

Kibogoyo huyu ndiye aliyenipatia jiko hili.

……

k) Kanusha (alama 2)

Akiingia atamnunulia samaki wengi

……

l) Andika kinyume cha sentensi ifuatayo (alama 3)

Mahindi ya mama yamekua kwa kupata mvua ya kutosha

……

m) Andika udogo wa sentensi ifuatayo: (alama 2)

Mbwa aliyemwuuma mtoto ameuawa

……

n) Kamilisha sentensi zifuatazo kwa kutumia vitenzi na kauli zilizo mabanoni: (alama 2)

i) Kaka alim……dadake (Kimbia-tendesha) (alama 1)

ii) Pesa alizo ……hazikutosha (leta-tendewa) (alama 1)

o) Andika msemo mwingine wenye maana sawa na 'piga maji' (alama 2)

……

……

SHEMU D – ISIMU JAMII

i) Eleza sababu mbili ambazo zinaweza kufanya lugha kufa/kufifia (alama 2)

……

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ii) Taja sifa zozote nne za sajili ya siasa (alama 8)

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SEHEMU E –FASIHI SIMULIZI

a) i) Taja majukumu yoyote matano ya fasihi simulizi (alama 5)

……

……

……

……

……

……

ii) Fasihi simulizi huendelezwaje leo? Taja namna tatu (alama 3)

……

……

……

b) Eleza maana ya dhana zifuatazo katika fasihi simulizi (alama 8)

i) Ulumbi

……

……

ii) Ngomezi

……

……

iii) Lakabu

……

……

iv) Misimu

……

……

c) Taja sifa zozote nne za mlumbi (alama 4)

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……

MTIHANI WA MUHULA WA KWANZA

KISWAHILI KIDATO CHA TATU

JINA_____NAMBARI_____KIDATO__

UFAHAMU: (ALAMA 15)

Soma habari ifuatayo kisha ujibu maswali

Tukilinganisha maisha ya zamani na ya siku hizi tutaona kwamba mambo mengi sana yamebadilika. Si watu wazima, si watoto; sote tumeathirika si haba. Mitindo mipya ya kimaisha na mazingira yanayobadilika kasi ni baadhi tu ya mageuzi haya. Sio katika mavazi, lugha, mienendo, mitazamo, mawazo na mielekeo tu bali katika vipengele vingine vingi.

Mavazi ya zama hizo yalikuwa yakitengenezwa kutokana na maganda ya mti au ngozi za wanyama kama vile mbuzi, kondoo, punda, ngamia, ng'ombe na hata pengine wanyama wa mwituni. Kwa vile kila mtu alifuga wanyama wengi, hakukuwa na shida ya kuzipata ngozi kama hizo wakati wowote ule haja zitokeapo. Magome ya miti yalipatikana mwituni- na kwa kuwa katika enzi hizo hakukuwa na hifadhi za wanyama wa mwitu wala misitu yenyewe, watu waliweza kuingia katika pori lolote na kubambua maganda au kuua wanyama kama walivyohitaji.. mavazi yalikuwa rahisi kupatikana kuliko zama zetu; licha kwa upande wa ndarama hata kwa upande wa sheria pia. Zaidi,katika enzi hizo watu hawakujali kwenda uchi au walipachika kipande tu cha vazi mwilini. Siku hizi gharama ya maisha imepanda mno.

Siku hizi hatuwezi kuwaua wanyama wa mwituni vururu mtende eti kwa chakula, kama walivyofanya babu zetu. Enzi hizo matunda yalining'inia mitini na njaa zilikuwa si nyingi. Chakula kilikuwa bwerere zaidi ya leo. Vinywaji vilikuwa kwa mpango – wazee wa ngambi walikuwa na vinywaji vyao; wazee wa kawaida, wanawake na watoto hirimu hawakusahauliwa. Watu waliheshimiana; vijana walikuwa wenye adabu na walifahamu fika kuwa walipaswa kuwaheshimu wakubwa wao kwa vyoyote vile. Siku hizi vyakula ni haba na ghali na vingi vyazua magonjwa tata.

Siku hizi kuna weledi wengi, hasa wa sayansi. Mja akitaka kwenda safarini huchukua kidubwasha fulani na huyoo! Kaenda zake; barabarani, angani au hata katikati ya kilindi cha bahari. Leo twajivunia ujuzi na maendeleo ya kiafya na madawa yapunguzayo mno unyofu wa binadamu lakini bado kuna pengo kubwa kati ya vikongwe na watu wa makamo, kinyume na zama hizo. Maisha ya karne hii yamekuwa kama zile nguo ziitwazo bwaga – mtwae", ambazo hazibali kufumka au kukwajuka..

Hivi leo, mtu akiumwa na kichwa hukimbilia daktari. Mwingine akiumwa na nyoka popote pale, hukimbilia hospitalini akapate sindano ambayo hata jina lake halijui. Zamani mtu alikuwa achimbechime mizizi ya upuzi upuzi, aitafune na alipata nafuu! Wa kisasa twapuuza wa kale eti hawakujua elimu ya usafi tuijuavyo sisi, ilhali walikuwa wakichoma miili ya watu waliokuwa wamekufa kwa ukoma au kifua kikuu. Wakati mwingine walikihama kijiji kilichoingiliwa na maafa ya ndui. Hata sasa wagonjwa kama hao hutengwa hospitalini maradhi kama vile UKIMWI bado yakikosa tiba.

Mengi tuliyo nayo sasa mathalan tarakilishi na eropleni yalivumbuliwa au kugunduliwa na hao wa zamani. Fanaka zetu zote na ustawi tulionao asili yake ni watu hao wa zamani. Akili ni mali na kila mtu ana zake. Kuongezeka kwa watu duniani, mchanganyiko au matumizi mabaya ya madawa

mengi pamoja na uchafuzi wa hali ya anga pia yameongezea kuleta hasara kubwa. Kweli sikio haliwezi kushinda kichwa.

(a) Kulingana na mwandishi, kwa nini maisha ya kale na ya sasa hayalingani? (alama 3)

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……

(b) Kupata mavazi zama zile kulikuwa nafuu. Toa sababu. (alama 2)

……

……

(c) Kwa kusema siku hizo, 'chakula kilikuwa bwerere zaidi ya leo,' mwandishi anamaanisha nini? (alama 2)

……

……

(d) Taja sababu za magonjwa na maafa kukithiri siku hizi licha ya hatua kubwa katika elimu na afya. (alama 3)

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(e) Fafanua usemi, 'sikio haliwezi kupita kichwa,' kwa mujibu wa taarifa. (alama 2)

……

……

(f) Eleza maana ya;

(i) Magome-

(ii) Vururu mtende-

(iii) Hazibali-

SEHEMU YA B: UFUPISHO: (ALAMA 15)

Soma taarifa ifuatayo kisha ujibu maswali yanayofuata.

Katika safu yangu hii sina lengo la kuzishambulia dini zetu na namuomba Mungu sana asiniandikie dhambi kutokana na ninayotaka kuyaandika, lakini nashawishika kuikumbusha jamii yangu ambayo inatufanya watu tuzione dini zetu zinamkandamiza mwanamke. Dini zetu kubwa kama Uislamu na Ukristo zinatuelekeza mwanamke kumheshimu mumewe na kumskiliza anachosema, lakini kwa yeye kufuata maadili ya dini na sikukwambia uue ukakubali.

Wakati dini inasema utekeleze amri ya mumeo na wao wameelezwa mambo ya kuwafanyia wanawake, ikiwa ni pamoja na kuwaheshimu na kuwaridhisha kadri na uwezo wao.

Kutokana na hilo la amri, wanaume wengi ndio wamechukua kama tiketi ya kuwanyanyaza wanawake na hata kumnyima fursa ya kujiendeleza kielimu na hata kufanya shughuli za kuongeza kipato. Unakuta familia ni ya kimaskini, baba hana fedha za kutosha kuihudumia familia yake, lakini baba huyo anataka kujishughulisha na shughuli yoyote ya kumuingizia kipato kinachoweza kuwasaidia wote na matokeo yake kuendelea kuwepo, kwenye dimbwi la umaskini. Wengine kwa hofu ya kupata changamoto kutoka kwa wake zao wanawakatalia wanawake walio wao kujiendeleza kielimu au kutafuta mwanamke asiyeelimika ili asiweeze kuhoji mambo kadhaa ndani ya nyumba.

Hili limebainishwa hivi karibuni na shirika moja lisilo la kiserikali huko Kigoma ambapo katika utafiti wao asilimia 90% ya wanawake wa vijijini wanashindwa kutoa hoja kutokana na uelewa wao duni na kutoa sababu ya kuwa hiyo ni kutokana na ukosefu wa elimu, masuala ya kidini yanayomwelekeza mwanamke kufuata amri za mumewe, mila na desturi kadhaa.

Dini zote zinaeleza wazi umuhimu wa mtu kupata elimu bila kubagua kama ya kiisalmu inavyosema; mtu anapata thawabu anapotafuta elimu na anatakiwa aitafute popote bila kujali umbali na hata ikiwezekana kufika China ambapo inaaminika ni mbali. Sijawahi kuona wala kusikia dini ikisema mwanamke asipate elimu lakini baba zangu na kaka zangu wanaume wanalipotosha hili kutaka kuendelea kumkandamiza mwanamke bila kufikiria kuwa mwanamke ni msaada mkubwa kwao na maendeleo ya taifa lolote; ikiwa leo tuko katika harakati za kupata maendeleo na nchi hii hivi kweli tutafanikiwa?

Mapambano ya kuleta maendeleo yaanze katika ngazi ya familia kwa kuondoka kwa ujinga wa kumkandamiza mwanamke ili naye aelimike, aweze kujenga hoja, aweze kujitafutia kipato na mwisho kusaidia katika maendeleo ya familia ambayo kwa njia nyingine ndiyo maendeleo yenyewe ya taifa hili.

(a) Fupisha aya tano za kwanza. (**Maneno 70**)

(b) Mwanamke anaweza kuendelezwa vipi? Rejelea aya mbili za mwisho. (**Maneno 50**)

SEHEMU YA TATU: MATUMIZI YA LUGHA (ALAMA 40)

a) (i) Andika katika hali ya umoja. (alama 2)
Masaibu yaliyowapata yaliwafanya wapoteze matumaini.

……

(ii) Machaka ya waridi hayazai maua meusi

……

b) Tunga sentensi ukitumia neno 'mwitu' kama:-

(i) Kielezi (alama 1)

(ii) Nomino (alama 1)

c) Andika katika usemi wa taarifa (alama 2

Askari: Ulikuwa unaenda wapi uliposhambuliwa?

Jirani: Nilikuwa nikienda sokoni.

……

d) Sahihisha sentensi ifuatayo. (alama 2)

Mtu ambaye aliyechukua kitabu chenye kilikuwa hapa arudishe.

……

e) Bainisha mofimu katika maneno haya (alama 1)

(i) Samaki

(ii) Mtu

f) Andika sentensi ifuatayao katika hali ya kuamrisha. (alama 1)

Tafadhali, acheni kucheka ovyo.

……

g) Changanua kwa kutumia mistari. (alama 4)

Raisi mpya aliwahutubia wananchi jana.

……

……

……

……..

h) Taja ala nne za kutamkia. (alama 2)

……

……

……

i) Majina haya yako katika ngeli gani? (alama 1)

i) Uga…….

ii) Huzuni ……..

j) Tambulisha viambishi katika kitenzi:- (alama 3)

Kitakachotolewa……

……

k) Toa maana mbili za sentensi ifuatayo. (alama 2)

Majoka alimpigia mpira……

…….

l) Andika katika hali ya wingi. (alama 2)

Mimi ndimi niliyepanga mkutano huu.

……

m) Andika katika hali ya udogo. (alama 2)

Mtoto amejiwa na mama yake.

……

n) Andika upya kwa kuzingatia maagizo. (alama 2)

Mbwa aliyepotelea mwituni alipatikana kidimbwini.

(Anza: Kidimbwini…)

……..……

…….

o) Kinyume cha:-

Jogoo akiwa juu ya banda aliwika na kusikika kote……(alama 2)

……

……

p) Fafanua matumizi matatu ya neno ‘kwa’. (alama 3)

……

……

……

q) Vihisishi hivi hutumika katika hali gani? (alama 2)

i) Makiwa ……

…….

ii) Lahaula……

……

r) Ainisha muundo wa silabi katika maneno yafuatayo. (alama 3)

i) Tandazwa

ii) Eua

iii) Chichiri

s) Ainisha vitenzi katika sentensi ifuatayo. (alama 2)
Babu alikuwa akitusimulia hadithi
……
……

4. ISIMU JAMII **(ALAMA 10)**

a) Lahaja ni nini? (alama 2)

……

……

b) Sajili ni nini? (alama 2)

……

……..

c) Taja wahusika wawili katika rejesta ya hotelini. (alama 2)

……

……

d) Eleza kwa kutoa mifano sifa nne za rejesta ya shuleni/darasani. (alama 4)

……

……

……

……

NAME:…… DATE:……..

CLASS:…… ADM NO……..

MATHEMATICS

FORM ONE

END OF TERM ONE EXAMINATION

TIME: $2^1/_2$ HOURS

TERM 1

END OF TERM 1 EXAMINATION

INSTRUCTIONS TO CANDIDATES

- ✓ Answer all questions in spaces provided

SECTION 1

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	Total

SECTION 2

17	18	19	20	21		GRAND TOTAL

1. Evaluate 26 ÷ 2 + 3 x 7 – 4 x 5 3mks

2. Evaluate $3\frac{1}{3} + \frac{6}{7}\ of\ 5\frac{4}{9}$ 3mks

3. A watermelon vendor had 1500 watermelons. He sold 800 on the first day and 250 on the second day. He added 470 to the remaining stock on the third day.
   a. How many watermelons did he have at the end? 2mks

   b. If he sold all the watermelons at an average cost of sh. 100. Each. How much money did he collect. 2mks

4. a. State the place value and total value of the underlined digit in 47<u>3</u>645

2mks

b. Write the number in (a) above in words. 1mk

5. Round off 4 827 627.931 to the nearest

   i. Ten thousand 2mks

   ii. Hundredths 2mks

6. Test whether 712.008 is divisible by 11 2mks

7. Express as a fraction in its simplest form $0.6\dot{3}$ 3mks

8. $^{3}/_{5}$ of the pupils in a school are boys. If there are 96 girls in the school, how many pupils are there in the school. 3mks

9. Express 1728 as a products of its prime factors in power form. 3mks

10. Arrange the following fractions in descending order

½, $^{3}/_{5}$, $^{4}/_{7}$, $^{8}/_{9}$, $^{2}/_{3}$ 3mks

11. Evaluate $\frac{0.0195\ x\ 4.55}{13.0\ x\ 0.35}$ 3mks

12. Find the G.C.D of 32, 48, 36 2mks

13. Three alarms signals at interval of 40 minutes, 45 minutes and 60 minutes. If they signaled simultaneously at 6.30am, at what time will they next signal together.

3mks

14. Doris office is on the twenty second floor in a storey building. On a certain day, she walked up five floors from her office to another office. She then took a lift to the third floor. Calculate the number of floors she went through while in the lift.

3mks

15. Use tables to find

i. 423^2 2mks

ii. $\sqrt{0.067}$ 2mks

16. Express the following number as stated.

i. 0.000000718 (in standard form) 2mks

ii. 1.56×10^{-5} (in normal form) 2mks

17. a. Carol borrowed sh. 150,000 she paid back sh. 25,000 in the first month. Sh 15,000 in the second month and sh. 34,000 in the third month. She paid the rest in equal amounts for two months. How much did she pay for each of the last two months.

4mks

b. Find the difference in value between the largest number and the smallest number formed by digits 5, 2 and 8. 3mks

c. The first four even numbers are written in descending order to form a number.

i. Write down the number 1mk

ii. Find the total value of the thousands digit in the number. 2mks

18. a. Express the following numbers as products of prime factors using power notation.

(i) 5148 2mks

(ii) 6084 2mks

b. Hence leaving your answers in prime factor form.

(i) Evaluate $\frac{(5148)^2}{\sqrt{6084}}$ 4mks

(ii) Find G.C.D and L.C.M of 5148 and 6084. 2mks

19. a. Three metal rods of lengths 234cm, 270cm and 324cm were cut into shorter pieces, all of the same length to make window grills. Calculate the length of the longest piece that can be cut from each of the rods and hence the number of pieces that can be obtained from the rods. 4mks

b. A metal dealer had a piece of wire which he intended to cut into pieces of 8m, 15m or 21m. determine the minimum length of the wire that would give an exact number of pieces of each length. 3mks

c. The G.C.D of two numbers is 12 and their L.C.M is 240. If one of the numbers is 60. Find the other number. 3mks

20. a. simplify 3mks

$1\frac{1}{9} \times \frac{3}{8}$ of $2\frac{2}{5}$

b. Mr. Kamau sold two thirds of his fruits on Monday, and ¾ of the remainder on Tuesday. He had then 60 left. How many fruits had she at first. 3mks

c. $\frac{\frac{2}{3} of\ 5\frac{2}{5} - 2\frac{3}{10}}{\frac{3}{5} \div 4\frac{1}{2} + 1\frac{3}{5}}$ 4mks

21.a) Find the value of $(25 + 36)^2 - 625 \div 25 \times 4$ 3mks

b) Evaluate $\frac{-8\ x\ +2\ +\ -11}{+18\ \div\ -2\ x\ +3}$ 3mks

c) Use number line to evaluate.

i) -5 + 3 2mks

ii) (-7) + (-1) 2mks

Name: …….. Class: ……..…..

Date: …… Adm No: ……..

MATHEMATICS

TIME: 2 HOURS 30 MINUTES

MATHEMATICS FORM II

INSTRUCTIONS TO CANDIDATES:

- Write your name, admission number, Class, Signature and write date of examination in the spaces provided
- The paper contains two sections. Section I and Section II.
- Answer ALL the questions in section I
- Answer any five questions in section II.
- Answers and working must be written on the question paper in the spaces provided below each question.
- Show all steps in your calculations below each question.
- Marks may be given for correct working even if the answer is wrong.
- KNEC mathematical table may be used, except where stated otherwise.

FOR EXAMINERS USE ONLY

SECTION I

Question	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	TOTAL
Marks																	

SECTION II

Question	17	18	19	20	21	22	23	24	TOTAL
Marks									

GRAND TOTAL

SECTION I (50 MARKS)

Answer all the questions from this section

1. Work out the following, giving the answer as a mixed number in its simplest form

$$\frac{\frac{2}{5}\div\frac{1}{2}of\ \frac{4}{9}-1\frac{1}{10}}{\frac{1}{8}-\frac{1}{6}\times\frac{3}{8}}$$ (3marks)

2. When a certain number is divided by 30, 45, 54, there is always a remainder of 21. Find the least numbers. (3marks)

3. Evaluate without using mathematical tables of a calculator,

$\frac{0.0084\times1.23\times3.5}{2.87\times0.056}$ expressing your answer as a single fraction. (3marks)

4. Use logarithm to solve tables to evaluate (4 marks)

$$\sqrt[3]{\frac{45.3\times0.00697}{0.534}}$$

5. If each interior angle of a regular polygon is 150^0, how many sides does the polygon have?

(3 marks)

6. Solve for x in the equation

$32^{(x-3)} \div 8^{(x-4)} = 64 \div 2^x$ (3 marks)

7. Use reciprocal table to work out.

$$\frac{7}{0.5283} + \frac{0.5}{3.735}$$ (4marks)

8. Three pens and four exercise books cost sh. 87. Two pens and five exercise books cost sh.93. Find the cost of one pen and one exercise book. (3marks)

9. A Kenyan Company received US dollars 100,000. The money was converted into Kenya Shillings in a bank which buys and sell foreign Currencies as shown below.

	Buying (kshs)	**Selling (ksh)**
1 US Dollar	77.25	77.44
1 sterling pound	119.93	120

a) Calculate the amount of money in ksh, the Company received. (1mark)

b) The company charged the Kenya shillings calculated above into sterling pounds to buy Car in Britain. Calculate the cost of the car to the nearest sterling pounds. (2marks)

10. A company saleslady sold goods worth sh. 1,600,000. From this sale she earned a commission of sh. 40,000.

a) Calculate the rate of Commission. (1mark)

b) If she sold goods whose marked price was sh. 3 600,000 and allowed a discount of 2%, calculate the amount of commission she received. (2marks)

11. A piece of metal has a volume of $20cm^3$ and a mass of 300g. Calculate the density of the metal in kg/m^3. (3marks)

12. The area of a sector of a circle of diameter 126cm is $4158cm^2$. Calculate the angle subtended at the centre of the circle. (Take pie $=\frac{22}{7}$) (3marks)

13. Simplify completely by factorization. (3 marks)

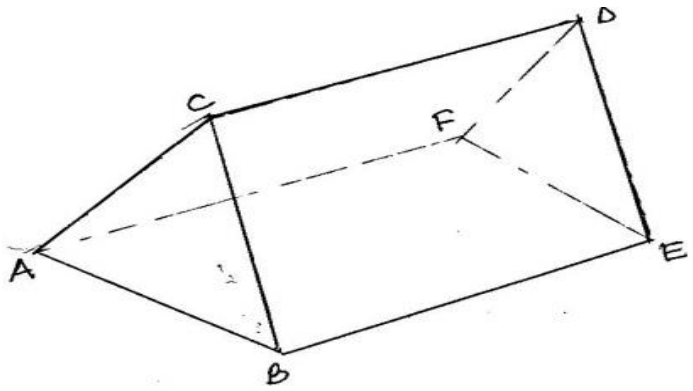
$$\frac{ax + bx + ya + yb}{ma + mb + na + nb}$$

14. Evaluate: $\dfrac{-12\div(-3)\times4-(-20)}{-6\times6\div3+(-6)}$ (3 marks)

15. Use the tables of cubes to evaluate: (3 marks)

$(3.461)^3 - \sqrt[3]{2809}$

16. The figure below is a prism whose cross-section is an equilateral triangle such that AB=BC=CA=3cm, BE=CD=AF=5cm



Draw the net of the prism (3marks)

SECTION II (50 MARKS)

Answer five questions only from this section

17. A line L passes through point (-2,3) and (-1, 6) and is perpendicular to a line P at (-1, 6)

a) Find the equation of L. (3marks)

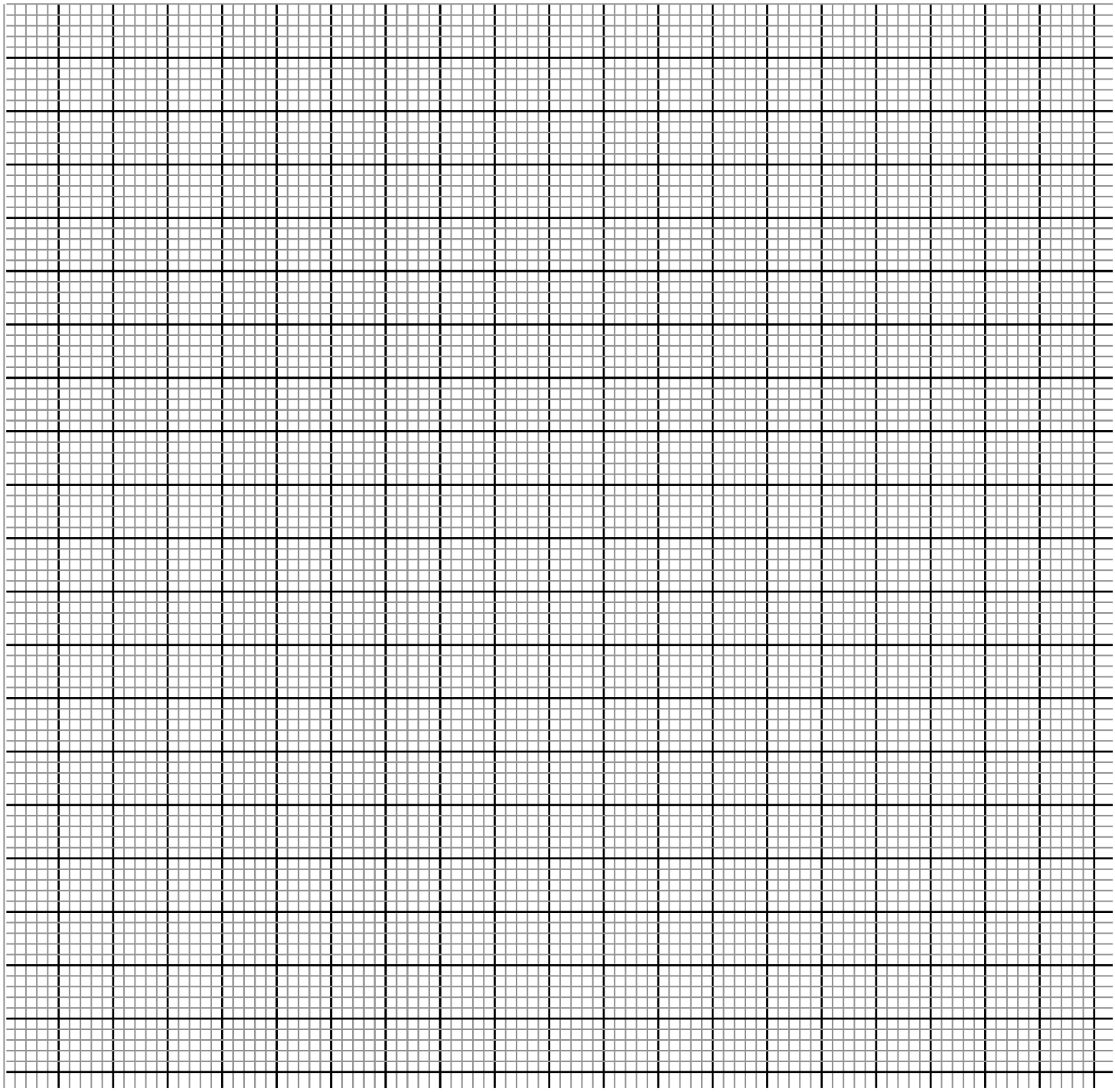
b) Find the equation of P in the form ax + by = c. (3marks)

c) Given that another line Q is parallel L and passes through point (1, 2), find the x and the y intercepts of line Q. (2marks)

d) Find the point of intersection of lines P and Q. (2marks)

18. Triangle PQR has vertices at P(2,3),Q(1,2) and R(4,1), while triangle $P^1Q^1R^1$ has vertices at $P^1(-2,3)$,$Q^1(-1,2)$, R^1 (-4,1).

(a) (i) Draw triangle PQR and $P^1Q^1R^1$ on the grid provided below (2marks)



(ii) Describe fully a single transformation which maps triangle PQR onto triangle $P^1Q^1R^1$.

(1mark)

(b) (i) On the same plane, draw triangle $P^{11}Q^{11}R^{11}$ the image of PQR, under reflection on line $y + x = 0$ (2marks)

(ii) Describe fully a single transformation which maps triangle $P^{11}Q^{11}R^{11}$ onto triangle $P^{1}Q^{1}R^{1}$. (1mark)

(c) Draw triangle $P^{111}Q^{111}R^{111}$such that it can be mapped onto triangle PQR by a positive quarter turn about the origin (2marks)

(d) State all pairs of triangles that are oppositely congruent (2marks)

19. A businessman sold a car at sh.900 000 after allowing his customer a 10% discount on the marked price of the car. In so doing he made a profit of 20%.

a) Calculate

(i) The marked price of the car. (3 marks)

(ii) The price at which the businessman had bought the car (2marks)

b) If the businessman had sold the same car without giving a discount. Calculate the percentage profit he would have made. (3 marks)

c) In the month of December the businessman sold 20 vehicles without giving a discount. Determine the total profit he received from the sale. (2 marks)

20. Four towns A, B, C and D are such that town B is 180 km East of A. Town C is at a distance of 120km on a bearing of 300^0 from B. Town D is due West of C and North Of A.

(a) Using a scale of 1cm to represent 20km, make an accurate scale drawing to show the relative positions of the towns. (4 marks)

(b) Find:

(i) Determine the bearing of C from A
(1mark)

(ii) Determine the distance of C from D (2 marks)

(iii) Determine the bearing of B from D (1 mark)

(iv) Determine the distance of A from D (2 marks)

21. The measurements (in metres) of a field were given in a field note book as follows:

Base line XY = 240m

	Y	
	150	50 to P
To Q 60	120	
	50	20 to M
	X	

(a) Using a scale of 1 cm to represent 20 m, draw an accurate map of the farm. (4 marks)

(b) **Find** the area of the field in hectares. (4marks)

(c) If the farm is on sale at sh. 900 000 per hectare, find how much the farm costs. (2 marks)

22. Triangle ABC is such that AB = 7cm, angle ABC = 120^0 and angle BAC = 30^0.

(a) Using a ruler and a pair of compass only, construct triangle ABC. (3 marks)

(b) Measure the length of:

(i) Line BC (1 mark)

(ii) Line BC (1 mark)

(c) Drop a perpendicular from C to meet line AB extended at M. (2 marks)

(d) Measure the length of line CM (1 mark)

(e) Calculate the area of triangle ABC (2 marks)

23. A hollow metal pipe whose internal and external and internal diameters are 6.3cm and 2.8cm respectively is 3.5m long.

(a) Calculate the volume of the metal used to make the pipe. (4 marks)

(b) The pipe is melted down and recast into a solid cylinder of height 1.75m. Calculate the radius of the cylinder to two decimal places. (4 marks)

(c) Given that the density of the metal above is $4.2g/cm^3$, calculate the mass of the solid cylinder in kilograms. (2 marks)

24. Three business people Kamau, Gachui and Maina agreed to contribute Kshs. 1 210 000 to start a business. The ratio of Kamau's contribution to Gachui's contribution is 3 : 2 while that of Gachui to Maina is 1 : 3.

(a) Determine the ratio of Kamau's contribution to Maina's contribution. (2 marks)

(b) Determine the amount of money contributed by Kamau (2 marks)

(c) They agreed to share their profits as follows;

50% to be shared in the ratio of their contributions

40% to be retained for the running of the business

10% to be set aside for emergencies

If their total profit for the year 2014 was sh.704 000, determine the

(i) Amount of money retained for running the business. (2 marks)

(ii) The amount of money set aside for emergencies. (2 marks)

(iii) The amount of received by Gachui (2 marks)

FORM 3 MATHEMATICS END TERM EXAMS

Kenya Certificate of Secondary Education

TERM1

1. Evaluate and simplify without using a calculator.

$$\frac{3\frac{1}{5} + \frac{1}{4} \text{ of } 3\frac{1}{2} - 5\frac{1}{6}}{2\frac{2}{3} - 1\frac{2}{5} \div 1\frac{1}{3} + 3\frac{3}{4}}$$

(3mks)

2. The sum of interior angles of a polygon is 1980^0. Find the number of sides the polygon has. (2mks)

3. Simplify as far as possible by rationalizing the denominator. (3mks)

$$\frac{1+\sqrt{2}}{2+\sqrt{3}} - \frac{1-\sqrt{2}}{2-\sqrt{3}}$$

4. Use table of reciprocal only to work out (3mks)

$$\frac{3}{} + \frac{13}{}$$

0.6735 0.156

5. Solve $3x - 2 \leq 5x - 6 < 2x + 12$ and represent your solution on a number line .
   Hence state the integral values. (4mks)

6. Evaluate without using mathematical tables. (3mks)
   $2 \log 5 - \frac{1}{2} \log 16 + 2 \log 40$

7. Given that P=2.6 cm, Q=4.0 cm and R=7.8 cm. Find the percentage error in the expression. (3mks)
   $$\frac{P + Q}{R}$$

8. From a point 20m away on a level ground the angle of elevation to the lower window line is 29^0 and the angle of elevation to the top line of the window is 32^0. Calculate the height of the window. (3mks)

9. The size of an interior angle of a regular polygon is156^0. Find the number of sides of the polygon. (2mks)

10. The number 5.81 contains an integral part and a recurring decimal. Convert the number into an improper fraction and hence a mixed fraction. (3mks)

11. Simplify. (3mks)

$\underline{2y^2 - xy + x^2}$

$2x^2 - 2y^2$

12. Given that Sin A= $\frac{4}{5}$, Cos B= $\frac{5}{12}$ A and B are acute angles. Without using tables calculate
Sin B Cos A + Sin A tan B (3mks)

13. A two digit number is such that the sum of the digits is 11 where the digits are reversed the number exceed the original number by 9. Calculate the original number. (3mks)

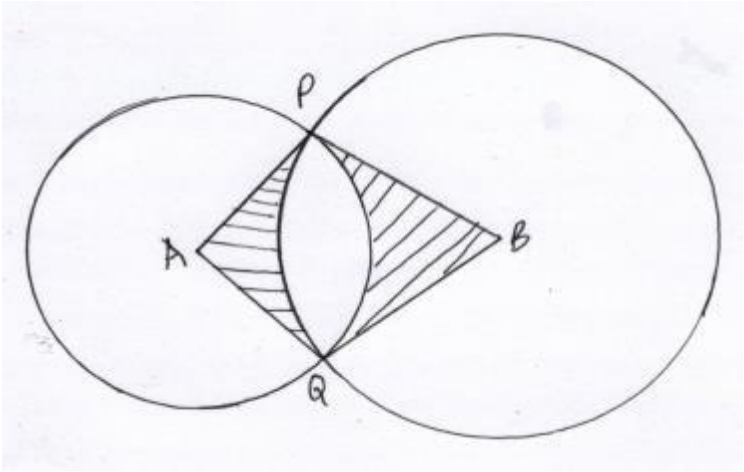
14. Two boys and a girl shared some money. The elder boy got $\frac{4}{5}$ of it, the younger boy got $\frac{2}{5}$ of the remainder and the girl got the rest. Find the percentage share of the younger boy to the girls share. (4mks)

15. Solve the following simultaneous equations. (4mks)
$x^2 - xy=2$
$x + y=3$

16. Use the table of squares, square roots and reciprocals to evaluate to 3 decimal places the question below. (4mks)

$$\frac{10}{\sqrt{0.625}} + (1.64)^2$$

17. The diagram below shows two circles centre A and B which intersect a point P and Q. Angle PAQ=70^0 and <PRQ=40^0 and PA=AQ=8 cm.



Use the diagram to calculate to 2 d.p

(a) the length PQ (2mks)

(b) The length PB (2mks)

(c) Area of minor segment circle centre A. (2mks)

(d) Area of the shaded region (4mks)

18. The following table shows the heights to the nearest centimeter of some maize plants in a research farm.

Height (cm)	80-84	85-89	90-94	95-99	100-105	105-109	110-114	115-119
Frequency	5	14	16	17	24	12	11	4

(a) State the modal class (1mk)

(b) Find to 2 d.p

(i) Mean height (4mks)

(ii) The difference between the mean height and the median height. (5mks)

19. (a) Three points A(0,4) B(2,3) and C(-2, -1) are vertices of a triangle. Find ;
(i) The gradient of AC (1mk)

(ii) The gradient of the perpendicular bisector of line AC (1mk)

(iii) The coordinates of the mid-point of line AC. (1mk)

(b) (i) the gradient of AB (1mk)

(ii) The gradient of the perpendicular bisector of lines AB (1mk)

(iii) The coordinates of the mid-point of AB (1mk)

(c) (i) Find the equation of the perpendicular bisector of AC (1mk)

(ii) The equation of perpendicular bisector of AB (1mk)

(iii) Hence find the coordinates of the circumcentre of the triangle.(2mks)

20. The position vectors of points A and B with respect to the origin O, are $\begin{pmatrix}-8\\5\end{pmatrix}$ and $\begin{pmatrix}12\\-5\end{pmatrix}$ respectively. Points M and N are the mid points of AB and OA respectively.

(a) Find

(i) The coordinates of N and M (3mks)

(ii) The magnitude of NM. (3mks)

(b) Express vector $\overrightarrow{NM}$ in terms of $\overrightarrow{OB}$ (1mk)

(c) Point P maps onto P^1 by a translation $\begin{pmatrix}-5\\8\end{pmatrix}$ given that OP=OM +2 MN, find the coordinates of P^1 (3mks)

21. The information of a piece of land was entered in a field book as shown below.

	180	F
E 50	120	
	90	74 D
C 35	55	
	30	40 B
A	0	

(a) Sketch the map of the land (3mks)

(b) Find the area of the land in hectors. (7mks)

22. (a) Draw the graph of the function $y=2x^2 + 4x - 3$ on the graph paper provided for $-4 \leq x \leq 2.5$ (5mks)

(b) Use your graph to solve the equations

(i) $2x^2 + 4x - 3 = 0$ (2mks)

(ii) $x^2 + x - 5 = 0$ (3mks)

23. The base of an open rectangular tank is 3m by 2.5 m and its height is 4m.
    (a) Calculate
        (i) The capacity of the tank in litres. (3mks)

(ii) The total surface area in m^2 of the tank. (2mks)

(b) An open cylindrical tank has an equal capacity and same height as the rectangular tank in (a) above. Calculate ;
(correct to one decimal places)
(i) The radius of the cylindrical tank. (3mks)

(ii) The total surface area, in m^2, of the tank. (2mks)

24. Transline bus left Nairobi at 8.00 and travelled Kisii at an average speed of 80km/h. Given that the distance between Nairobi and Kisii is 400km, calculate;
(a) The time the car arrived in Nairobi. (3mks)

(b) The time the two vehicles met. (3mks)

(c) The distance from Nairobi to the meeting point. (2mks)

(d) The distance of the bus from Kisii when the car arrived in Nairobi. (2mks)

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