KCSE JOINT PREMOCK

2023 SERIES 1 EXAMS

ALL SUBJECTS

Kenya National Schools Premock Examination Tests for the KCSE 2023 Candidates. This is in preparation for the Upcoming Mocks, Postmocks and the final KCSE Examinations.

SUBJECTS COMPILED;

Mathematics, English, Kiswahili, Biology, Chemistry, Physics, CRE, Geography, History, Business Studies, Agriculture & Computer Studies.

SERIES 1

For Marking Schemes

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MWALIMU CONSULTANCY

KCSE JOINT PREMOCK

2023 SERIES 1 EXAMS

CHEMISTRY

PAPER 1

TIME: 2 HOURS

NAME……

SCHOOL…… SIGN……

INDEX NO…… ADM NO……

INSTRUCTIONS TO CANDIDATES:

(i) *Write your **name** and **index number** in the spaces provided **above**.*

(ii) ***Sign** and write the **date** of examination in the spaces provided **above**.*

(iii) *Answer **ALL** the questions in the spaces provided.*

(iv) *Mathematical tables and silent electronic calculators **may be** used.*

(v) *All working **must be** clearly shown where necessary.*

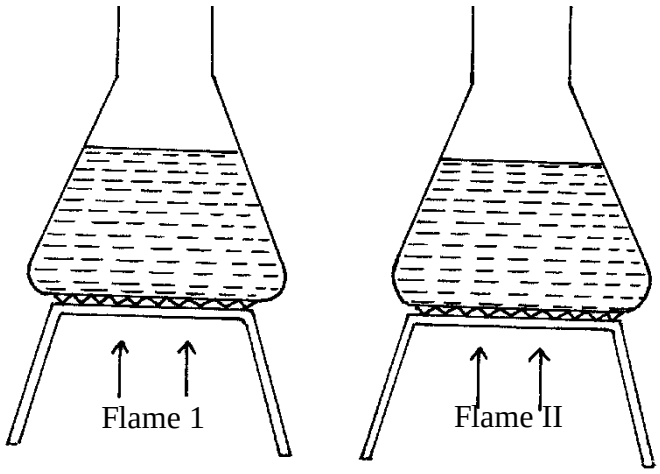
(vi) *Candidates should check the question paper to ascertain that all the pages are printed as indicated and that no questions are missing*

FOR EXAMINER'S USE ONLY

QUESTIONS	MAXIMUM SCORE	CANDIDATE'S SCORE
1 –30	80	

*Answer **ALL** the questions in the spaces provided*

1. The samples of equal volumes of water were put in 100cm^3 conical flasks and heated for 5 minutes on a Bunsen flame. It was observed that sample 1 registered a low temperature than sample II



(a) Name flame I **(1mk)**

……

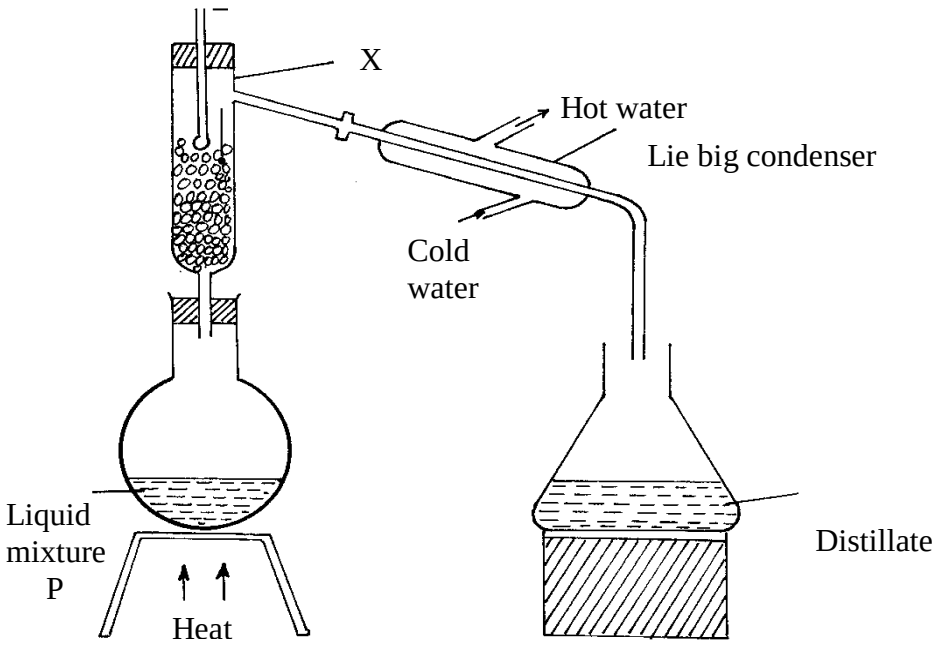
(b) State one disadvantage of using flame I for heating **(1mk)**

……

……

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

The diagram shows the method used to separate component of mixture P



(a) Name X **(1mk)**

……

(b) What is the name given to the method used in separation of mixture P **(½mk)**

……

(c) What would happen if the inlet and outlet of water were interchanged **(½mk)**

……

(d) Which physical property is used to separate mixture P **(1mk)**

……

……

3. The table below shows the solubility of three solids P, Q, and R.

Solid	Cold Water	Hot Water
P	soluble	soluble
Q	insoluble	insoluble
R	insoluble	soluble

How would you obtain pure samples of R,P and Q **(2mks)**

……

……

……

4. State why a water molecule H_2O can combine with H^+ ion to form H_3O^+ ion **(1mk)**

……

……

5. The P^H values of some solutions are given below

P^H	14.0	1.0	8.0	6.5	7.0
Solution	M	L	N	P	Z

(a) Identify the solution with the lowest concentration of hydrogen ion. Give reason for your answer **(1mk)**

……

……

(b) Which solution would be used as an anti-acid for treating stomach upset. Give for your answer **(1mk)**

……

……

6. The data below gives the electronic configuration of some selected atoms and ions

Atom/ion	A^{2+}	B	C^{2-}	D^{2+}	E	F^{-}	G^{+}	H
Electronic configuration	2	2.4	2.8	2.8.8	2.8	2.8.8	0	2.8.2

(a) Select an atom that is a noble gas **(1mk)**

……

(b) What is the atomic number of C and A **(1mk)**

……

(c) Select an element that belong to group 2 and period four **(1mk)**

……

(d) Write the formula of the compound formed when D and F react **(1mk)**

……

7. Helium is used instead of hydrogen in balloons for metrological research. Explain **(1mk)**

……

……

8. Zinc metal and hydrochloric acid reacts according to the following equation

$Zn_{(s)} + 2HCl_{(aq)} \rightarrow ZnCl_{2(aq)} + H_{2(g)}$

1.96g of Zinc metal were reacted with $100cm^3$ of 0.2M hydrochloric acid

a) Determine the reagent that was in excess **(2mks)**

Zn=65.2; Molar gas volume at s.t.p 22.4 liters

……

……

……

(b) Calculate the total volume of hydrogen gas that was liberated at s.t.p **(1mk)**

……

……

……

9. Give the IUPAC names of the following compounds **(1mk)**

(i) .$CH_3CH_2CH_2CH(CH_3)$

CH_3 ……

(ii)$CH_3CH=CHCl$…… **(1mk)**

10. 0.9g of potassium chloride and potassium carbonate mixture completely reacted with $25cm^3$ of 0.2M hydrochloric acid

(i) Write an equation of the reaction which takes place **(1mk)**

……

……

(ii) Determine the number of moles of the acid used **(1mk)**

……

……

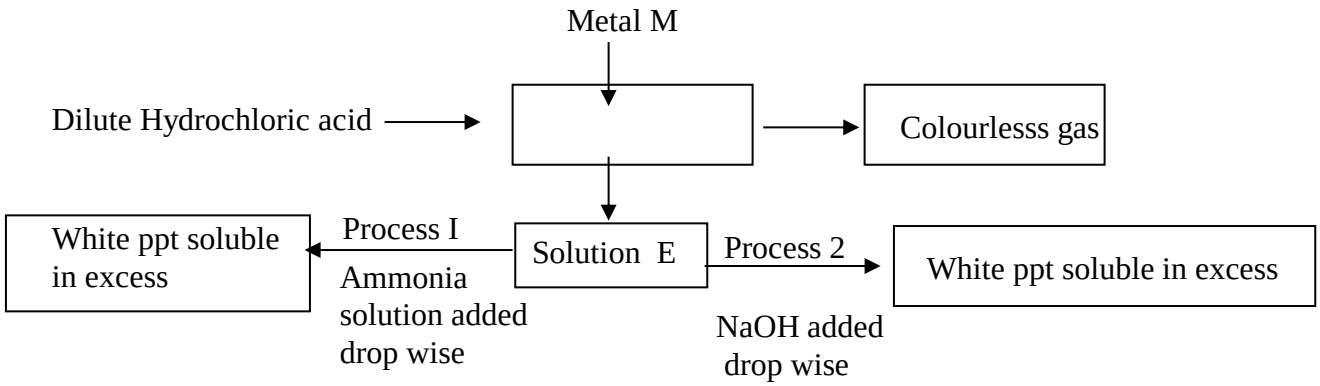
(iii) Calculate the mass of potassium chloride in the mixture(**K=39.0; C=12.0; O=16.0)** **(2mks)**

……

……

……

11. Study the flow chart below and answer the questions that follow



(i) Identify metal **M:** ……. **(1mk)**

(ii) Colourless gas: ……. **(1mk)**

(iii) Write an equation that leads to the formation of white precipitate in process **(1mk)**

……

……

12. a) Define the term dynamic equilibrium **(1mk)**

……

……

b) A reaction at equilibrium can be represented as

$$2CrO^{2-}_{4[aq]} + 2H^{+}[aq] \rightleftharpoons Cr_2O7\ ^{2}_{[^{-}aq]} + H_2O_{\{l\}}$$

Yellow **orange**

State and explain the observation made when NaOH is added to the equilibrium mixture **(2mks)**

……

……

……

……

13. Few drops of hydrochloric acid were added into a test tube containing lead {II} Nitrate solution

a) State one observation made **(1mk)**

……

b) Write an ionic equation of the reaction that occurred in the test tube **(1mk)**

……

14. A compound of carbon, hydrogen and oxygen contains 57.15% carbon, 4.76% hydrogen and the rest oxy gen. If its relative molecular mass is 126, find its molecular formula. **(C = 12, H = 1, O = 16)** **(3mks)**

……

……

……

……

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

Salt	Solubility g/100g of water	
	At 40°C	At 60°C
$CuSO_4$	28	38
$Pb(NO_3)_2$	79	98

A mixture containing 35g of $CuSO_4$ and 78g of $Pb(NO_3)_2$ in 100g of water at 60°C was cooled to 40°C.

i) Which salt crystallized out? Give a reason. **(2 marks)**

……

……

ii) Calculate the mass of the salt that crystallized out. **(1 mark)**

……

……

……

16. a)Distinguish between strong and concentrated acid **(1mk)**

……

……

b). A solution of ammonia in methylbenzene has no effects on red litmus paper while a solution of ammonia in water turns red litmus paper blue. Explain **(2mks)**

……

……

……

17. Name the process which takes place when

i. Iodine changes directly from solid to **gas** **(1mk)**

……

ii. $Fe^{2+}_{(aq)}$ changes to $Fe^{3+}_{(aq)}$ **(1mk)**

……

iii. White sugar changes to black when mixed with concentrated sulphuric (VI) acid **(1mk)**

……

……

18. In the last stage of the solvay process, a mixture of sodium hydrogen carbonate and ammonium chloride is formed

a) State the method of separation **used** **(1mk)**

……

b) Write an equation showing how lime is **slaked** **(1mk)**

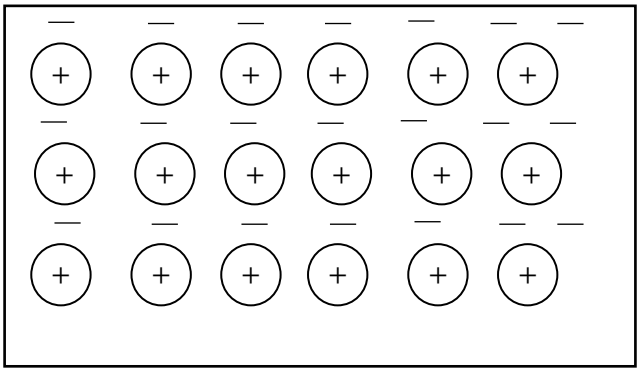
……

……

c) Name the by- product recycled in the above **process** **(1mk)**

……

19. The diagram below is a section of a model of the structure of element K



a) State the type of bonding that exist in **K** **(1mk)**

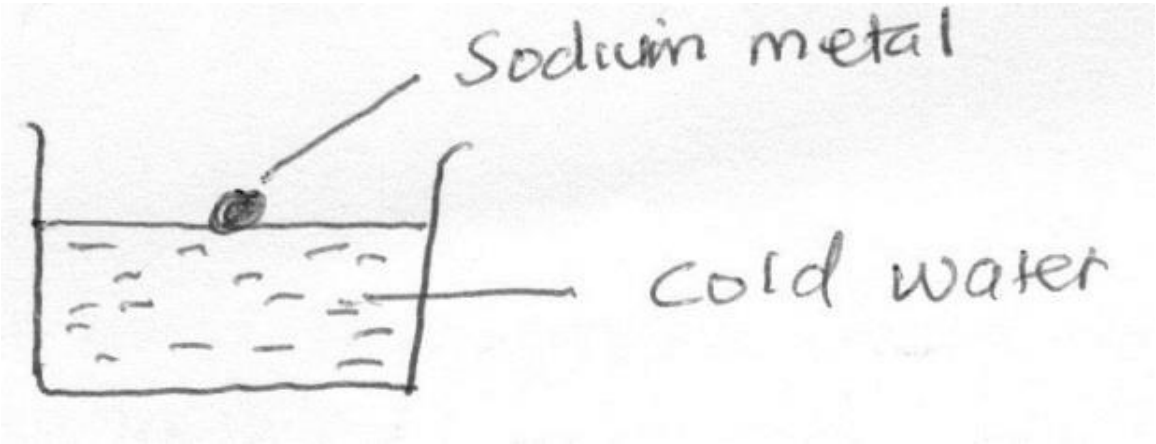
……

b) In which group of the periodic table does element K belong. Give a **reason** **(2mks)**

……

……

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



a) State two observations made in the above experiment when sodium react with wate**r (2 mks)**

……

……

b) Write a chemical equation for the reaction that takes **place** **(1mk)**

……

……

21. (a)Explain why permanent hardness in water cannot be removed by boiling **(2mks)**

……

……

……

(b) Name two methods that can be used to remove permanent hardness from **water** **(1mk)**

……

……

22. Write an equation to show the effect of heat on the nitrate of: - **(2mks)**

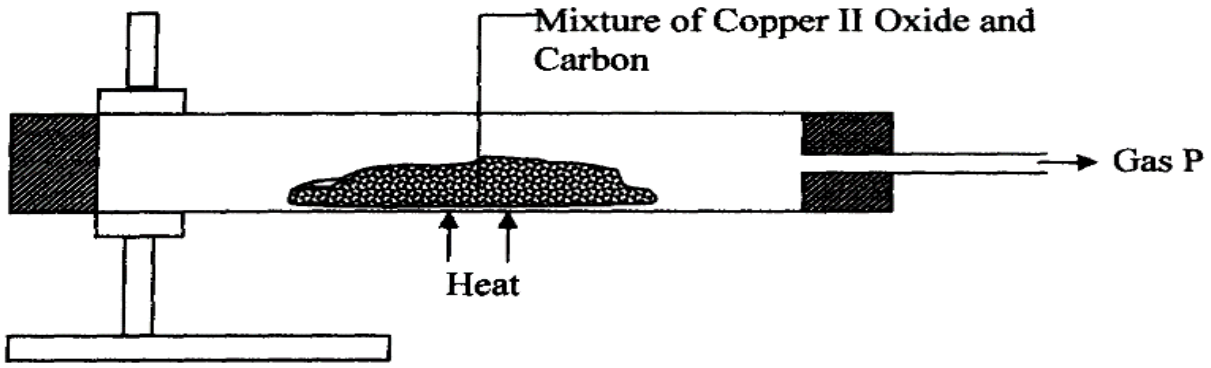
i) Potassium

……

(ii) Silver

……

23. Study the diagram below and use it to answer the questions that follow.



(a) State the observation made in the combustion tube. **(1mk)**

……

……

(b) Write an equation for the reaction that took place in the combustion tube. **(1mk)**

……

(c) Name gas **P** **(1mk)**

……

24. Sulphur exists in two crystalline forms.

a) Name **one** crystalline form of Sulphur. **(1mk)**

……

b) State **two** uses of Sulphur. **(2mks)**

……

……

25. Bond energies for some bonds are tabulated below: -

BOND	BOND ENERGY KJ/mol
H – H	436
C = C	610
C- H	410
C – C	345

Use the bond energies to estimate the enthalpy for the reaction. **(3mks)**

$C_2H_{4(g)} + H_{2(g)} \longrightarrow C_2H_{6(g)}$

……

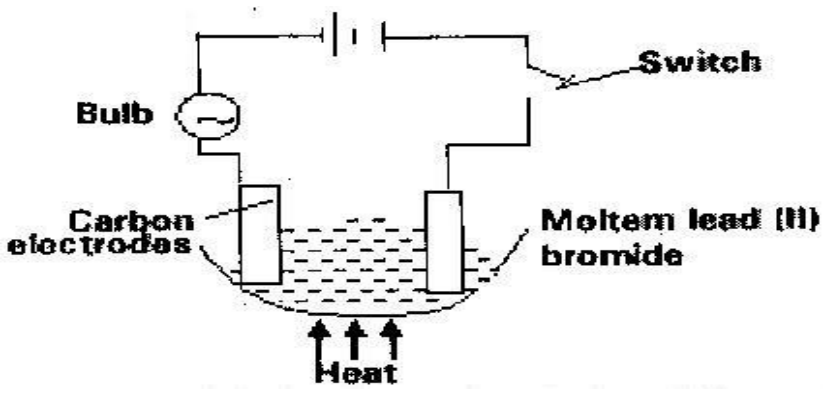
……

……

……

……

26. Study the set up below and answer the questions that flows



State all the observations that would be made when the circuit is **completed** **(3mks)**

……

……

……

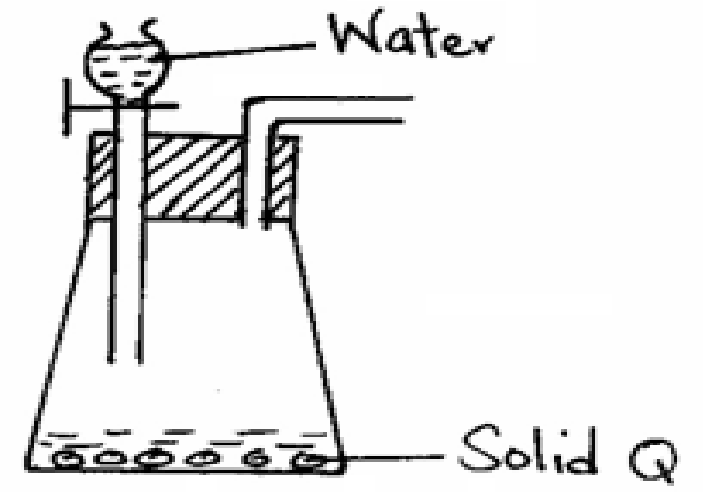
27. Describe how solid samples of salts can be obtained from a mixture of lead (II) chloride, sodium chloride and ammonium chloride. **(3mks)**

……

……

……

28. The diagram below represents a set-up used to prepare oxygen gas.



(a) Name substance Q. **(1mk)**

……

(b) Complete the set-up to show how oxygen gas is collected. **(1mk)**

(c) Write the equation for the reaction that occur. **(1mk)**

……

29. Two reagents that can be used to prepare chlorine gas are potassium manganate (VII) and hydrochloric acid.

(a) Write an equation for the reaction. **(1mk)**

……

b)Give the formula of another reagent that can be used instead of potassium manganate (VII).**(1mk**

……

(c) Using an equation illustrate how chlorine bleach coloured substances. **(2mks)**

……

……

KCSE JOINT PREMOCK

2023 SERIES 1 EXAMS

CHEMISTRY

PAPER 2

TIME: 2 HOURS

NAME……

SCHOOL…… SIGN……

INDEX NO…… ADM NO……

INSTRUCTIONS TO CANDIDATES

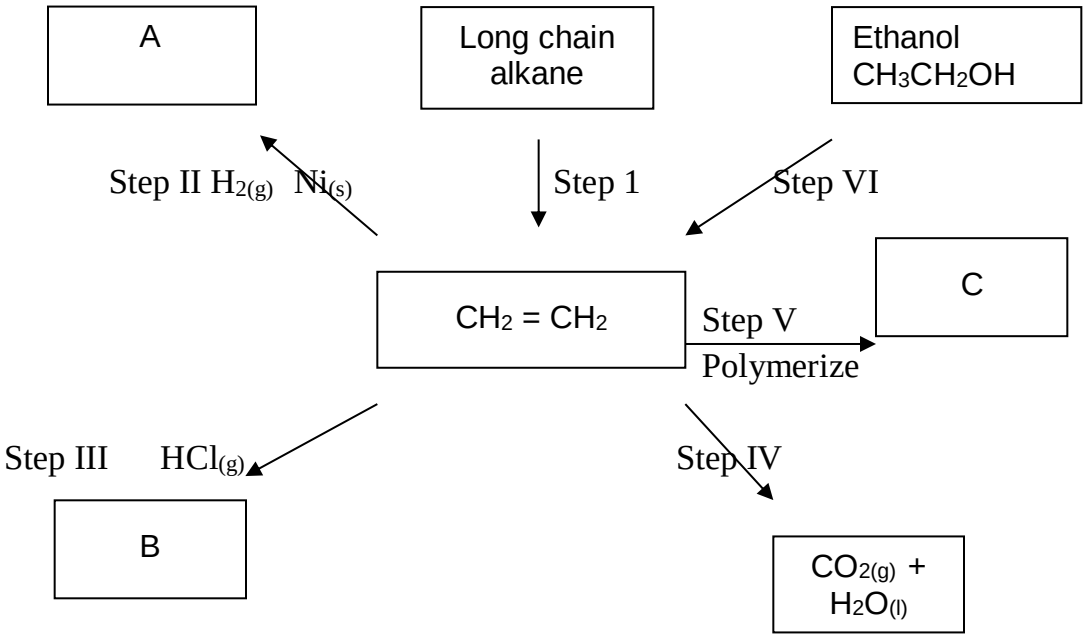
- *Write your **Name, Admission Number** and **School** in the spaces provided above.*
- *Answer **all** the questions in the spaces provided after each question.*
- *Mathematical tables and non-programmable electronic calculators may be used.*
- ***ALL** working must be clearly shown where necessary.*

FOR EXAMINER'S USE ONLY

QUESTIONS	MAX SCORE	CANDIDATE'S SCORE
1	12	
2	12	
3	10	
4	11	
5	14	
6	10	
7	11	
TOTAL	**80**	

*Answer **all** the questions*

1. (a) Study the flow chart below and answer the questions that follow.



(i) Name the process taking place in step (I). **(1mark)**

……

(ii) Describe a chemical test that can be carried out to show the identity of organic compound A.

(2marks)

……

……

……

(iii) Give the name of the following: **(2marks)**

I. A:……

II.B:……

(iv) Give the structural formulae of substance C. **(1mark)**

……

……

(v) Name the type of reaction that occurs in:

I. Step IV **(2marks)**

……

II. Step VI:

……

(vi) Give the reagent and the condition necessary for step VI. **(2marks)**

Reagent:……

Condition:……

(b) Give the systematic names of the following compounds:

I. $CH_2CHCHCH_2CH_3$ **(1mark)**

……

II.CH C CH_3 **(1mark)**

……

2. a) The results below were obtained in an experiment conducted by form 3 students from Tigityo Secondary school using Magnesium.

- Mass of the crucible + lid = 19.52g
- Mass of the crucible + lid + Magnesium Ribbon = 20.36g
- Mass of the crucible + lid + Magnesium oxide = 20.92g

(i) Use the results to find the percentage mass of Magnesium & Oxygen in Magnesium oxide **(2 marks)**

……

……

……

(ii) Determine the empirical formula of magnesium oxide. (Mg=24.0,O=16.0) **(3 marks)**

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……

b) Sodium hydroxide pellets were accidentally mixed with sodium chloride 8.8g of the mixture were dissolved in water to make one litre of solution. 50cm^3 of the solution was neutralised by 20cm^3 of 0.25M sulphuric acid.

(i) Write an equation for the reaction that took place. **(1 mark)**

……

(ii) Calculate the:

I. number of moles of the substance that reacted with sulphuric acid. **(2 marks)**

……

……

II. number of moles of the substance that would react with sulphuric acid in the one litre solution **(2 marks)**

……

……

……

(iii) the percentage of sodium chloride in the mixture. **(2 marks)**

(H=1.0; Na=23.0; Cl=35.5; O=16.0)

……

……

……

3. a) Study the table below and answer the questions that follow

Bond type	bond energy $kJmol^{-1}$
C-C	346
C = C	610
C-H	413
C-Br	280
Br-Br	193

i) Calculate the enthalpy change for the following reaction **(3 marks)**

$C_2H_{4(g)} + Br_{2(g)} \longrightarrow C_2H_4Br_{2(g)}$

……

……

……

……

ii) Name the type of reaction that took place in (a) above **(1mark)**

……

b) Butane C_4H_{10} cannot be prepared directly from its elements but its standard heat of formation (ΔH_f^θ) can be obtained indirectly.

The following heats of combustion are given.

ΔH_C^θ (Carbon) = -393kJ/mol

ΔH_C^θ (Hydrogen) = -286kJ/mol

ΔH_C^θ (Butane) =-2877kJ/mol

i) Draw an energy cycle diagram linking the heat of formation of butane with its heat of combustion and the heat of combustion of its constituents elements. **(1mark)**

……

……

……

……

ii) Calculate the heat of formation of butane ΔH_f^θ (C_4H_{10}) **(2marks)**

……

……

……

……

c) Given that the lattice enthalpy of potassium chloride is +690kJ/mol and hydration enthalpies of K^+ and Cl^- are -322kJ and -364kJ respectively. Calculate the enthalpy of solution of potassium chloride. **(3 marks)**

……

……

……

……

4. (a) Name two apparatuses that can be used for determining accurate volume in a laboratory **(2marks)**

……

……

(b) One of the flames produced by Bunsen burner is the luminous flame

i) Explain why this flame is very bright **(1mark)**

……

……

ii) State two disadvantages of the luminous flame **(2marks)**

……

……

(c) Air is usually one of the substances that is considered as a mixture

(i) Identify the two most abundant component of air **(2marks)**

……

……

(ii) Give two reasons why the air is considered as a mixture **(2marks)**

……

……

(iii) One of the components of air is carbon (iv) oxide. Describe an experiment that can be used to prove the presence of carbon (iv) oxide in the air **(2marks)**

……

……

……

5. The grid below forms part of the periodic table. Study it and answer the questions that follow. The letters do not represent the actual symbols of the elements

P				**T**	**V**	**W**	**Y**	**M**
	Q		**S**	**U**		**X**		
	R						**Z**	

a) Write the general name given to the element P belong. **(1mark)**

……

b) An element N has an atomic number of 15. Write down its electronic arrangement and hence fix it in its right position on the grid above. **(2marks)**

Electronic arrangement ……

c) Compare the size of the atom of R and that of its ion. Explain your answer. **(2marks)**

……

……

……

d) Give the formula of the compound formed between **(1mark)**

i. P and W ……

ii. T and Y ……..

e) Compare the melting points of element Q and S. Explain **(2marks)**

……

……

……

f) State the least reactive element in the grid. Give a reason for your answer **(2marks)**

……

……

g) Give two advantages that element S has over element Q in making electric cables **(2mks)**

……

……

h) Draw (a) dot (.) and cross (x) diagram to represent the bonding in compound formed between T and Y **(2 marks)**

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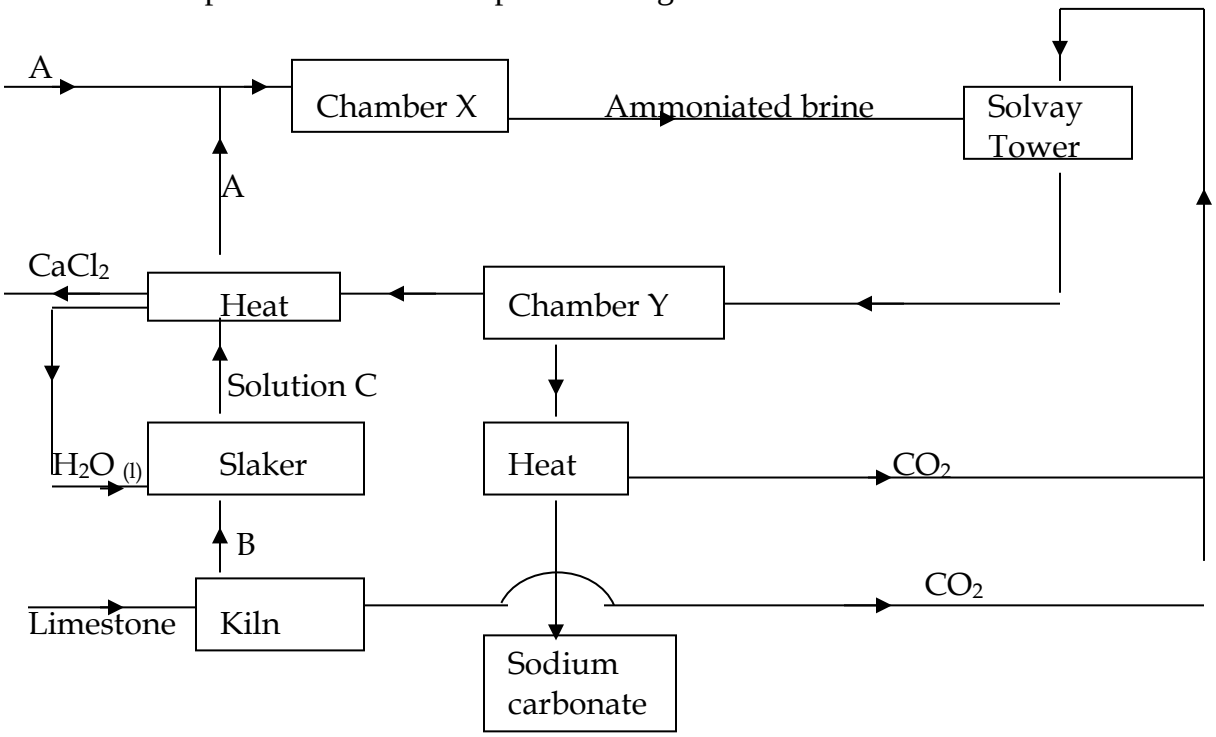
……

6. The chart below represents the main steps in the large-scale manufacture of sodium carbonate.



(a) Name substances A and B.

A …… **(1 mark)**

B …… **(1 mark)**

(b) Write down the chemical equation leading to formation of C. **(1 mark)**

……

(c) A stream of cold water is made to circulate around chamber X. What does this suggest about the reaction taking place. **(1 mark)**

……

……

(d) Name the process that takes place in chamber Y. **(1 mark)**

……

(e) State any 2 by-products recycled in the process. **(2 marks)**

……

……

(f) In an experiment, wood charcoal was mixed with concentrated sulhuric (VI) acid in a test-tube. The mixture was then placed over a Bunsen-burner flame for sometime.

(i) Write down the chemical equation of the reaction that takes place. **(1 mark)**

……

(ii) State the property of concentrated sulphuric (VI) acid investigated in (i) above. **(1 mark)**

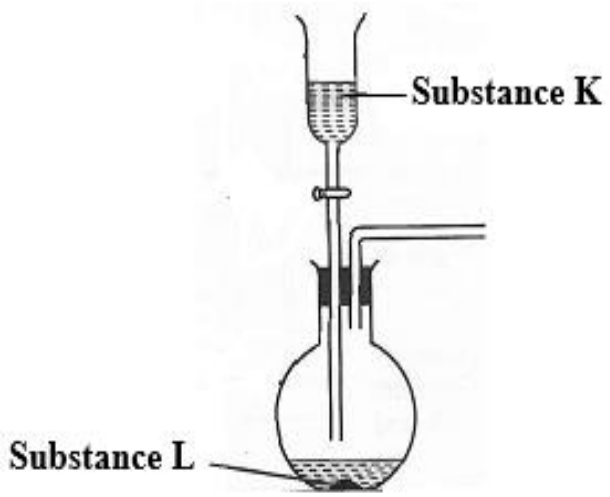
……

(g) Mention any 2 uses of sodium carbonate. **(1 mark)**

……

……

7. The set-up below can be used to generate a gas.



(a) (i) Complete the table below giving the names of substance **K** and **L** if the gases generated are carbon (IV) oxide and carbon (II) oxide. **(2marks)**

Substance	Carbon (IV) oxide	Carbon (II) oxide
K		
L		

(ii) Complete the diagram to show how a sample of carbon (II) oxide can be collected. **(2marks)**

(iii) State two ways that can be used to distinguish carbon (IV) oxide from carbon (II) oxide?

(2 marks)

……

……

(b) (i) In an experiment, carbon (IV) oxide gas was passed over heated charcoal held in a combustion tube. Write a chemical equation for the reaction that took place in the combustion tube. **(1 mark)**

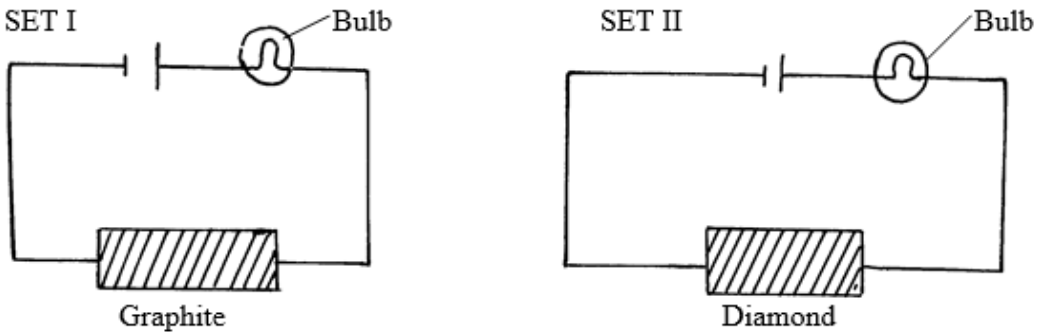
……

……

(ii) State **one** use of carbon (II) oxide. **(1 mark)**

……

(c) The following set ups were used by Form Two students. Study and use them to answer the questions that follow.



State and explain the difference in observation made in set up I and II above. **(3 marks)**

……

……

……

……

KCSE JOINT PREMOCK

2023 SERIES 1 EXAMS

CHEMISTRY

PAPER 3

CONFIDENTIAL

CONFIDENTIAL OF REQUIREMENTS

- *Burette*
- *Pipette*
- *2 conical flasks*
- *120cm^3 of 2.0M NaoH labelled B*
- *100cm^3 0f 0.2M H_2SO_4 labelledA*
- *250cm^3 volumetric flask*
- *A label*
- *Pipette filter*
- *Stand and clamp*
- *500cm^3 distilled water*
- *Phenolphthalein indicator*
- *100cm^3 plastic beaker*
- *Thermometer*
- *10cm^3 measuring cylinder*
- *100cm^3 measuring cylinder*
- *50cm^3 2.0M HCl , Solution D*
- *50cm^3 2.0M NaoH*
- *6 test tubes in a test tube rack*
- *0.2g of solid N ($Al_2(SO_4)_3$]*

REAGENTS

- *2M NaoH*
- *2M NH_4OH*
- *Ba $(NO_3)_2$solution*
- *2M nitric acid*
- *Potassium iodide solution*

KCSE JOINT PREMOCK

2023 SERIES 1 EXAMS

CHEMISTRY

PAPER 3

TIME: 2¼ HOURS

NAME……

SCHOOL…… SIGN……

INDEX NO…… ADM NO……

INSTRUCTIONS TO CANDIDATES

[a]*Answer ALL questions in the spaces provided in each question.*

[b] *Mathematical tables and electronic calculators may be used for calculations.*

[c]*All working must be clearly shown where necessary.*

FOR EXAMINERS ONLY

QUESTION	MAXIMUM SCORE	CANDIDATES SCORE
1	15	
2	13	
3	12	
Total	40	

1. You are provided with

- 2.0M NaoH solution labelled B
- Sulphuric(VI) acid solution labelled A `

You are to:

[a] Prepare a dilute solution of NaoH solution.

[b] Determine the concentration of in moles per litre.

PROCEDURE 1

i. Using a pipette 25.0cm^3 of solution B and place it into 250cm^3 volumetric flask.

ii. Add about 200cm^3 of distilled water and share well.

iii. Add more water to make up to 250cm^3mark. Label this solution C

[a] Calculate the concentration of the dilute solution C in moles per litres. **[2mks]**

……

……

……

PROCEDURE 2

i. Fill the burette with solution A and record the readings in the table below.

ii. Pipette 25cm^3 of dilute solution C and place it into 250ml conical flask.

iii. Add 2-3 drops of phenolphthalein indicator.

iv. Titrate with solution A.

v. Record your results in the table below.

vi. Repeat the titration two or more times and complete the table.

	I	II	III
Final burette reading (cm^3)			
Initial burette reading(cm^3)			
Volume of solution A(cm^3)			

[4mks]

[a] Determine average volume of the acid (solution A) used. **[1mk]**

……

……

……

[b] Determine moles of dilute solution C in the volume used. **[2mks]**

……

……

……

[c] Write an equation for the reaction taking place. **[1mk]**

……

……

[d] Determine the number of moles of A used. **[2mks]**

……

……

……

[e] Determine the concentration of A in moles per litre. **[2mks]**

……

……

……

2. You are provided with the following

- 2M sodium hydroxide solution, solution B
- 2M hydrochloric acid, solution D

You are required to determine the molar enthalpy of neutralization of the acid using sodium hydroxide.

PROCEDURE

[i] Measure out 20cm^3 of acid into a clean plastic beaker.

[ii] Record the temperature of this solution in the table below

[iii] Measure 5cm^3 of sodium hydroxide and add it to the hydrochloric acid.

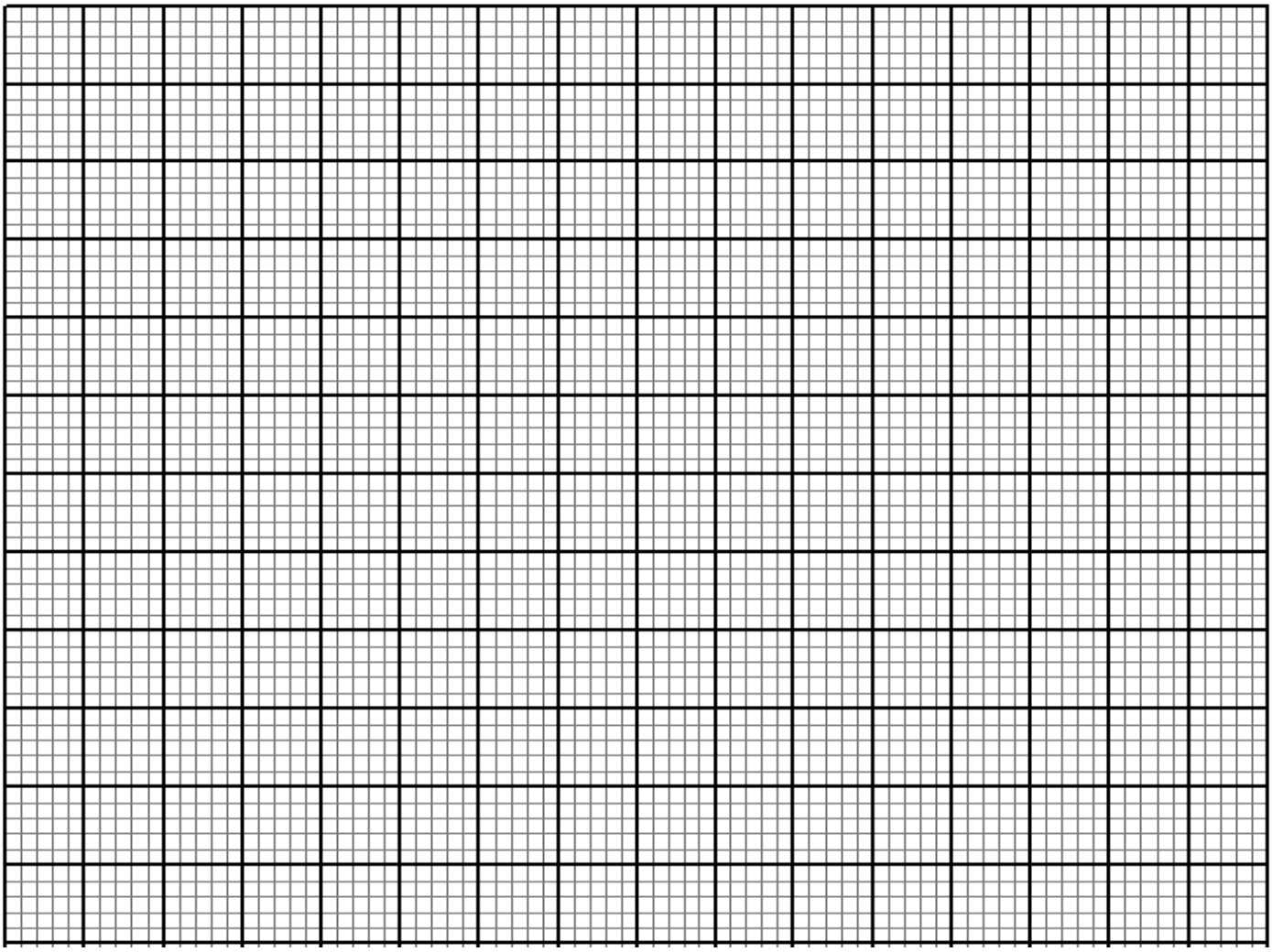
[iv] Stir with the thermometer and record the maximum temperature reached.

[v] Repeat the above procedure adding 5cm^3 portions of sodium hydroxide until the total volume of the solution is 50cm^3. **[3mks]**

Volume of acid(cm3)	20	20	20	20	20	20	20
Volume of NaoH added cm^3	0	5	10	15	20	25	30
Temperature($°C$)of solution							

You are required to:

[a]. Plot a graph of temperature rise against sodium hydroxide added. **[3mks]**



[b]From your graph determine:

[i] maximum temperature change. **[1mk]**

……

[ii] the volume of NaOH that is required for complete **neutralization** **[1mk]**

……

[iii]Calculate the molar enthalpy of neutralization for this reaction. (C=4.2J/g/K) assume density of solution is 1gcm^{-3}**)** **[2mks]**

……

……

……

[iii]The theoretical molar heat of neutralization is -57.2kj/mol-1.Compare your value in [ii] above with the theoretical value. Give the reasons for any differences noted between these two values. **[2mks]**

……

……

……

……

……

3. You are provided with solid N carry out the tests below and record your observations and inferences.

[**a]Place** a spatula of N in a test tube and add $5cm^3$ of water and shake well divide the solution in to three portions.

OBSERVATION (1mk)	**INFERENCE (1mk)**

[b] Add sodium hydroxide to the first portion drop wise while observing till in excess

OBSERVATION (1mk)	**INFERENCE (2mks)**

[c]Add ammonia solution to the second portion drop wise until in excess.

OBSERVATION **(1mk)**	**INFERENCE** **(1mk)**

[d]Add four drops of potassium iodide solution to the third portion.

OBSERVATION **(1mk)**	**INFERENCE** **(1mk)**

[e]Add three drops of acid barium nitrate to the fourth followed by 5 drops of nitric acid.

OBSERVATION **(2mks)**	**INFERENCE** **(1mk)**

KCSE JOINT PREMOCK

2023 SERIES 1 EXAMS

BIOLOGY

PAPER 1

TIME: 2 HOURS

NAME……

SCHOOL…… SIGN……

INDEX NO…… ADM NO……

INSTRUCTIONS TO CANDIDATES

- *Write your **name, Admission number and name of your school** in the spaces provided above*
- ***Sign** and write the **date** of examination in the spaces provided.*
- *Answer **all** the questions in the spaces provided.*

FOR EXAMINERS USE ONLY

QUESTION	MAXIMUM SCORE	CANDIDATE'S SCORE
1-26	80	

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

1. a) Name the causative agents of the following diseases in humans.

i) Typhoid. **(1mk)**

……

ii) Amoebic dysentery. **(1mk)**

……

2. State the function of the following cell organelles.

i) Ribosome. **(1mk)**

……

ii) Lysosomes **(1mk)**

……

iii) Nucleolus. **(1mk)**

……

3.a) Name **one** defect of the circulatory system in humans. **(1mk)**

……

b) State **three** functions of blood other than transport. **(3mks)**

……

……

……

4.a) Distinguish between epigael and hypogeal germination in plants. **(2mks)**

……

……

……

b) Name the gland that secretes the following hormones. **(2mks)**

i) Ecdysone

……

ii) Juvenile

……

5.a) Give two sex linked genes found on the Y-chromosome. **(2mks)**

……

……

b) Below is a nucleotide strand

A	A	G	T	C

i) Identify the type of nucleic acid. **(1mk)**

……

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

……

……

6.a) Distinguish between homologous and analogous structures. **(2mks)**

……

……

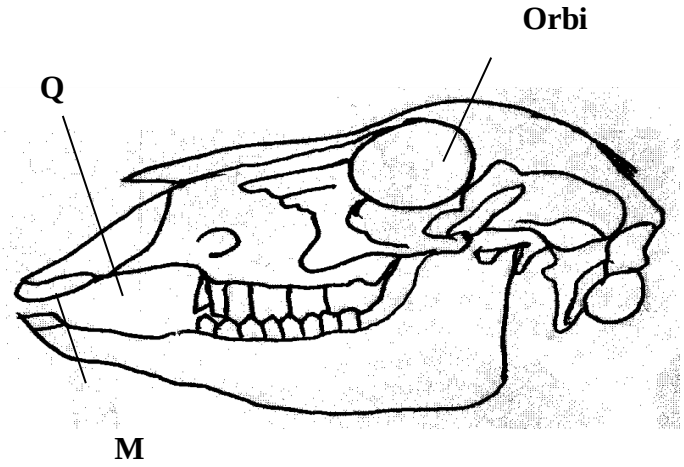
……

b) Give **one** reason why organisms become resistant to drugs. **(1mk)**

……

……

7.The following specimen was extracted from a newly discovered organism.



a) Name the tooth labeled **M**. **(1mk)**

……

b) Name the part labeled Q and state its role. **(2mks)**

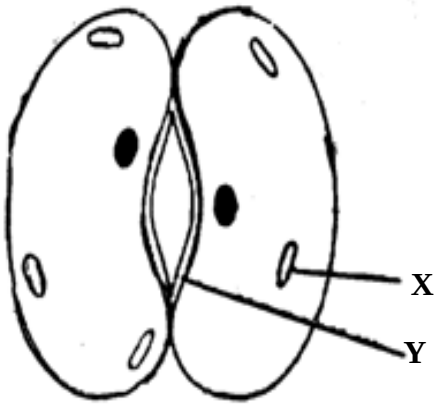
Name……..…….

Role

……

……

8.The diagram below represents a cell organelle



a) Name the part labeled Y. **(1mk)**

……

b)State the function of the part labeled X. **(1mk)**

……

c) Explain how dark stage of photosynthesis is dependent on the light stage. **(2mks)**

……

……

……

9.a) Name **two** gaseous exchange surfaces in plants. **(2mks)**

……

……

b) What is the importance counter current flow system in fish? **(2mks)**

……

……

10. Form three students wanted to estimate the population in $5km^2$ grass field near a school compound. They captured 36 grass hoppers and marked them before returning them to the field. After a few days they made another catch of grasshoppers. They collected 45 grasshoppers out of which only 4 had marks.

a) Name the method of population estimation the students used. **(1mk)**

……

b) State **two** assumptions that were made by the students during the study. **(2mks)**

……

……

……

c) From the data, calculate the population size of grasshopper. **(2mks)**

……

……

……

……

11. State the functions of the following parts. **(2mks)**

i) a) Endometrium

……

……

b) Epididymis

……

……

ii) What mechanism facilities the movement of the ovum towards uterus. **(1mk)**

……

……

12.The diagram below represents the flow of energy in a food chain.

Sun → Grass → Antelope → Leopard → Bacteria → **P**

a) Suggest a reason why the energy labeled P does not enter food chain **(1mk)**

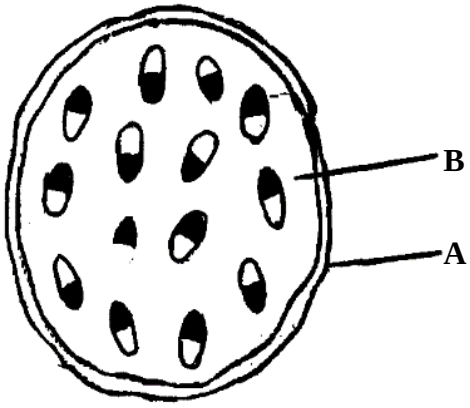
……

……

b) State **one** way in which energy is lost from the food chain. **(1mk)**

……

13. The diagram below represents the cross section of a part of a certain plant.



a) Name the class of the plant from which the section was taken. **(1mk)**

……

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

……

……

c) Name the parts labeled **A** and **B**. **(2mks)**

……

……

12. State **two** reasons why the study of biology is important. **(2mks)**

……

……

14. State the economic importance of the following plants excretory procedures. **(3mks)**

a) Caffeine

……

……

b) Quinine

……

……

c) Colchicine

……

……

13. Define the following terms

a) Irritability **(1mk)**

……

……

b) Stimulus **(1mk)**

……

……

14. A process that occurs in plants is replaced by the equation below

$C_6H_{12}O_6 \longrightarrow 2C_2H_5OH + CO_2 + Energy$

a) Name the process. **(1mk)**

……

b) State the importance of the process named in a) above. **(2mks)**

……

……

15. a) What is Binomial Nomenclature? **(1mk)**

……

……

b) State **two** rules that are followed when printing scientific names. **(2mks)**

……

……

16. Name **three** strengthening tissues in dicolyledonous plants. **(3mks)**

……

……

……

17. Name the site for gaseous exchange in insects. **(1mk)**

……

18. a) What is alternation of generations **(2mks)**

……

……

b) Explain why leaves of Peridophytes are referred to as Fronds. **(1mk)**

……

……

19. State **four** adaptations of red blood cells to its functions. **(4mks)**

……

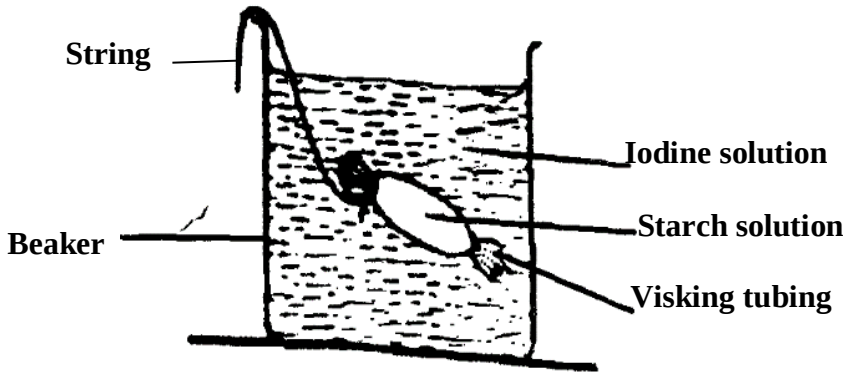
……

……

……

……

20. The experiment illustrated below was set up to investigate a certain physiological process



a) Name the physiological process that was being investigated. **(1mk)**

……

b) State the observations that were made after at the end of the experiment

(i) Inside the Visking tubing **(1mk)**

……

……

(ii) Outside the Visking tubing **(1mk)**

……

……

c) Account for the observations in b) above. **(2mks)**

……

……

……

……

21. State the differences between the following structures in wind and insect pollinated flowers.

(3mks)

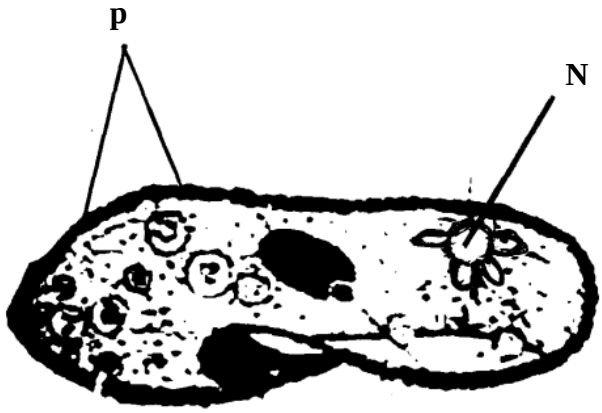
(i) Anther

(ii) Pollen grains

(iii) Stigma

Wind Pollinated	Insect Pollinated flower

21. A student placed a drop of pond water in a cavity slide and observed it under the microscope. The student observed many fast moving organisms, one of which is represented in the diagram below.



a) Name the kingdom to which the organism belongs. **(1mk)**

……

……

b) Name the structures labeled **P** and **N** **(2mks)**

P……..

N……...

22. A person was found to pass out large volumes of dilute urine frequently. Name the;

a) Disease the person was suffering from **(1mk)**

……

……

b) Hormone that was deficient **(1mk)**

……

……

KCSE JOINT PREMOCK

2023 SERIES 1 EXAMS

BIOLOGY

PAPER 2

TIME: 2 HOURS

NAME……

SCHOOL…… SIGN……

INDEX NO…… ADM NO……

INSTRUCTIONS TO CANDIDATES

- *Write your name and Admission Number in the spaces provided above.*
- *This paper consists of **two** sections**:** Section **A** and section **B.***
- *Answer **ALL** questions in section **A** in the spaces provided.*
- *In section **B** answer question **6** (compulsory) and either question **7** or **8** in the spaces provided after question 8*

For Examiners use only.

Section	Question	Maximum score	Candidates score
A	1	8	
	2	8	
	3	8	
	4	8	
	5	8	
B	6	20	
	7	20	
	8	20	
	Total score	80	

SECTION A (40MARKS)

1 (a) What is meant by linked genes**?** **(1mk)**

……

……

(b) Njoki is an albino.Her husband Mwenda has normal skin colour.Two of their children have normal skin colour while the other two are albinos.If albinism is a sex linked trait;

(a) Give the genotype of

(i)Njoki **(1mk)**

……

(ii)Mwenda **(1mk)**

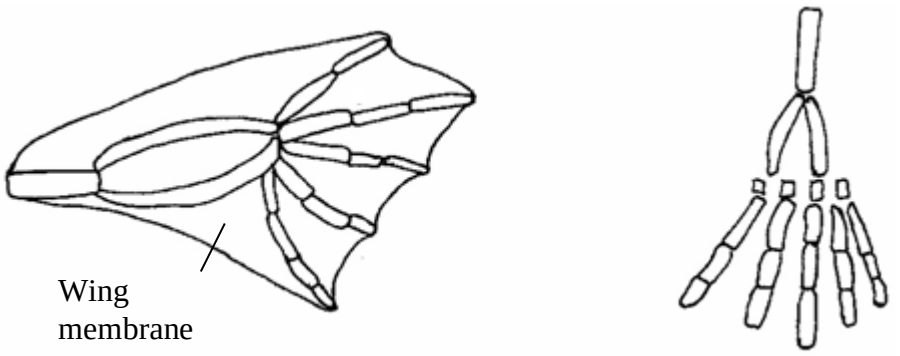
……

(b) Illustrate the cross between the two **parents** **(4mks)**

(c)Give genotypic ratio of the **offsprings** **(1mk)**

……

2 (a) The diagram below shows structures of the bat wing and human arm.



(a) These structures are thought to have same ancestral origin. State one structural similarity and one adaptational difference between the two.

(i) Structural similarity. **(1 mark)**

……

(ii) Adaptation difference. **(2 marks)**

……

……

(b) Give **two** other examples of structures in nature that show the type of evolution as in (a) above. **(2 marks)**

……

……

(c) Distinguish between the terms 'chemical evolution' and 'organic evolution'. **(2 marks)**

……

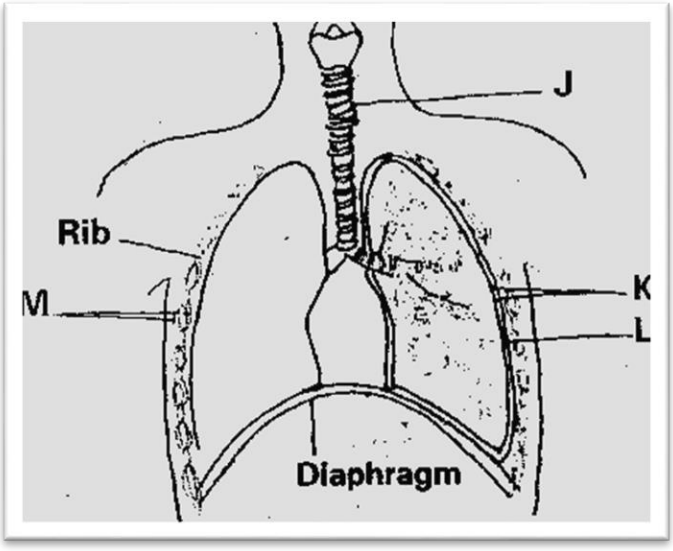
……

……

(d) What is the study of fossils called? **(1 mark)**

……

3.The diagram below represents some gaseous exchange structures in humans.



a) Name the structure labeled K, L and M **(3mks)**

K……

L……

M……

b) How is the structure labeled J suited to its functions? **(3mks)**

……

……

……

c) Name the process by which inhaled air moves from the structure labeled L into blood capillaries. **(1mk)**

……

d)Give the scientific name of the organism that causes tuberculosis in humans. **(1mk)**

……

4. (a) (i) The action of ptyalin stops at the stomach. Explain. **(1mk)**

……

……

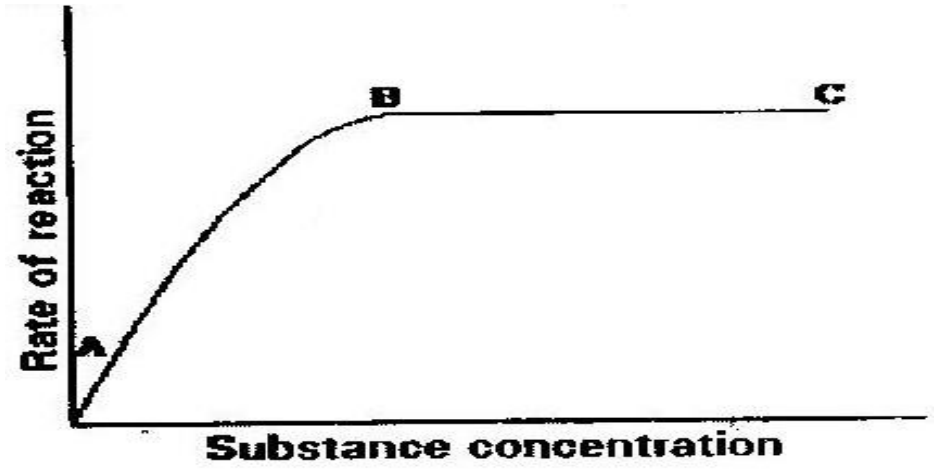
(ii)State a factor that denatures enzymes. **(1mk)**

……

(iii)Name the features that increase the surface area of small intestines**.** **(1mk)**

……

(b) The graph below shows the effect of substrate concentration on the rate of enzyme reaction.



(i) Account for the shape of the graph between A and B **(2mks)**

……

……

……

(ii) How can the rate of reaction be increased after point B? **(1mk)**

……

……

(iii) State two factors that affect the rate of enzyme reaction. **(2mks)**

……

……

5 (a) Laboratory analysis of a patient's urine revealed the following concentration of various substances:

Blood proteins	0.00%
Water	50%
Glucose	48%
Salts	0.8%
Urea	1.2%

(i) From the analysis above, which disease is the patient suffering from **(1mk)**

……

(ii) Explain the cause of the disease in **3(a)** above **(2mks)**

……

……

……

……

(iii) Which organ in the person may not be functioning properly**?** **(1mk)**

……

……

(b) Explain the effects of the following on the quantity and composition of urine

(i) Drinking large amount of clean water **(2mks)**

……

……

……

(ii) Drinking very salty **soup** **(2mks)**

……

……

……

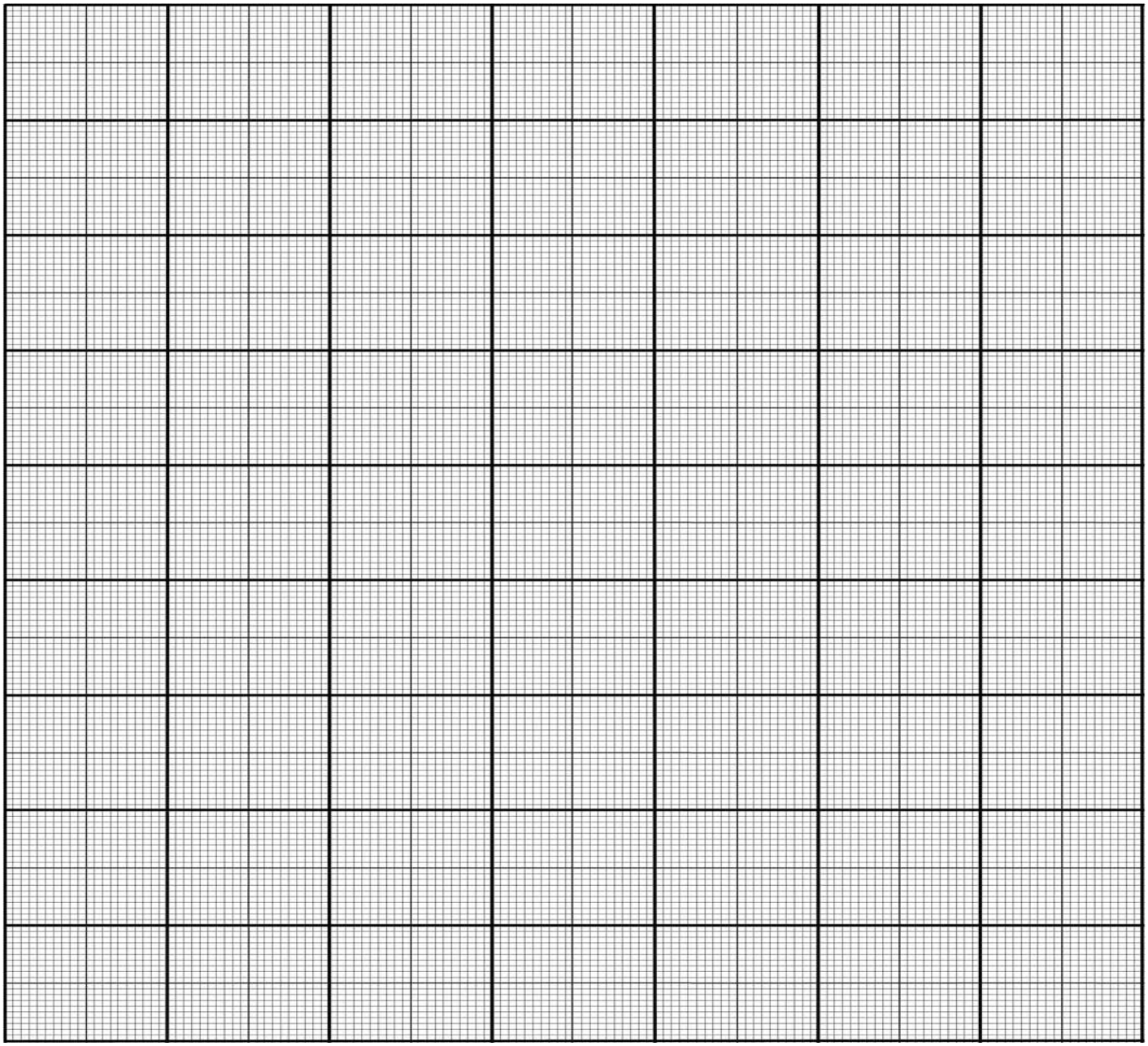
SECTION B (40 Marks)

Answer questions 6 (compulsory) and either questions 7 or 8

6. The following data are results of making daily growth measurement ion an organism over a period of 24 days during its development.

Day	Width of head (mm)	Length of hind femur (mm)
1.	3.0	7.0
2.	3.5	7.5
3.	4.0	8.0
4.	4.0	8.0
5.	4.0	8.0
6.	4.0	9.2
7.	4.0	10.5
8.	4.4	12.0
9.	4.7	12.0
10.	5.0	12.0
11.	5.0	12.0
12.	5.0	12.0
13.	5.0	12.0
14.	5.0	12.0
15.	5.0	13.3
16.	5.0	14.8
17.	5.7	16.4
18.	6.4	18.0
19.	7.0	18.0
20.	7.6	18.0
21.	7.6	18.0
22.	7.6	18.0
23.	7.6	18.0
24.	7.6	18.0

(a) Using a suitable scale draw graphs of width of head and length of femur against time. Draw the graphs on the same axis. **(8 marks)**



(b) (i) Name the growth pattern represented by the graph **(1 mark)**

……

(ii) With reference to your graph identify the phylum to which the organisms belong. Give a reason for your answer **(2 marks)**

……

……

……

(c) Account for the length of hind femur between

(i) Day 3 and day 7 **(3 marks)**

……

……

……

(ii) Day 7 and day 10 **(2 marks)**

……

……

……

(d) State two hormones involved in the growth pattern represented by the graphs **(2 marks)**

……

……

(e) State two advantages of metamorphosis in organisms **(2 marks)**

……

……

7 (a) Describe how the mammalian small intestine is adapted to its function**.** **(12mks)**

(b) For each of the following nutrients give one example of its role in the body and the deficiency disease it may cause **?** **(8mks)**

Nutrient	Role in the body	Deficiency disorder it causes
Vitamin A		
Iron		
Iodine		
Vitamin D		

8. a) Describe the process of fertilization in flowering plant**.** **(15mks)**

b) State the changes that take place in a flower after fertilization. **(5mks)**

KCSE JOINT PREMOCK

2023 SERIES 1 EXAMS

BIOLOGY

CONFIDENTIAL

Paper 3

Confidential

The information contained in this paper is to enable the head of the school and the teacher in charge of Biology to make adequate preparations for the Biology practical examination.

Each Candidate will Require:-

1) *L1 – Sodium hydrogen carbonate solution supplied with a dropper.*
2) *L2 – starch solution supplied with a dropper*
3) *(Olive) oil supplied with a dropper.*
4) *Benedict's solution supplied with a dropper.*
5) *Iodine solution supplied with a dropper*
6) *5 clean test tubes.*
7) *Irish potato*
8) *Scalpel*
9) *Amylase solution*
10) *4 labels*
11) *Motar and pestle*
12) *Distilled water in a wash bottle*
13) *A 30cm transparent ruler*
14) *10ml measuring cylinder*
15) *Means of timing e.g. clock / stop watch.*
16) *Means of heating.*
17) *Hibiscus flower marked K*

KCSE JOINT PREMOCK

2023 SERIES 1 EXAMS

BIOLOGY

PAPER 3

TIME: 1¾ HOURS

NAME……

SCHOOL…… SIGN……

INDEX NO…… ADM NO……

INSTRUCTIONS TO CANDIDATES

1. *Answer all the questions.*

2. *Spend the first 15 minutes of the 1 ¾ hours allowed for this paper reading the whole paper carefully before commencing your work.*

3. *Answers MUST be written in the spaces provided in the QUESTION PAPER ONLY.*

FOR EXAMINERS USE ONLY

QUESTION	Max Score	Candidate Score
1	14	
2	12	
3	14	
TOTAL SCORE	40	

1. You are provided with olive oil, liquids labeled L_1 and L_2, and an Irish potato. Label test tubes A and B. Place $2cm^3$ of water into each test tube. Add 8 drops of olive oil into each test tube. To test tube A, add 8 drops of liquid L. Shake both test tubes. Allow to stand for 2 minutes.

(a) **(i)** Record your observations ***(2 marks)***

Test Tube A

……

……

Test Tube B

……

……

(ii) Name the process that has taken place in test tube A ***(1 mark)***

……

(iii) State the significance of the process named in (a) above ***(1 mark)***

……

……

(v) Name the digestive juice in humans that has the same effect on oil as liquid L_1 ***(1 mark)***

……

……

(v) Name the region of the alimentary canal into which the juice is secreted ***(1 mark)***

……

(b)

(i) Label two test tubes C and D place $2cm^3$ of liquid L2 into each test tube. Add a drop of iodine solution into each test tube. Record your observations. ***(1 mark)***

……

……

(ii) Suggest the identity of L_2 ***(1 mark)***

……

(iii) Cut a cube whose sides are 1cm^3 from the Irish potato. Crush the cube to obtain a paste. Place the paste into a test tube labeled C. add 2cm3 of amylase solution. Leave the set up for at least 30 minutes.

Record your observations ***(2 marks)***

C……

D……

(iv) Account for the result in (b)(iii) above ***(2 marks)***

……

……

……

(c) Cut another cube whose sides are 1cm from the Irish potato. Crush the cube. Place the crushed paste into a test tube. Carry out food test with reagents provided. Record your procedure and results.

Procedure: ***(1 mark)***

……

……

Results: ***(1 mark)***

……

……

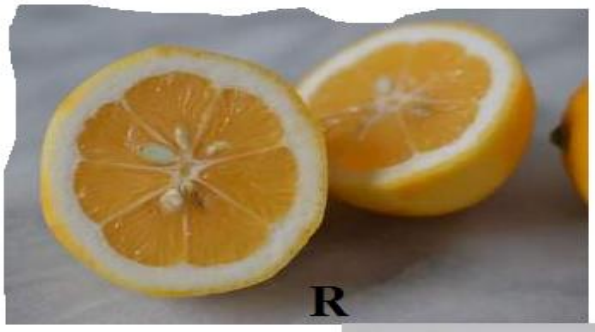
2. You are provided with specimen **K**. Use it to answer the questions that follow

a) Cut the specimen **K** longitudinally. Draw one of the **sections** **(4marks)**

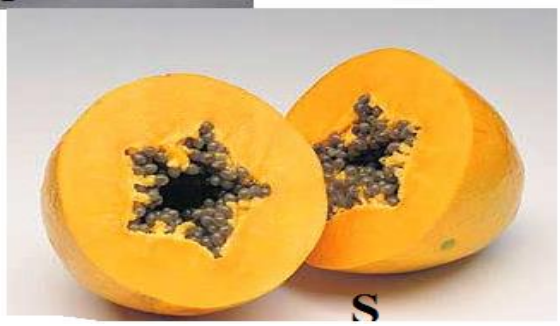
b) With a reason state the agent of pollination **(1mark)**

……

c) The photographs labelled **Q, R**,and **S** are sections of some plant parts.



Q



(i) Name the type of placentation in the specimens shown in photographs **Q, R** and **S (3 marks)**

Q…….

R…….

S…….

(ii) Giving a reason in each case, name the mode of dispersal of the specimen in photograph **Q** and **S** **(4mark)**

Q Mode……

Reason

……

……

S

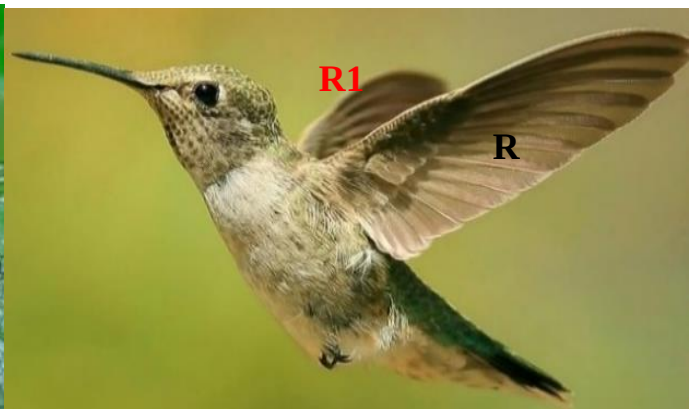
Mode……

Reason

……

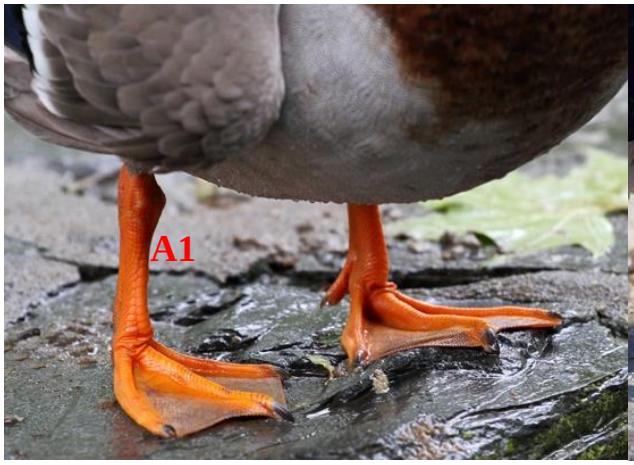
……

3. Study photographs shown below then answer the questions.

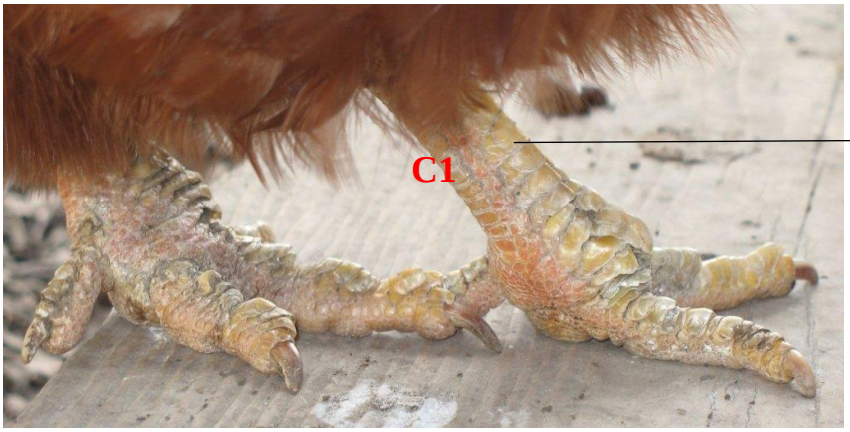


S

A



C



(a) State the type of evolution represented by structures **Q1**, **R1** and **S1**. **(1mk)**

……

b) Explain the type of evolution identified in (a) above. **(1mk**)

……

……

(c) Give the evolution term used to describe structures;

(i) **Q1, R1** and **S1.** **(1mk)**

(ii)**A1**, **B1** and **C1.** **(1mk)**

d). what type of evolution is illustrated by the limbs (**A1**, **B1** and **C1**)? **(1mk)**

……

……

e). (i) Name classes for organisms labeled Q**, R** and **S.**

Q……...…… **(1mk)**

R……...…… **(1mk)**

S……...… **(1mk)**

(ii) Give two reasons for placing **S** in the class above **(2mks)**

……

……

f) (i) Suggest the diet of animals **B** and **R**.

B……...…… **(1mk)**

R……..…….... **(1mk)**

(ii) How is beak of animal **B** adapted to its function? **(2mks)**

……

……

KCSE JOINT PREMOCK

2023 SERIES 1 EXAMS

PHYSICS

PAPER 1

TIME: 2 HOURS

NAME……

SCHOOL…… SIGN……

INDEX NO…… ADM NO……

INSTRUCTIONS TO THE CANDIDATES:

- *Write your **name and index number** in the spaces provided above.*
- *Answer **all** the questions both in section **A** and **B** in the spaces provided below each question*
- *All workings **must** be clearly shown; marks may be awarded for correct steps even if the answers are wrong.*
- *Mathematical tables and silent electronic calculators may be used.*

(Take acceleration due to gravity g= 10ms^{-2} Density of water 1g/m^{-3})

FOR EXAMINERS' USE ONLY

SECTION	QUESTION	MAXIMUM SCORE	CANDIDATE'S SCORE
Section A	1-12	25	
Section B	13	09	
	14	14	
	15	14	
	16	09	
	17	09	
	18	**10**	
	TOTAL	**80**	

SECTION A (25 MARKS)

Answer all questions in this section in the spaces provided

1. State Pascal's principle of transmission of pressure in fluids **(1mk)**

……

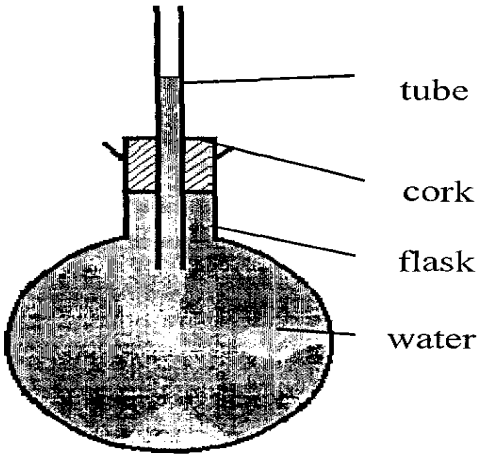
……

2. Water is known to boil at 100^{o}C . a student heated some water and noticed that it boiled at 101^{o}C. State two possible reasons for this observation **(2mks)**

……

……

3. Fig 1. Shows a flask filled with water. The flask is fitted with a cork through which a tube is inserted. When the flask is cooled, the water level rises slightly, then falls steadily.



Explain the observation **(3mks)**

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……

……

4. A pipe of radius 4mm is connected to another pipe of radius 6mm. if water flows in the wider pipe at the speed of 5ms^{-1}, what is the speed in the narrower pipe? **(3mks)**

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5. The system in figure2 is in equilibrium

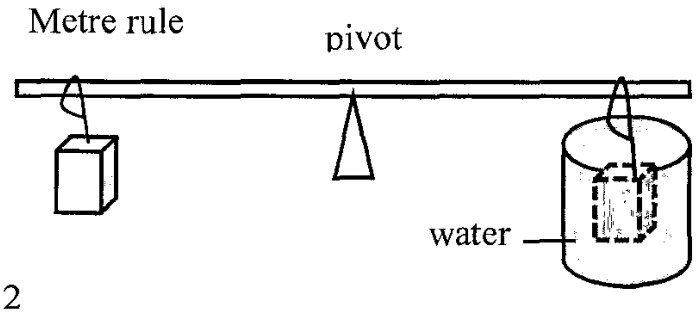


Figure 2

When the temperature of the water is raised the system is observed to tilt to the right, state the reason for this observation **(2mks)**

……

……

6. Explain why a glass container with glass walls is more likely to crack than one with a thin wall when a very hot liquid is poured into them. **(2mks)**

……

……

……

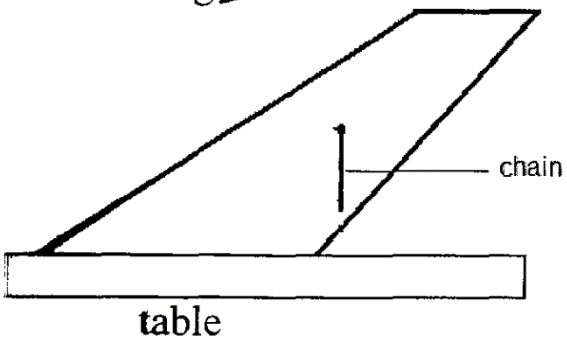
7. State two ways in which the stability of a body can be increased **(2mks)**

……

……

8. The object in figure 3 is placed on a horizontal table with a chain hanging from its centre of gravity. State the type of equilibrium for the object **(1mk)**

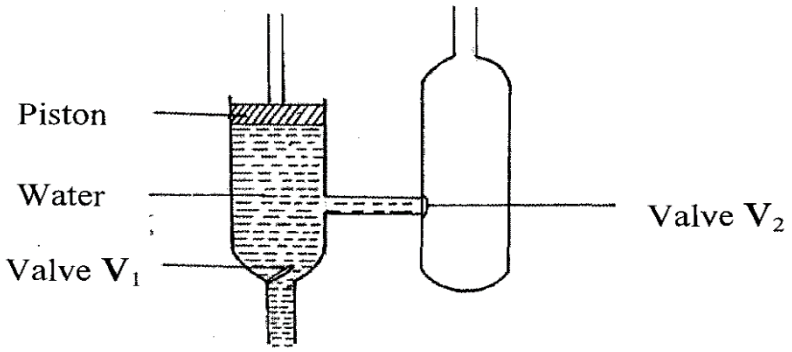
Fig 3



……

9. A ball is thrown upwards and returns to its starting point after 6 seconds. Calculate the maximum height reached($g=10m/s^2$) **(3mks)**

10. The figure below shows a force pump



Explain how the water gets past valve V2 **(2mks)**

……

……

……

11. When calibrating a liquid in glass thermometer, it is normally not advisable to dip the bulb in boiling water when getting the upper fixed point. Explain why it is so **(2mks)**

……

……

……

12. Convectional and diffusion both involve motion of fluid molecules. Distinguish between the two **(2mks)**

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……

……

SECTION B (55 MKS)

13. **(a)** Define the term heat capacity **(1mk)**

……

……

(b) You are provided with the apparatus shown in Fig 5 and stop watch

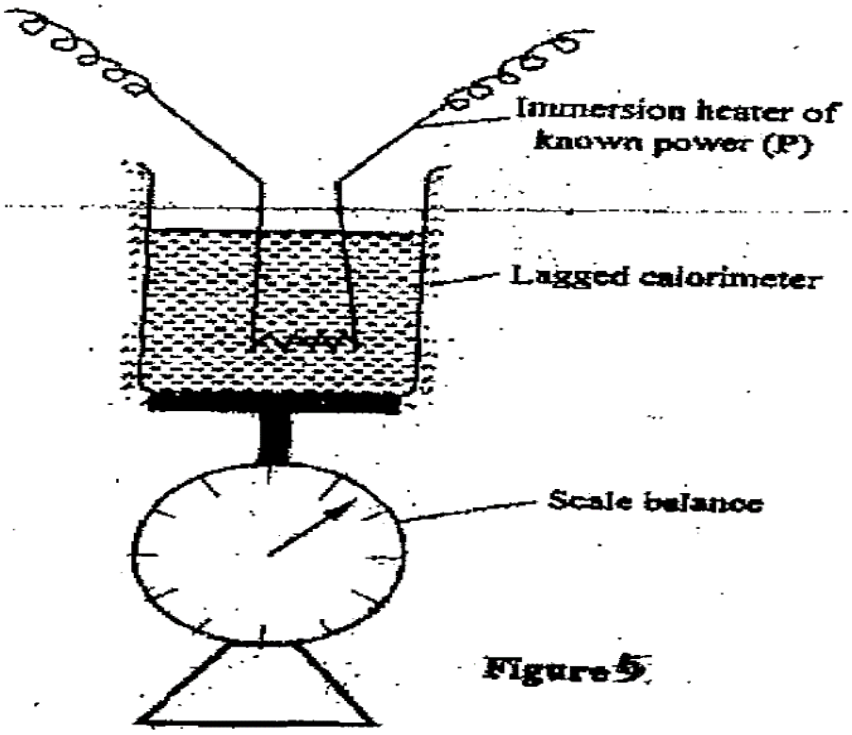

Figure 5

Describe an experiment to determine the specific latent heat of steam, using the set up. In your answers clearly explain the measurements to be made and how these measurements could be used to determine 1 **(6mks)**

……

……

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……

……

(c) A block of metal of mass 150g at 100^{o}C is dropped into a lagged calorimeter of heat capacity 40JK^{-1} containing 100g of water at 25^{o}C. The temperature of the resulting mixture is 34^{o}C. (Specific heat capacity of water=4200JK^{-1})

Determine:

(i) Heat gained by calorimeter; **(2mks)**

……

……

……

(ii) Heat gained by water; **(1mk)**

……

……

(iii) Heat lost by the metal block; **(1mk)**

……

……

(iv) Specific heat capacity of the metal block **(3mks)**

……

……

……

……

14.(a) Distinguish between solid and liquid states of matter in terms of intermolecular forces **(1mk)**

……

……

……

(b) In an experiment to estimate the diameter of an oil molecule, an oil drop of diameter 0.05 spreads over a circular patch whose diameter is 20cm

Determine

(i) The volume of the oil drop **(2mks)**

……

……

……

(ii) The area of the patch covered by the oil **(2mks)**

……

……

……

(iii) The diameter of the oil molecule **(2mks)**

……

……

……

(c) State

(i) Any assumption made in (b) (iii) above **(1mk)**

……

……

(ii) Two possible sources of errors in this experiment **(2mks)**

……

……

15.(a) State what is meant by centripetal acceleration (**1mk)**

……

……

(b) A block of mass 200g is placed on a frictionless rotating table while fixed to the centre of the table by a thin thread. The distance from the centre of the table to the block is 15cm. if the maximum tension the thread can withstand is 5.6N. determine the maximum angular velocity the table can attain before the thread cuts. (**4mks)**

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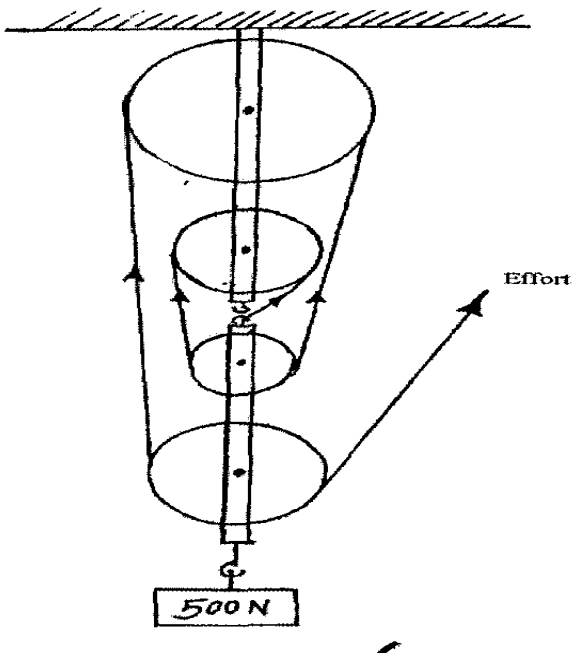
16. **(a)** Define the term velocity ratio as used in machines **(1mk)**

……

……

(b) Figure 6 shows a block and tackle pulley system lifting a load of 500N



(i) Determine the velocity ration of the machine **(1mk)**

……

……

(ii) If an effort of 120N is required to lift the load using the machines determine the efficiency of the pulley system **(3mks)**

……

……

……

(iii) In the space provided below, sketch a graph of efficiency against load for the system. **(2mks)**

17.A car of mass 2000kg travelling at 5m/s collides with a minibus of mass 5000kg travelling in the opposite direction at 7m/s, the vehicles stick and move together after collision. If the collision lasts 0.1 seconds

(a) Determine the velocity of the system after collision to 3 decimal places **(3mks)**

(b) Calculate the impulsive force on the minibus **(3mks)**

(c) (i) Calculate the change in kinetic energy of the system to 5 significant figures **(3mks)**

18.(a)(i) State the law of floatation **(1mk)**

……

……

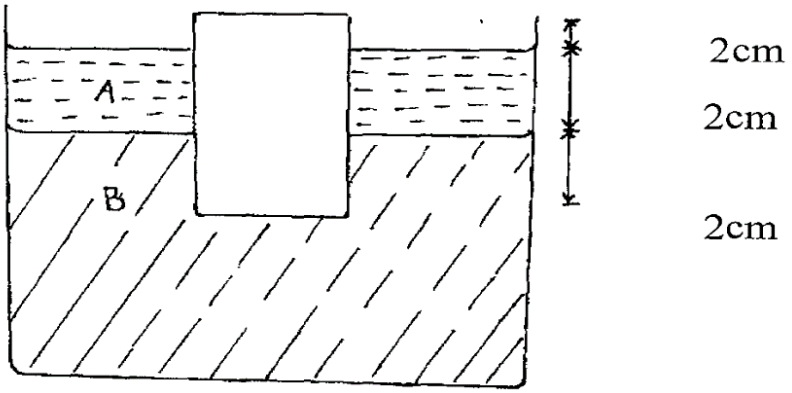
(ii) Explain why a hollow metal sphere floats on water while a solid metal sphere of the same material sinks in water. **(2mks)**

……

……

……

(b) The figure 7 below shows a uniform block of uniform cross-sectional area of 6.0cm^2 floating on two liquids A and B. The lengths of the block in each liquid are shown. Given that the density of liquid A is 800kg/m^3 and that of liquid B is 1000kgm^{-3} determine the:



(i) Weight of liquid A displaced **(2mks)**

(ii) Weight of liquid B displaced **(2mks)**

(iii) Density of block **(3mks)**

KCSE JOINT PREMOCK

2023 SERIES 1 EXAMS

PHYSICS

PAPER 2

TIME: 2 HOURS

NAME……

SCHOOL…… SIGN……

INDEX NO…… ADM NO……

INSTRUCTIONS TO CANDIDATES

1) *Write your name and index number in the spaces provided above.*
2) *Sign and write the date of the examination in the spaces provided above*
3) *This paper consists of **two** sections **A** and **B**.*
4) *Answer **all** the questions in section **A** and **B** in the spaces provided*
5) *All working **MUST** be clearly shown in the spaces provided in this booklet.*
6) *Non programmable silent electronic calculators and KNEC mathematical tables may be used except where stated otherwise.*

Take: Speed of light in vacuum C = 3.0 x 10^8m/s
Acceleration due to gravity g = 10N/S^2

FOR EXAMINER'S USE ONLY

Section	Question (s)	Max. Score	Candidates Score
A	1 – 12	25	
B	13	12	
	14	8	
	15	11	
	16	12	
	17	12	
	Total	80	

SECTION A (25 MARKS)

Answer all the questions in the spaces provided.

1. Figure 1 below shows a ray of light incident to the first of the two mirrors placed at an angle of 60^0

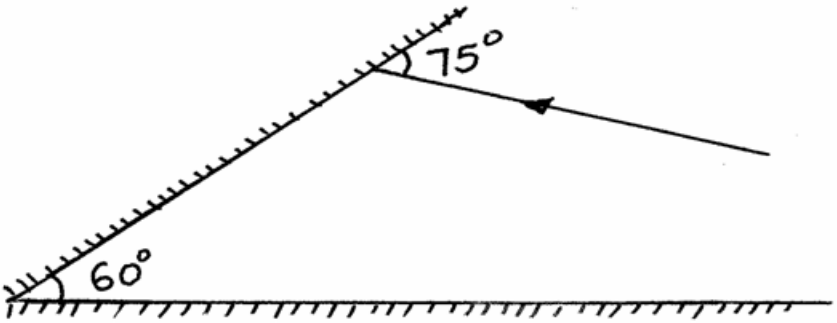


fig 1

Complete the path of the ray after reflection from the mirrors. (**1mk)**

2. Figure 2 below shows a positive charge near a plate carrying negative charge.

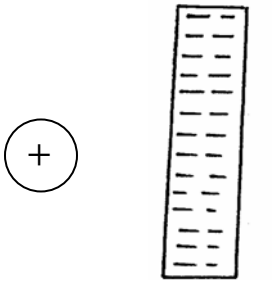


fig 2

Draw the electric field between them. **(2mks)**

3. Two pins are hanging from a magnet as shown in the diagram below (figure 3)

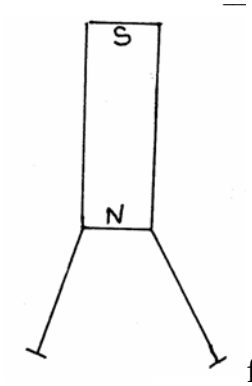


fig 3

Explain why they do not hang vertically downwards. **(2mks)**

……

……

4. Draw the diagrams to illustrate what happens when plane waves are incident on a slit.

i) When the width of the slit is large compared with the wavelengths of the waves. **(2mks)**

ii) When the width of the slit is small compared with wavelength of the waves. **(2mks)**

5. What energy conversion occurs in a photocell? **(1mk)**

……

……

6. i) Arrange the following waves in order of decreasing wavelength; infrared, X-rays, micro-waves and visible light **(1mk)**

……

ii) State one application of visible light. **(1mk)**

……

……

7. State two advantages of an alkaline battery over lead acid battery. **(2mks)**

……

……

8. A girl shouts and ears an echo after 0.6 seconds later from a cliff. If velocity of sound is 330m/s, calculate the distance between her and the cliff. **(3mks)**

9. What is dispersion of light? **(1mk)**

……

……

10. Determine the reading of an ammeter in figure 4 below **(2mks)**

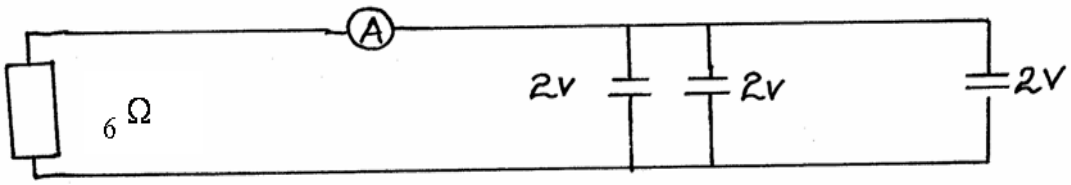


fig 4

11.A ray of light is incident on a glass oil interface as shown in figure 5 below. Determine the value of r (Take refractive index of glass and oil as 3/2 and 6/3 respectively) **(3mks)**

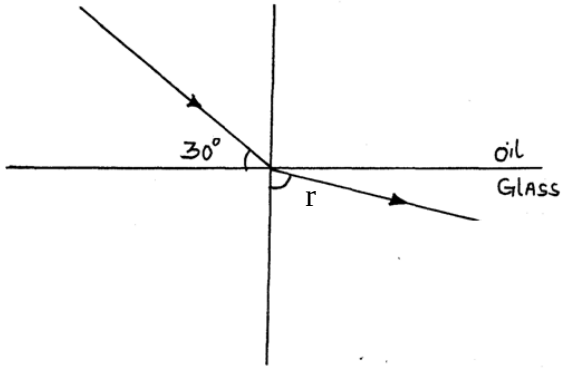


fig 5

12. State two factors that affect the capacitance of a parallel plate capacitors. **(2mks)**

……

……

……

SECTION B (55 MARKS)

13.(a)State Ohm's law. **(1 mark)**

……

……

(b) You are provided with the following apparatus:

- Connecting wires
- An ammeter
- Fixed resistor
- A voltmeter

– A variable resistor
– Switch
– 2 dry cells in a cell holder

(i) In the spaces below, draw the circuit that can be used using the apparatus above to verify Ohm's Law. **(3 marks)**

(ii) Briefly explain how you can obtain the results to verify Ohm's law. **(4 marks)**

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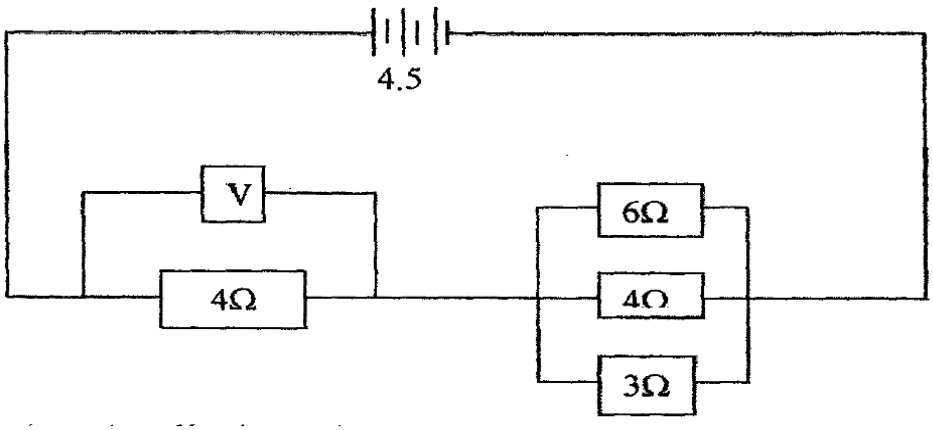
(c)Study the circuit diagram below and answer the questions that follow.



(i) Calculate the effective resistance of the circuit. **(3marks)**

(ii) Find the voltmeter reading. (**2marks)**

14. (a) A Girl stands some distance from a high wall and claps her hands

(i) What two measurements would need to be made in order to determine the speed of sound?

(2mks)

……

……

(ii) Describe how you would make use of these measurements (**3mks)**

……

……

……

(iii) The speed of sound in air is 330m\s.How far from the wall would you stand? Choose an answer from the following distances .10m, 200m, 500m.

Give reasons why you did not choose each of the other two distances (**2mks)**

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……

(b) The balloon filled with carbon dioxide can act like a lens and focus sound from a loud speaker. On to the microphone, Figure 6 show waves produced by loud speaker moving towards the balloon.

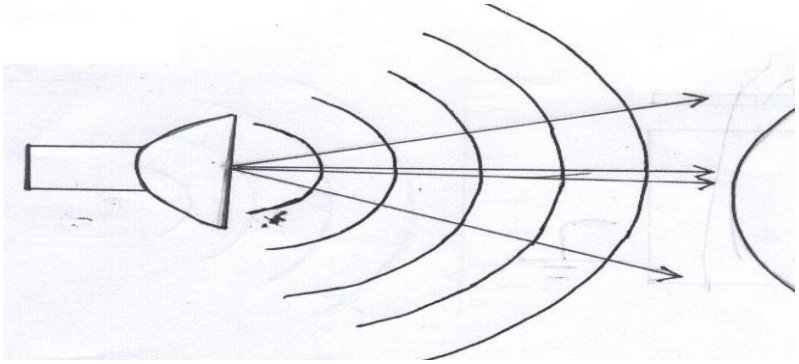

Figure 1

(i)Complete the diagram to show what happens to the sound waves when they happens to the sound waves when they have passed through the balloon and moves towards the microphone **(2mks)**

(ii) The loud speaker is now moved towards the balloon .This results in less sound at the microphone. **Explain** why there is less sound at the microphone. **(1mk)**

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(iii) The frequency of the sound emitted by the loud speaker is 1020Hz. **Calculate** the wavelength of the sound wave in air where its velocity is 340m\s **(2mks)**

c) Figure 15 shows the set up used to demonstrate interference of sound

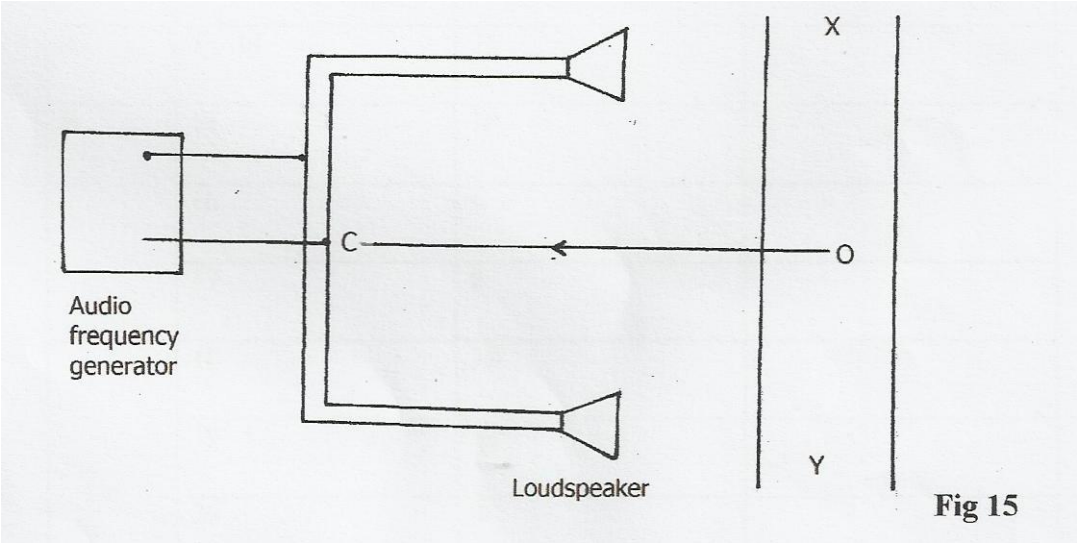

Fig 15

i) An observer O, moves along XY.

State the observation(s) made. **(1 mark)**

……

……

(ii) State what would be observed if a cathode ray oscilloscope is moved along line XY.**(1 mark)**

……

……

(iii) What will a student hear if he moves along the line OC? **(1 mark)**

……

……

15. (a) State the conditions to be satisfied for total internal reflection to occur. **(2marks)**

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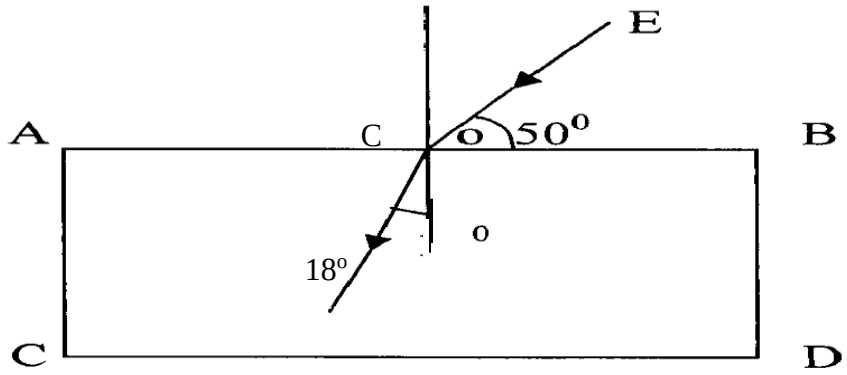
(b) A ray of light traveling in the direction EO in air enters a rectangular block as shown in the diagram. The resulting angle of refraction is 18°.



Find:

(i) The refractive index of the block. **(2marks)**

……

……

(ii) The critical angle C of the block. **(3marks)**

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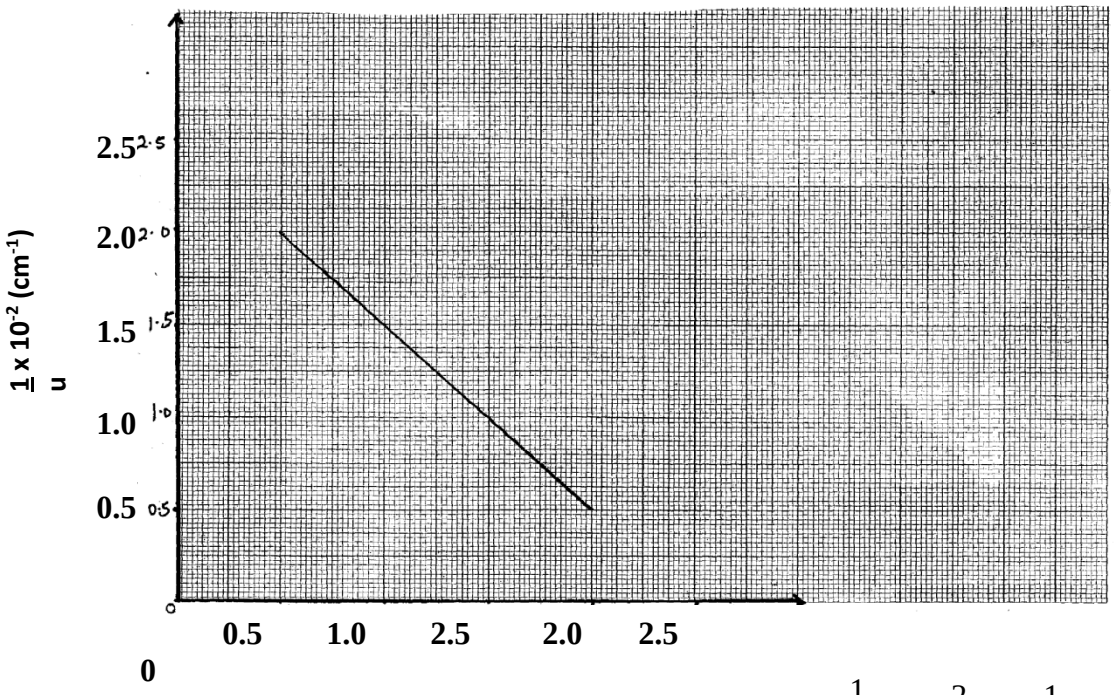
16. (a) The graph below shows the relationship between $^1/_u$ for $^1/_v$for a converging lens where u and are the object and image distances respectively.



From the graph, determine the focal length f, of the lens. **(3 mks)**

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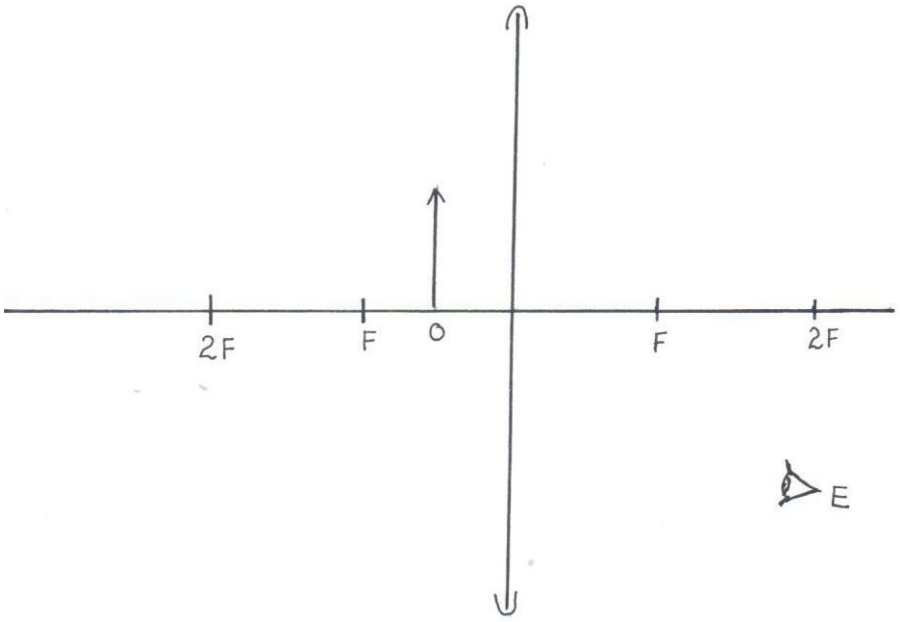
17.(a) The figure below shows an object in front of lens.



(i) Using rays locate the image as seen by observer, E. **(2 marks)**

(ii) Give **one** application of such a lens as used above. **(1 mark)**

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(iii) Write **three** similarities between an eye and a camera. **(3 marks)**

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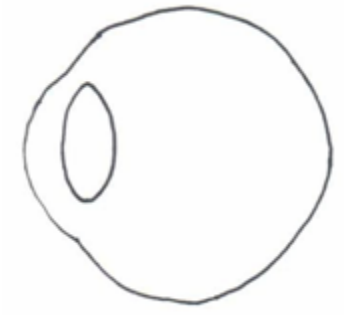
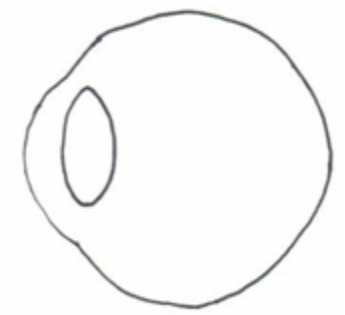
(b) Figure (a) and (b) show diagrams of the human eye.

(a)



(b)



(i)In figure (a), sketch a ray diagram showing long sightedness**.** **(1 mark)**

(ii) In figure (b), sketch a ray diagram showing how lens is used to correct long sightedness.

(2 marks)

(d) An object of height 10.5cm stands before a diverging lens of focal length 20cm and a distance of 10cm from the lens. Determine;

(i) image distance. **(3 marks)**

……

……

……

……

……

(ii) height of the image. **(3mark)**

……

……

……

……

……

(iii) magnification. **(2 mark)**

……

……

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KCSE JOINT PREMOCK

2023 SERIES 1 EXAMS

PHYSICS

232/3

PRACTICAL

CONFIDENTIAL

INSTRUCTIONS TO SCHOOLS

1. The information contained in this paper is to enable the head of school and the teacher in charge of Physics to make adequate preparations for this year's Physics practical examination. **NO ONE ELSE** should have access to this paper or acquire knowledge of its contents. Great care **MUST** be taken to ensure that the information herein does not reach the candidates either directly or indirectly.

2. The Physics teacher is Not expected to perform the experiments.

3. The apparatus required by each candidate for the Physics practical examination are set out on page 2.

It is expected that the ordinary apparatus of a Physics laboratory will be available.

The Physics teacher should note that it is his/ her responsibility to ensure that each apparatus acquired for this examination agrees with the specification on pages 2.

4. The question paper will NOT be opened in advance.

5. Teachers are reminded that electronic calculators may be allowed in the examination rooms.

N.B

Any use of apparatus other than the ones specified may lead to candidates being penalized.

Each candidate requires the following;

Question 1

- *A candle*
- *A white screen*
- *A metre rule*
- *A convex lens of focal length 20cm*
- *A lens holder*
- *A piece of plasticine*

Question 2

- *A clamp, boss and retort stand*
- *Optical pin fixed on a piece of a cork*
- *A copper wire of length 15 cm and diameter 1.0mm*
- *A protractor*
- *A stop watch*

KCSE JOINT PREMOCK

2023 SERIES 1 EXAMS

PHYSICS

PAPER 3

TIME: 2½ HOURS

NAME……

SCHOOL…… SIGN……

INDEX NO…… ADM NO……

INSTRUCTIONS TO CANDIDATES

- *Write your name, school and index number in the spaces provided above.*
- *Sign and write the date of the examination in the spaces provided above.*
- *You are not allowed to start working with the apparatus for the first 15 minutes of the 2½ hours allowed for this paper. This time is to enable you read the question paper and make sure you have all the apparatus you may need.*
- *Marks are given for a clear record of the observations actually made, for their suitability and accuracy and the use made of them.*
- *Candidates are advised to record their observations as soon as they are made.*
- *Mathematical tables and electronic calculators **may be** used in calculations.*

FOR OFFICIAL USE ONLY

Question 1	b	e	f(i)	f(ii)	f(iii)	f(iv)	TOTAL
Maximum Score	2	6	5	3	2	2	
Candidate's Score							

Question 2	c(i)	c(ii)	d	e	f	g	TOTAL
Maximum Score	1	1	7	5	3	3	
Candidate's Score							

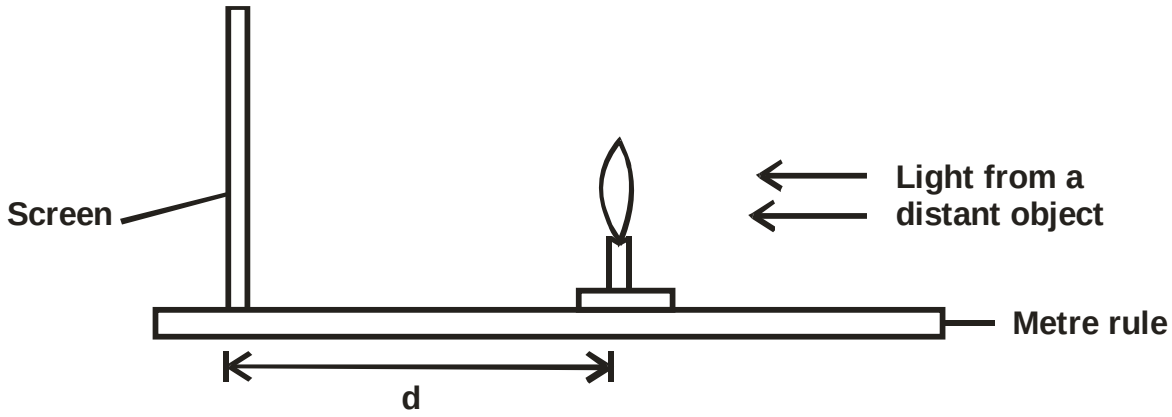
GRAND TOTAL

1. You are provided with the following;

- A candle
- A white screen
- A metre rule
- A lens
- A lens holder
- A piece of plasticine.

Proceed as follows:

a) Arrange the apparatus as shown below.



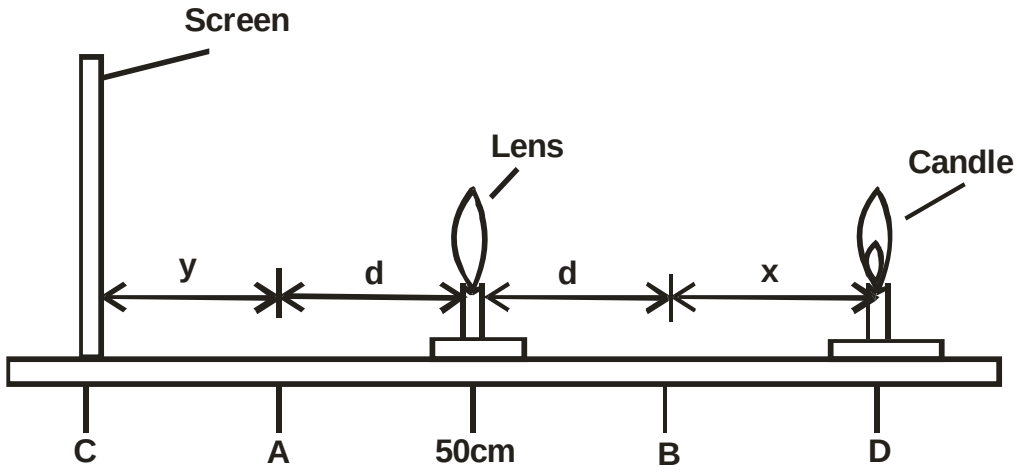
b) Adjust the distance of the lens from the screen until a well-focused image of a very distant object like a tree, is seen on the screen. Record the distance between the screen and the lens as d.

d = _____ cm **(1 mark)**

d = _____ m **(1 mark)**

c) Now place the lens at the midpoint of the metre rule.

(**It will remain at this point throughout the entire experiment**) Arrange the screen and lit candle as shown below.



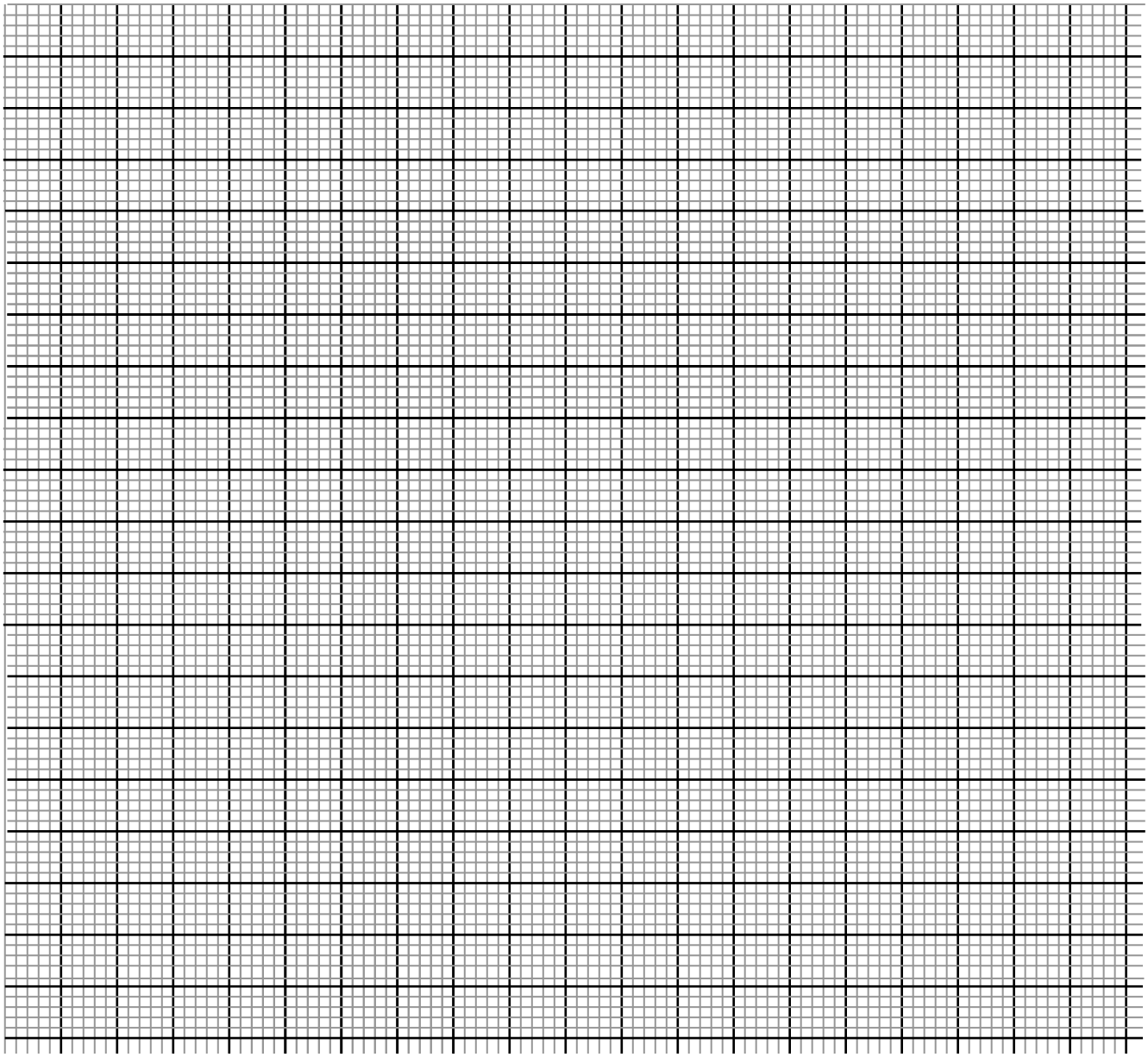
Mark the point A and B each of which a distance 'd' from the lens.

d) Place the lit candle at point d, 30cm from B. Adjust the position of the screen until a sharp image appears on it. The screen is at C. Measure BD and AC and record them as x and y respectively in the table below.

BD = x (cm)	AC = y (cm)	$\frac{1}{y}$ (cm^{-1})
30		
25		
20		
15		
10		

Repeat the procedure in (d) above for other values of x in the table and complete it.**(6 marks)**

e) i) Draw a graph $\frac{1}{y}$ (y-axis) against x. **(5 marks)**



ii) Determine the slope S of the graph. **(3 marks)**

iii) Calculate the value of m given that

$$m = \sqrt{\frac{1}{s}}$$ **(2 marks)**

iv) Comment on values of m and d. **(2 marks)**

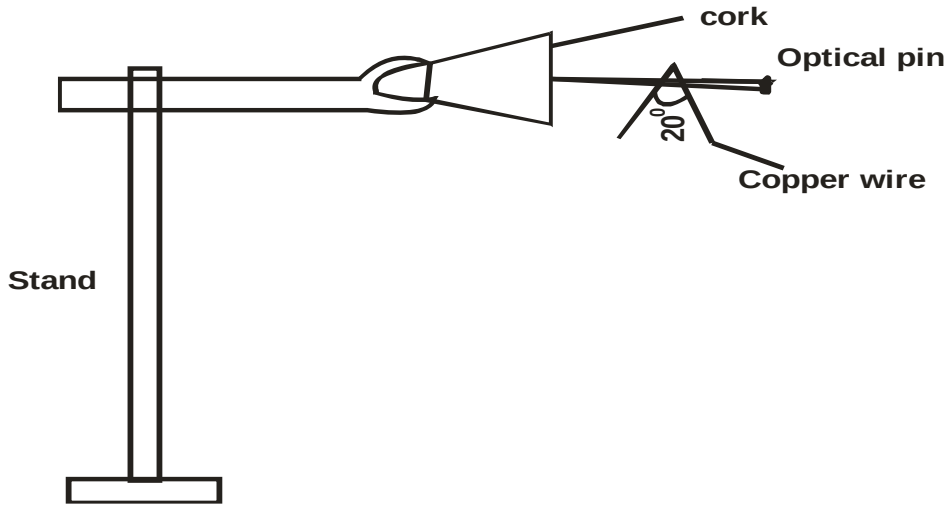
2. You are provided with the following:

- Clamp, boss and stand
- Optical pin fixed on a piece of cork.
- Copper wire of length 15cm
- Protractor
- Stop watch

Proceed as follows:

a) Bend the wire in the middle so that the angle formed is 20^0.

b) Set-up the apparatus as shown in the diagram below.



c) i) Displace the wire horizontally and allow it to swing freely. Record time for 10 complete oscillations.

t = _____ seconds **(1 mark)**

ii) Calculate frequency, f at time in (i) above. **(1 mark)**

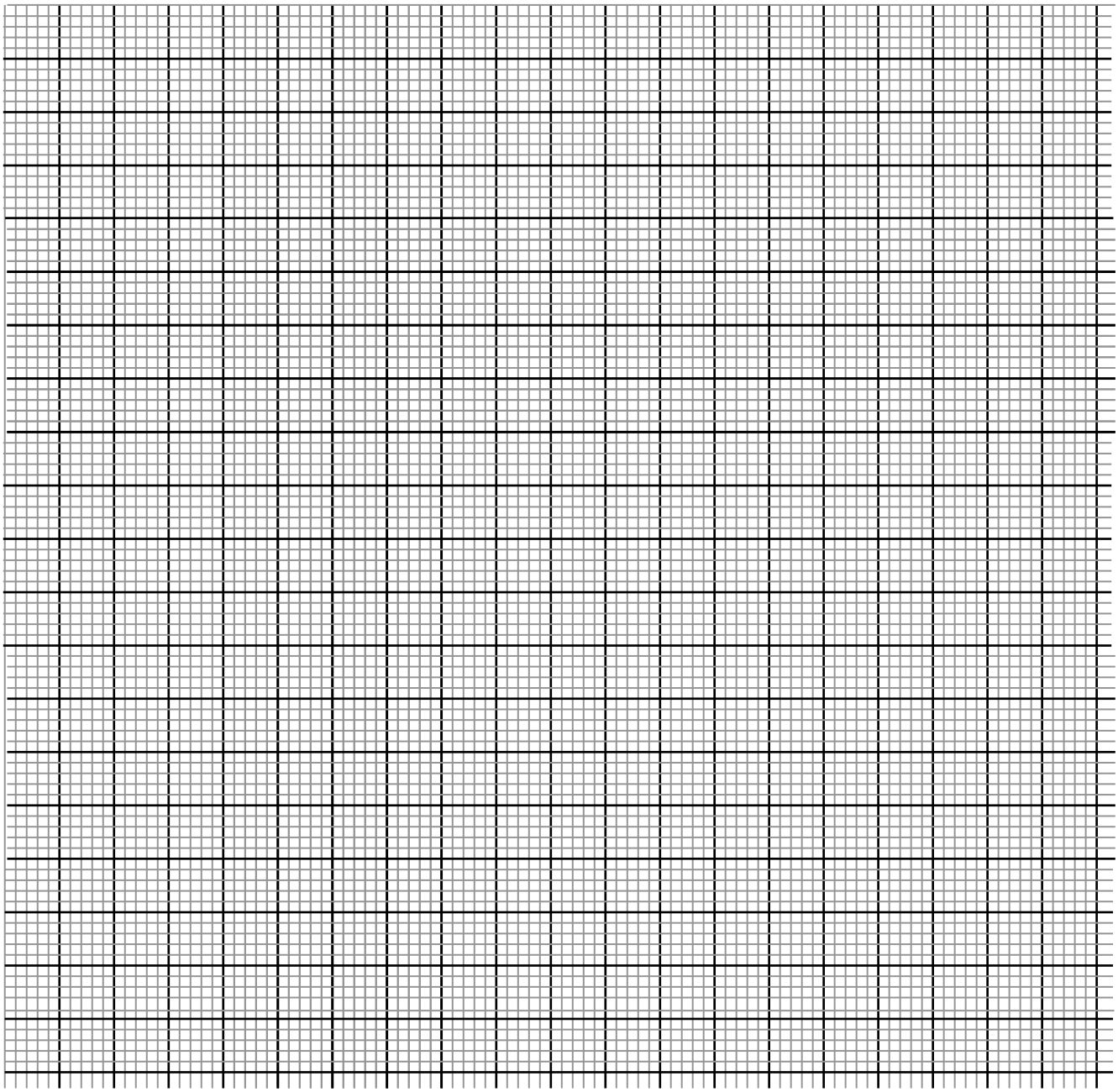
d) Repeat the procedure above (c) for other given angles on the table below.

Angle θ^0	**Time for 10 oscillation t (s)**	**Frequency, f = $\frac{t}{10}$**	**$f^2(Hz)^2$**	**Cos$\left(\frac{\theta}{2}\right)$**
20^0				
40^0				
60^0				
80^0				
100^0				
120^0				

(7 marks)

e) Find the gradient of the graph**.(***Answer after drawing graph in* **(f))** **(3 marks)**

f) On the grid provided, plot a graph of f^2 (y axis) against Cos $\left[\frac{\theta^0}{2}\right]$ **(5 marks)**



g) The equation of the graph is $f^2 = \frac{150K}{4\pi^2 L}$ Cos $\frac{\theta}{2}$ determine the value of constant K if L is the total length of the wire in centimeters. **(3 marks)**

KCSE JOINT PREMOCK

2023 SERIES 1 EXAMS

AGRICULTURE

PAPER 1

TIME: 2 HOURS

NAME……

SCHOOL…… SIGN……

INDEX NO…… ADM NO……

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

INSTRUCTIONS TO CANDIDATES

a) *Write your name and index in the spaces provided above*

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

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

d) *Answer* ***all*** *the questions in sections* ***A*** *and* ***B****.*

e) *Answer any* ***two*** *questions in section* ***C***

f) ***All*** *answers should be written in the spaces provided in the question paper.*

FOR EXAMINER'S USE ONLY

Section	Question	Maximum Score	Candidates Score
A	1 – 20	30	
B	21 - 26	40	
C	27-29	20	
Total Score		90	

SECTION A

1. State t**wo** methods which can be used to detect mineral deficiency in crops. **(lmk)**

……

……

2. State **two** conditions under which shifting cultivation is favourable. **(lmk)**

……

……

3. State t**wo** conditions under which seeds are seeded at a high seed rate. **(2mks)**

……

……

4. State **three** ways in which trees improve soil fertility. **(1 $^{1}/_{2}$ mks)**

……

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5. Give **three** causes of hardpans in cultivation. **(1 $^{1}/_{2}$ mks)**

……

……

……

6. Under what **two** conditions does opportunity cost not exist? **(lmk)**

……

……

7. Give **two** roles of additives in silage making. **(lmk)**

……

……

8. Outline **four** advantages of mixed farming. **(2mks)**

……

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9. Give **three** reasons why bulbils make good planting materials than suckers. **(2mks)**

……

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10. Give **three** reasons why agriculture is defined as a science. **(1 $^{1}/_{2}$ mks)**

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11. Give **four** characteristics of large scale farming system. **(2mks)**

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12. State **four** farming practices which help to improve soil structure. **(2mks)**

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……

13. Give **four** effects of top dressing on a pasture. **(2mks)**

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14. What are the two reasons for innoculating legume seeds before planting . **(1mk)**

……

……

15. State **two** advantages of carrying out pruning in banana production. **(1mk)**

……

……

16. In maize hybrid 614 what do the following figures stand for? **(1mk)**

(i) 6……

(ii) 4……

17. Give **two** ways in which pastures are classified. **(1mk)**

……

……

18. Name **four** practices carried out to improve and maintain permanent pasture. **(2mks)**

……

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19. Give **four** advantages of tissue culture. **(2mks)**

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20. Give **three** stages of controlling devils horsewhip by mechanical means. **(1½ marks)**

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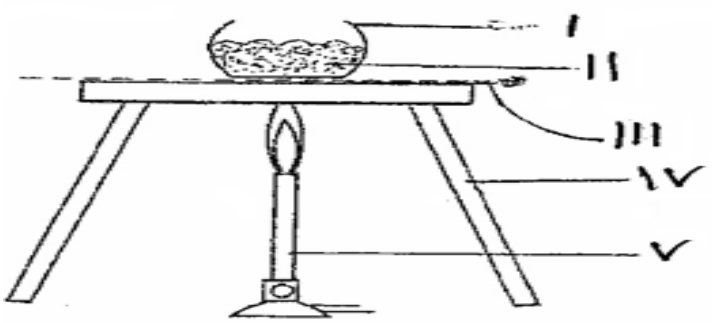
SECTION B

21. The diagram below shows a set up of apparatus for finding the percentage of humus contents in a soil by ignition.



(a) Label the apparatus. **(2 marks)**

I……

II……...

III……..

IV……...

(**b)** Outline the steps followed in carrying out the illustrated experiment. **(3 marks)**

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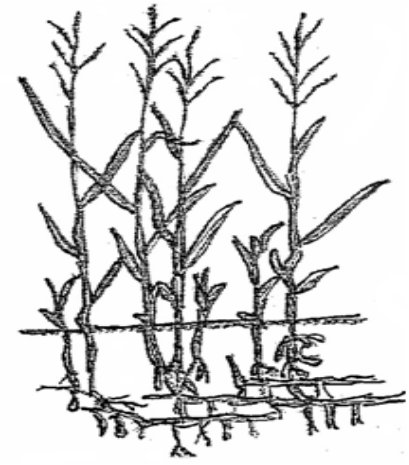
……

22.

G



H

(i) Identify the weeds above. **(2 marks)**

G ……

H ……

(ii) State the economic importance of the weed shown in diagram **G**. **(2 marks)**

……

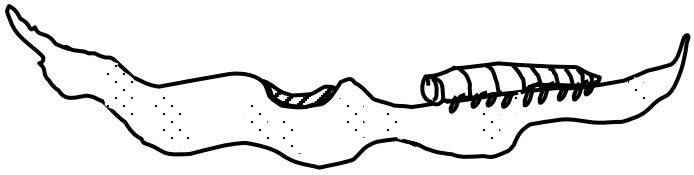
……

(iii) Why is it difficult to control weed in diagram **G**? **(1 mark)**

……

……

23. Study the pest below and answer the questions below.



(a) Identify the pest **(1 mark)**

……..

(b) State two methods of controlling the pest. **(2 marks)**

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……

(c) Name the crops attacked by the pest. **(2 marks)**

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24. The diagram below illustrates a field management practices in tomatoes

(i) Identify the practice **(1 mark)**

……

(ii) State three reasons for carrying out the practice. **(3 marks)**

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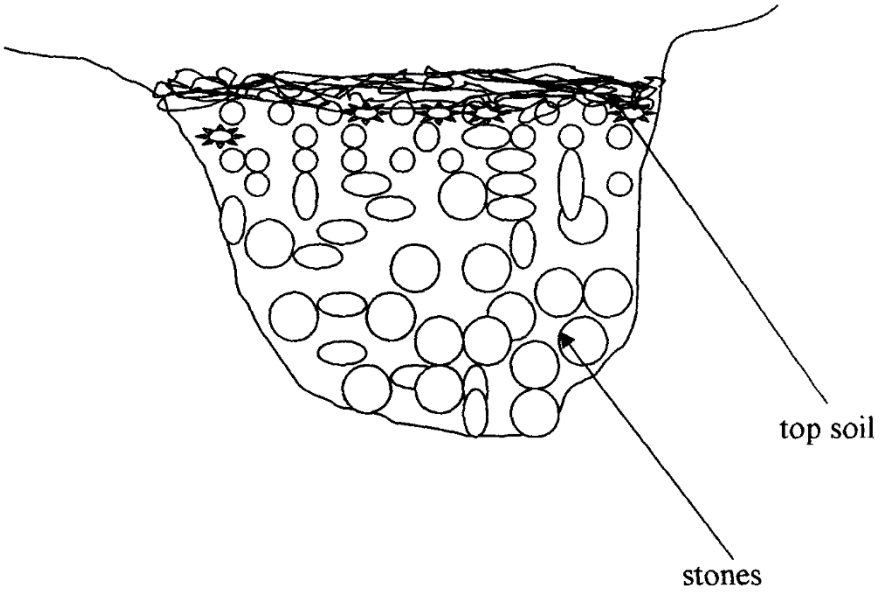
……

……

(iii) Give another practice that could be carried out to give the same results. **(1 mark)**

……

25. Study the diagram below then answer the questions that follow:



(a) Identify the method of drainage above. **(1mk)**

……

(b) State other **three** methods used to drain swampy areas. **(3mks)**

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(c) Give **four** importance of drainage. **(4mks)**

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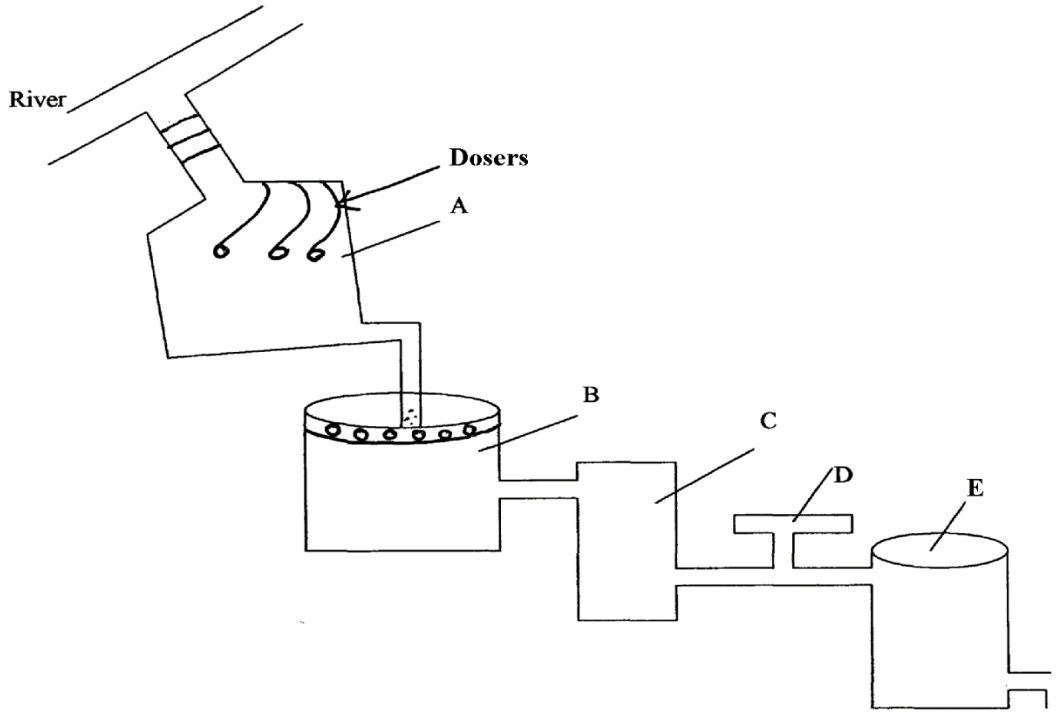
26. Study the processes of chemical water treatment below and answer the questions that follow:



(a) Identify the parts labeled: **(2mks)**

A…… **C**……

B…… **D**……

(b) State **two** chemical substances added at part labeled B and give their functions. **(2mks)**

……

……

(c) State **two** factors which influence the quantity of the chemical used in part labeled D**.(2mks)**

(d) State **three** uses of water in crop production. **(3 mks)**

(e) State **three** types of production functions in agriculture. **(3mks)**

SECTION C (20MKS)

27. (a) Describe the cultural methods of weed control in crop production. **(l0mks)**

(b) Describe the harmful effects of pests on crops **(10mks)**

28. (a) Discuss the human factors which influence agriculture. **(10 marks)**

(b) Explain **five** factors to consider when choosing the planting time. **(10 marks)**

29. Describe the production of carrots under the following sub headings

a) Seedbed preparation **(3 marks)**

b) Harvesting **(4 marks)**

c) Explain five cultural methods of weed control in beans production. **(10 marks)**

d) Outline three roles of sulphur in crop production. **(3 marks)**

KCSE JOINT PREMOCK

2023 SERIES 1 EXAMS

AGRICULTURE

PAPER 2

TIME: 2 HOURS

NAME……

SCHOOL…… SIGN……

INDEX NO…… ADM NO……

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

Instructions to candidates

a) Write your name and index in the spaces provided above

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

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

*d) Answer **all** the questions in sections **A** and **B**.*

*e) Answer any **two** questions in section **C***

*f) **All** answers should be written in the spaces provided in the question paper.*

FOR EXAMINER'S USE ONLY

Section	Question	Maximum Score	Candidates Score
A	1 – 29	40	
B	30 - 35	30	
C	36 - 38	20	
Total Score		90	

1. What is apiculture? **(1 mark)**

……

……

2. Name one livestock disease that is transmitted by the following parasites.

(a) Brown ear tick **(½ mark)**

……

(b) Tsetsefly **(½ mark)**

……

3. State the intermediate host for liver fluke Fasciola spp. **(½ mark)**

……

4. State four breeds of rabbits. **(2 marks)**

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5. State two functions of a crop in a digestive system of chicken. **(1 mark)**

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6. State three ways of restraining cattle **(1½ marks)**

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7. State two livestock diseases caused by virus. **(1 mark)**

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8. State two types of selection practiced by livestock farmers **(1 mark)**

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9. State three ways of preventing predation in a fish pond **(1mark)**

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10. State four functions of feed additives in livestock production. **(2 marks)**

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11. State two types of calf pens. **(1 mark)**

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12. State advantages of embryo transplant. **(2 marks).**

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13. State two roles of testis in male reproductive system. **(1 mark)**

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14. Differentiate between mothering ability and prolificacy **(2 marks)**

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15. **State three** ways in which feeding contributes to disease control. **(1½ marks)**

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16. **State two** functional differences between rumen and abomasums. **(2marks)**

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17. Name four practices carried out in the crush **(2 mks)**

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18. Give three dual purpose cattle breeds **(1½ mks)**

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19. Give three terms used to describe the following: - **(1½ mks)**

(i) Mature male pig.....

(ii) Sterilised birds .....

(iii) Mature female goat .....

20. State four reasons for identifying farm animals **(2mks)**

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21. State two factors that determine the quality of honey **(1mk)**

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22. Give four categories of livestock diseases **(2 mks)**

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23. Name three tools used for plumbing **(1½ mks)**

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24. State two maintenance practices carried out on an ox-drawn plough **(1 mk)**

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25. List two sources of farm's power which are environmental friendly **(1 mk)**

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26. State four functions of the lubricating system in a tractor **(2mks)**

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27. State two conditions under which a farmer would prefer to use an ox-cart instead of a tractor-drawn trailer **(1mks)**

……

……

28. State four qualities considered when selecting a heifer for dairy purposes **(1mks)**

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29. Give one role of a damp proof course in the foundation of a farm building **(1mk)**

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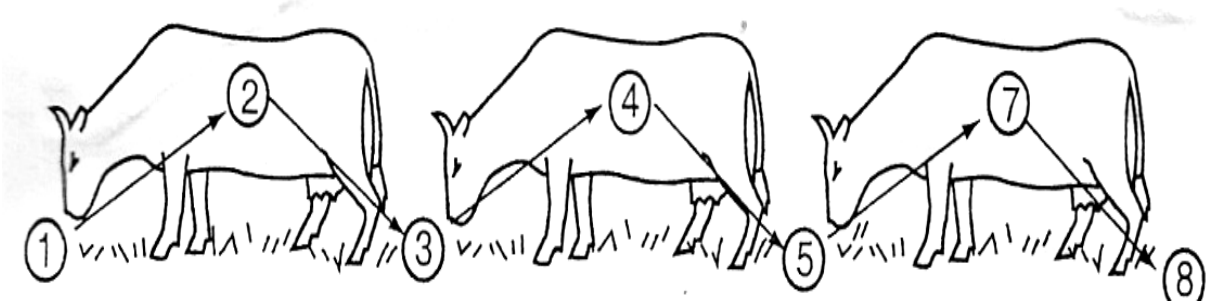
SECTION B (30MKS)

30. The illustrations below represents the stages of development of a three –host tick. Study it carefully and then answer the questions that follow:



(a) Briefly explain what is happening in the following stages **(4 marks)**

1……

……

4……

……

5……

……

7……

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(b) Why do you think that tick control is difficult using acaricides? **(1 mark)**

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(c) Name the most common sites the tick can be found on the body of an animal**.(2 marks)**

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(d) Give **two** examples of a three host tick **(1mark)**

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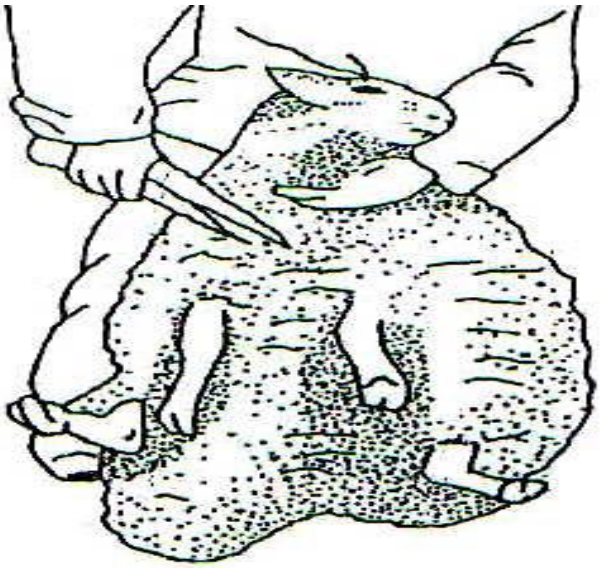
31. The diagram below illustrates a certain practice carried out in sheep management. Study carefully and answer the questions that follow



(i) Identify the practice illustrated above **(1mark)**

……

(ii) State two precautions a farmer should put into consideration when carrying out this practice. **(2marks)**

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(iii) How often should the practice be carried out? **(1mark)**

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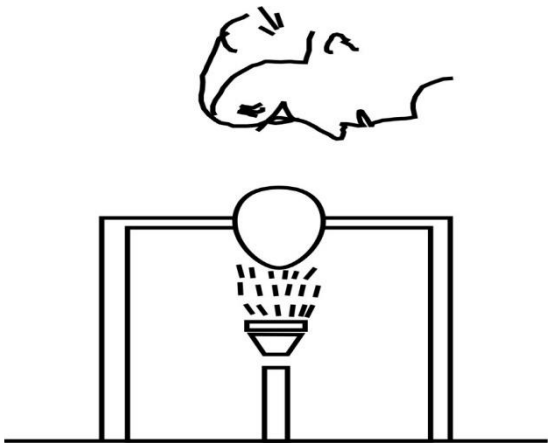
32. Below in an activity carried out in poultry production. Study it carefully then answer the questions that follow.



a) Identify the practice being carried out..... **(1 mk)**

b) State three defects that can be detected by this practice **(3 mks)**

.....

.....

.....

c) State two disadvantages of artificial incubation. **(2 mks)**

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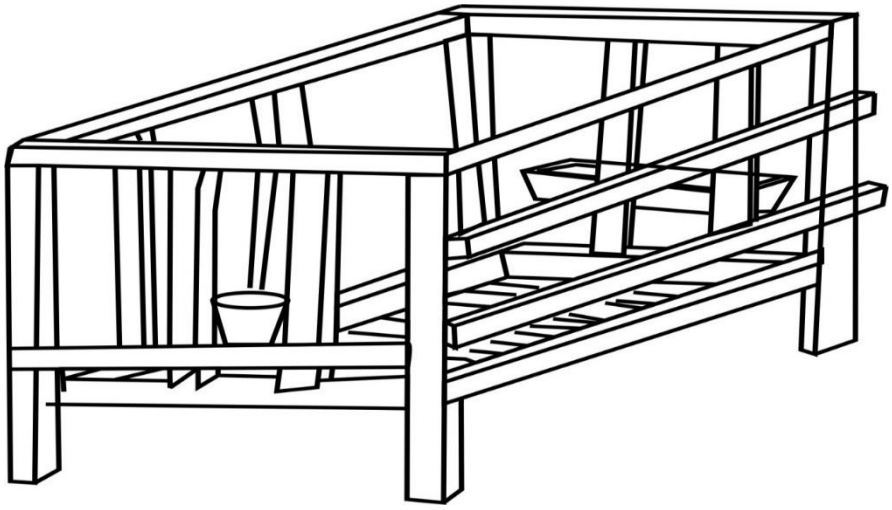
33. Use the above diagram of a calf pen to answer the questions that follow.



a) How high should the calf pen be raised from the ground **(1mk)**

.....

b) Give any two reasons why calves are housed singly **(2mks)**

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……

c) Why should the calf pen be near the milking parlour? **(2mks)**

……

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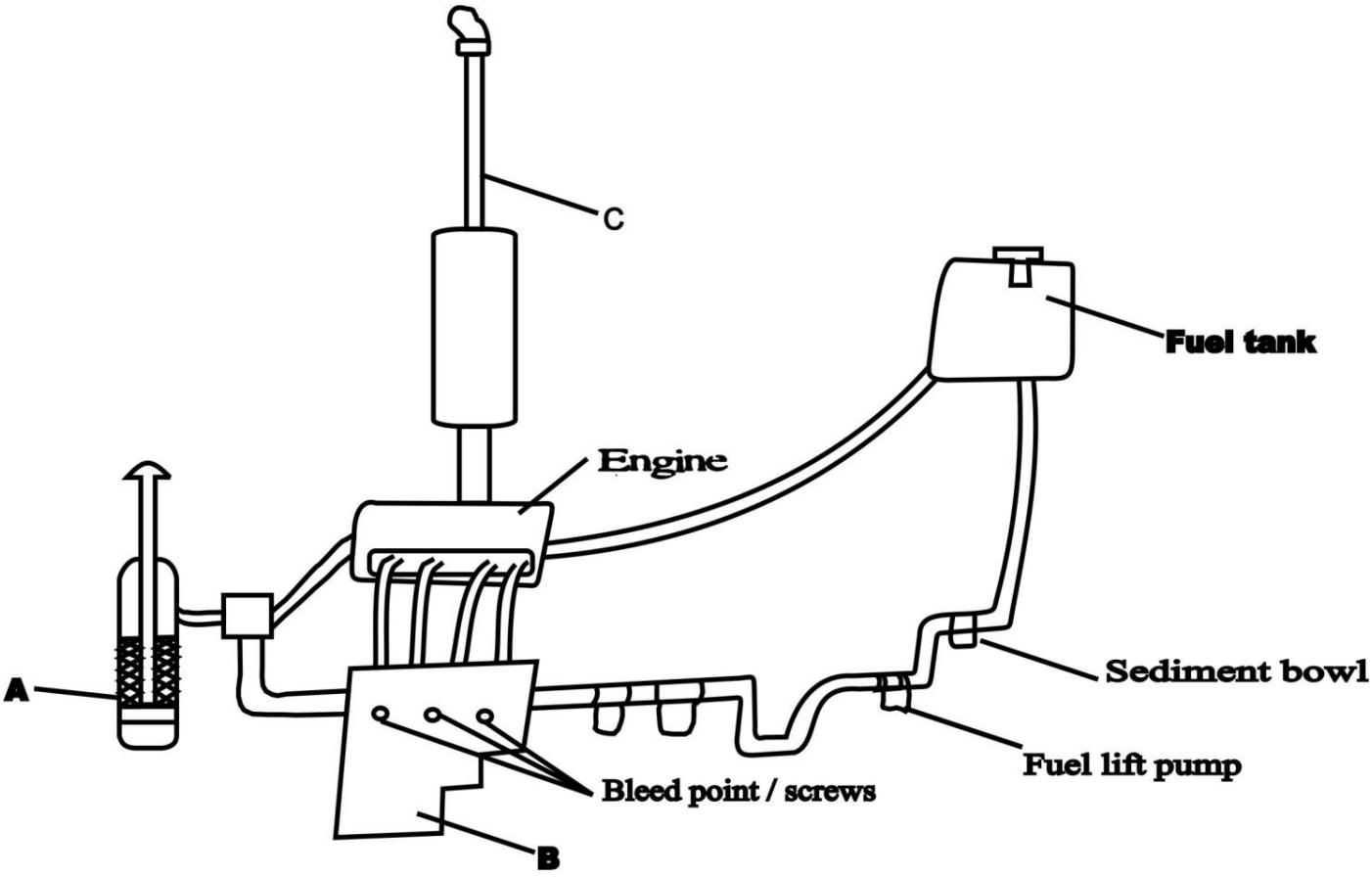
34. Study the diagram below of a diesel fuel system then answer the questions that follow.



a) Identify the parts labelled **(3 mks)**

A.....

B.....

C.....

b) State three maintenance practices carried out on the system **(2mks)**

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……

……

35. Outline the procedure of proper milking technique **(3 mks)**

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SECTION C (20MKS)

36. a) Outline five signs of heat in a cow **(5 mks)**

b) Outline five causes of stress in poultry and describe their control **(10mks)**

c) Using Pearson's square compute a ration with 20% DCP from oats which contains 10% DCP and simsim seedcake containing 60% DCP. (show your working) **(5mks)**

37. a) Outline the daily maintenance practices that should be carried out on a farm tractor **(8 mks)**

b) Outline twelve general symptoms of endoparasite attack in livestock. **(12 mks)**

38. a) State four advantages of using a sub soiler in seedbed preparation **(4mks)**

b) Give five advantages of artificial insemination in cattle **management** **(5mks)**

c) State five function of water in animal's body **(5mks)**

d) Describe control measures for tape worm in livestock **(6mks)**

KCSE JOINT PREMOCK

2023 SERIES 1 EXAMS

BUSINESS STUDIES

PAPER 1

TIME: 2 HOURS

NAME……

SCHOOL…… SIGN……

INDEX NO…… ADM NO……

Answer ALL the questions

1. Onazi Secondary School will wish to change from an enclosed office to an open office. Highlight **four** advantages that will accrue from this. **(4mks)**

……

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2. Motor cycles have recently become a very popular mode of transport in Kenya. List **four** benefits a commuters enjoy by using them. **(4mks)**

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3. Outline **four** factors that may make it necessary for insurance company to reinsure. **(4mks)**

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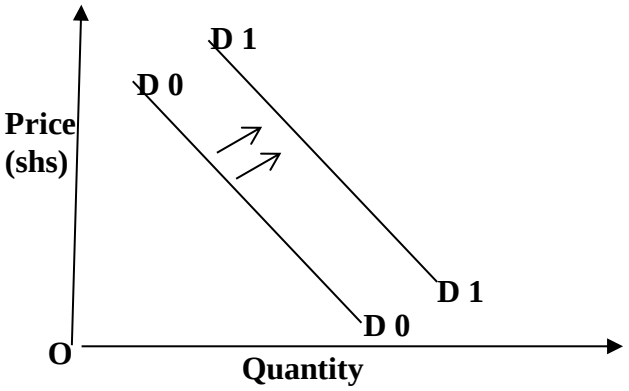
4. The following diagram shows a shift in demand curve. Outline **four** reasons that can lead to this shift.

(4mks)



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5. Kenya has a few oligopoly firms. Highlight **four** sources of oligopoly powers to these firms.

(4mks)

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6. Highlight **four** ways in which capital of a business may change **(4mks)**

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7. For each of the following transactions, indicate with tick **(√)** in the spaces provided whether it will increase, decrease or have no effect on the balance sheet totals. **(4mks)**

Transaction	**Increase**	**Decrease**	**No effect**
a) Investing more cash in business			

b)Paying creditors in cash			
c)Buying a piece of furniture in cash			
d)Paying a creditor using money from private source			

8. Below are some entries in the cash book of Romeo Traders for the month of July 2021.

Cash Book

Dr **Cr**

Date(2021)	Details	Cash (shs)	Bank(shs)	Date (2021)	Details	Cash (Shs)	Bank (Shs)
July: 1	Bal b/f	15,000		July: 1	Bal.b/f		100,000
6	cash		20,000	6	bank	20,000	
20	sales		15,000	15	wages	5,000	
28	Debtors	20,000		29	stock		10,000
				31	Bal c/f	19,000	

State the meaning of the following entries. **(4mks)**

a) July 1, bal b/f bank column shs.100,000

……

b) July 6, cash shs. 20,000 and Bank shs. 20,000

……

c) July, 28 debtors shs. 20,000

……

d) July 31 2010, balance c/f shs. 10,000

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……

9. Highlight **four** roles of an entrepreneur to the economy of a country. **(4mks)**

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10. Identify the source documents used to enter the following journals. **(4mks)**

Journal	Source document
i)Purchase journal	i)
ii)Returns outwards journal	ii)
iii) Sales journal	iii)
iv)Cash receipt journal	iv)

11. State **four** ways in which consumers are likely to suffer when there is no warehousing. **(4mks)**

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12. Highlight **four** disadvantages of concentrating many firms in Nairobi town. **(4mks)**

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13. Oscar imports goods from South Africa to Kenya. State **four** conditions that would determine the choice of his distribution channel **(4mks)**

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……

14. State **four** ways in which Kenya as a country can conserve her economic resources.**(4mks)**

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15. Outline **four** ways in which the legal political environment can influence the activities of a business. **(4mks)**

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16. For each of the following descriptions, identify the corresponding method of product promotion. **(4mks)**

DESCRIPTION	**METHOD OF PROMOTION**
Free promotion of a product	
Strategies to increase sales at the point of promotion.	
Impersonal presentation of a product through the mass media	
Ment to improve the reputation of a firm	

17. Outline **four** factors that influence the amount of money held by an individual for precautionary motive. **(4mks)**

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18. The following balances relates to the business of Super loaf traders during the period ended 30th June 2021.

	Shs.
Rent received	12,000
Salaries and wages	48,000
Gross profit	120,000
Discounts received	7,500
Insurance	12,500
Carriage on sales	15,000
Discounts allowed	6,000

Prepare the business's Profit & loss a/c for the period ended 30th June 2021.

19. The following transaction was extracted from books of Kuria business on 31st March 2004.

Stock (01/04/05)	8,000
Stock (31/03/06)	9,000
Purchases	4,500
Sales	21,000

Calculate:

(i) Margin **(2mks)**

(ii) Rate of stock turn over. **(2mks)**

20. Highlight **four** factors that must be considered before spending public funds. **(4mks)**

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21. Outline **four** circumstances under which a firm may be located near the source of its raw materials. **(4mks)**

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22. Highlight **four** circumstances under which face – to face communication would be preferred to written communication in a firm. **(4mks)**

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23. State **four** ways how consumers can protect themselves against malpractices by private business people. **(4mks)**

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24. Highlight **four** problems associated with the measurement of national income using the output approach. **(4mks)**

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25. The aggressive campaign for citizens to plan their families seems to be causing a decline in the country's population growth. Outline four possible effects of this. **(4mks)**

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KCSE JOINT PREMOCK

2023 SERIES 1 EXAMS

BUSINESS STUDIES

PAPER 2

TIME: 2½ HOURS

NAME……

SCHOOL…… SIGN……

INDEX NO…… ADM NO……

INSTRUCTIONS TO CANDIDATES

Answer any five questions in the spaces provided.

For Examiner's Use Only

Question No	1a	1b	2a	2b	3a	3b	4a	4b	5a	5b	6a	6b
Marks												

1. (a) Explain five benefits that could accrue to a customer who buys goods from a departmental store. **(10mks)**

(b) Explain five roles played by licensing as a government regulatory tool. **(10mks)**

2. (a) Explain five services that the central bank of Kenya offers to commercial banks. **(10mks)**

(b) The following information relates to the business of Kipisigs Traders for the week ended 29th Feb 2016.

Feb 24th Started business with shs 24,000 in thebank.
Feb 25 th Bought goods worth shs 18,000 by cheque.
Feb 26 th Sold goods for cash shs 18,900
Feb 28 th Cash sales worth Kshs 5,625
Feb 29 th Paid commission Kshs 900 in cash.

Required

Prepared ledger accounts and balance them off. **(10mks)**

3. (a) Describe five channels followed in exporting agricultural product. **(10mks)**

(b) he following trial balance was extracted from Milka traders on 31st Dec 2020.

	Dr	Cr
	Sh	Sh
Capital		250,000
Stock	25000	
Machinery	250,000	
Motor vehicle	87000	
Purchase	360,000	
Sales		600,000
Returns inwards	40,00 0	
Returns outwards		20,000
Discount received		5,000
Carriage inwards	2000	
Carriage outwards	3000	
Bad debts (written off)	80,00 0	
General expenses	88,00 0	
Debtors	18,00 0	
Creditors		49,000
Rent	1000	
	954.000	954.000

Additional information; losing stock was sh. 22000

Prepare Milka traders Trading, profit and loss account for the year ending 31/12/2020. **(10mks)**

4. (a) Explain five reasons why a country imposes taxes on her citizens. **(10mks)**

(b)Outline five differences between a public limited company and a cooperative society.**(10mks)**

5. (a) Using a diagram illustrate the effects of a positive shift of a demand curve on the equilibrium point, price and quantity **(10mks)**

(b) Explain five features of land as a factor of production. **(10mks)**

6. (a) Mmanyi Enterprises have decided to construct their own warehouse. Explain five benefits they are likely to derive. **(10mks)**

(b) Explain five importance of filing documents in an organization **(10mks)**

KCSE JOINT PREMOCK

2023 SERIES 1 EXAMS

CHRISTIAN RELIGIOUS EDUCATION

PAPER 1

TIME: 2½ HOURS

NAME……

SCHOOL…… SIGN……

INDEX NO…… ADM NO……

INSTRUCTIONS TO CANDIDATES

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

2) *This paper consists of six questions.*

3) *Answer any **FIVE** questions in the answer sheet provided*

4) *Each Question carries 20 marks*

Questions No.	1	2	3	4	5	6	GRAND TOTAL
Marks							

QUESTIONS

1. (a) Give the moral importance of studying Christian Religious Education. **(6mks)**

(b) Describe the first account of creation as in 1:2:4. **(8mks)**

(c) Outline SIX ways in which Christians care for God's creation. **(6mks)**

2. a) Describe the covenant between God and Abraham.Gen15:1-19 **(8mks)**

b) Why is Abraham referred to as the father of faith? **(7mks)**

c) Give five ways in which Christians show their faith in God. **(5mks)**

3. (a) State reasons why Samuel was opposed to the establishment of kingship in Israel. **(5mks)**

(b) Explain FIVE reasons why David was considered the greatest King of Israel. **(10mks)**

(c) Give reasons why the political leaders in Kenya today has failed to perform their duties effectively. **(5mks)**

4. a) What were the characteristics of true prophets in the Old Testament? **(7mks)**

b) Give reasons why Amos proclaimed God's judgment on Israel and Judah? **(6mks)**

c) What lessons do Christians learn from Amos' teachings on judgment? **(7mks)**

5. a) Explain the final reforms carried out by Nehemiah **(5mks)**

b) Outline the content of Jeremiah's letter to the exiles in Babylon (Jer 29) **(8mks)**

c) Relate the teaching from Nehemiah's exemplary life to Christian life **today** **(7mks)**

6. a) Describe any four moral values acquired during initiation rituals **(8mks)**

b) What is the importance of kinship in traditional African society? **(7mks)**

c) How has the Kenyan government promoted African culture. **(5mks)**

KCSE JOINT PREMOCK

2023 SERIES 1 EXAMS

CHRISTIAN RELIGIOUS EDUCATION

PAPER 2

TIME: 2½ HOURS

NAME……

SCHOOL…… SIGN……

INDEX NO…… ADM NO……

INSTRUCTIONS TO CANDIDATES

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

2) *This paper consists of six questions.*

3) *Answer any **FIVE** questions in the answer sheet provided*

4) *Each Question carries 20 marks*

Questions No.	1	2	3	4	5	6	GRAND TOTAL
Marks							

QUESTIONS

1. (a) Explain the Jewish expectations concerning the messiah **(7mks)**

(b) State 7 similarities in the annunciation of the birth of John the Baptist and that of Jesus Christ. **(7mks)**

(c) Identify six lessons Christians learn from the annunciation of the birth of Jesus Christ **(6mks)**

2. (a) Give seven advantages of a monogamous marriage **(7mks)**

(b) Outline the importance of children in both Christianity and traditional African communities. **(6mks)**

(c) Identify ways through which Christians help to minimize conflicts between parents and their children in Kenya today **(7mks)**

3. (a) Outline Jesus teachings about the Kingdom of God. **(7mrks)**

(b) Narrate the parable of the sower Luke 8:4-15. **(8mrks)**

(c) State the challenges faced by new converts in the church today. **(5mrks)**

4. (a) Give the teachings of Jesus on the role of the Holy Spirit. **(7mrks)**

(b) Explain how the unity of believers is expressed in the image of the body of Christ. **1st Cor 12:12-31**. **(8mrks)**

(c) State **five** ways in which the gift of the Holy Spirit have been abused in the church today. **(5mrks)**

5. (a) Outline **six** prophecies of Jeremiah about the Messiah. (Jeremiah 23: 5 – 6) **(6 marks)**

(b)With reference to Luke 1:16 – 17, state the mission of John the Baptist from the message of angel Gabriel to Zachariah. **(8 marks)**

(c) State **six** lessons Christians learn from the role of John the Baptist? **(6 marks)**

6. (a) Explain seven sources of Christians Ethics. **(7marks)**

(b) Explain eight Christian values necessary for the creation of a just society. **(8marks)**

(c) State five reasons for sexual abuse in Kenya today. **(5marks)**

KCSE JOINT PREMOCK

2023 SERIES 1 EXAMS

HISTORY AND GOVERNMENT

PAPER 1

TIME: 2½ HOURS

NAME……

SCHOOL…… SIGN……

INDEX NO…… ADM NO……

INSTRUCTIONS TO CANDIDATES.

(a)*This paper consists of three sections A, B and C.*
(b)*Answer all the questions in section A, three questions from section B and two questions from section C.*
(c)*Candidates must answer all the questions in English.*

SECTION A (25 MARKS)

Answer all questions in this section

1. Identify one main source of History and Government of the Kenyan communities during the pre-colonial period. **(1 mark)**

2. Identify two cultural practices introduced by the Cushites in Kenya. **(2 marks)**

3. Identify the title given to the war leader among the Luo community. **(1 mark)**

4. State one characteristic of a good constitution. **(1 mark)**

5. Which other name is used to refer to the Oromo? **(1 mark)**

6. State the two levels of government in Kenya today. **(2 marks)**

7. Identify one recommendation of Lyttleton constitution of 1954. **(1 mark)**

8. Highlight two functions of the governor during the British administration in Kenya. **(2marks)**

9. Give two demands of African Elected Members Organization (A.E.M.O). **(2 mark)**

10. Name two operation Forts established by the British to enhance political control in Central Kenya. **(2 marks)**

11. State two problems that the co-operative movement has faced in Kenya since independence **(2 marks)**

12. Identify two elements of the rule of law in Kenya **(2 marks)**

13. State two characteristics of human rights. **(2 marks)**

14. State two terms of the Heligoland treaty of 1890. **(2 marks)**

15. Give two values and principles of the public service according to the Kenya Constitution of 2010. **(2marks)**

16. Give one role played by the Public Service Commission in Kenya. **(1 mark)**

SECTION B (45 MARKS)

Answer any three questions.

17. (a) Name three Kalenjin speaking communities that remained in Mt. Elgon region during migration. **(3 marks)**

(b)Describe the social organization of the pre-colonial Somali community. **(12 marks)**

18. (a) State three factors that led to the decline of the coastal towns after 1500 AD. **(3 marks)**

(b) Explain six social impacts of the missionary activities in Kenya. **(12 marks)**

19. (a) Give five common challenges faced by both the railway builders and settlers in colonial Kenya. **(5 marks)**

(b) Explain five internal factors that led to the growth of Kenyan nationalist activities. **(10 marks)**

20. (a) Give three grievances of the white settlers that were presented to the Duke of Devonshire in London in 1923. **(3 marks)**

(b) Explain six positive effects of urbanization in Kenya during the colonial period. **(12 marks)**

SECTION C (30 MARKS)

Answer any two questions from this section.

21. a) State five non-violent methods of resolving conflicts. **(5marks)**

b) Explain five factors that promote national unity. **(10 marks)**

22. (a)Identify three ways that could be used to amend the constitution in Kenya. **(3 marks)**

(b) Explain the process of law making at the National level in Kenya. **(12 marks)**

23.a). State five functions of Kenya correctional facilities. **(5marks)**

b).Explain five factors that undermine the administration of justice in Kenya. **(10marks)**

KCSE JOINT PREMOCK

2023 SERIES 1 EXAMS

HISTORY AND GOVERNMENT

PAPER 2

TIME: 2½ HOURS

NAME……

SCHOOL…… SIGN……

INDEX NO…… ADM NO……

INSTRUCTIONS TO THE CANDIDATES:

- *This paper consists of three sections: A, B and C.*
- *Answer all questions in section A, three questions from section B , and two questions from section C.*
- *Answers to all questions must be written in the booklet provided.*

SECTION A (25MARKS)

Answer all questions in this section

1. Name one of the periods of History **(1mk)**

2. Identify the hominid that is associated with the invention of fire **(1mk)**

3. Give two reasons that made Early human beings to live in groups during the stone age period **(2mks)**

4. State two theories that explain the origin and spread of agriculture **(2mks)**

5. Give two reasons why the camel is referred to as "the ship of the desert" **(2mks)**

6. What was the main item of trade from North Africa in the Trans-Saharan Trade **(1mk)**

7. Give two factors that enhanced the spread of iron working in Africa **(2mks)**

8. Give the main advantage of a cell phone **(2mks)**

9. Name two communities that did not take part in the MajiMaji uprising of 1905 – 1907 in Tanganyika **(2mks)**

10. Name the European power that colonized Zimbabwe **(1mk)**

11. Name two communes in Senegal where assimilation was successful **(2mks)**

12. Give the main reason for the convening of the Berlin conference of 1880-1884 **(1mk)**

13. Give the main function of international court of justice **(1mk)**

14. List two founders of Pan-Africanism **(2mks)**

15. Name any two weapons used during cold war **(2mks)**

16. Name the European power that was blamed for the outbreak of the first world war **(1mk)**

17. Name the international organization that took over from O.A.U **(1mk)**

SECTION B (45 MARKS)

Answer any three questions in this section

18.(a) Identify five ways in which Homo Erectus attempted to improve his way of life **(5mks)**

(b) Explain how the development of Early agriculture changed the lives of Early man (**10mks)**

19. (a) State five uses of iron during the pre-colonial period in Africa **(5mks)**

(b) Explain five challenges facing industrialization in Third World **Countries** **(10mks)**

20. (a) Outline five methods used by Europeans to acquire colonies in Africa **(5mks)**

(b) Explain five reasons for the failure of the Maji Maji uprising of 1905-**1907** **(10mks)**

21. (a) Outline the duties of the Emirs in Northern Nigeria **(5mks)**

(b) Explain five roles of Kwame Nkrumah in the struggle for independence in Ghana **(10mks)**

SECTION C (30MKS)

Answer any two questions in this section

22. (a) State three European dictation responsible for second world war **(3mks)**

(b) Explain six political results of the second world war **(12mks)**

23. (a) State the three permanent members of the council of the league of nations **(3mks)**

(b) Explain six achievements of Economic Community of West African states (ECOWAS)**(12mk)**

24. (a) Identify three reasons why the Manchester Pan African congress of 1945 was unique. **(3mks)**

(b) Explain six reasons why Pan African Movement was not properly established in Africa by 1945. **(12mks)**

KCSE JOINT PREMOCK

2023 SERIES 1 EXAMS

GEOGRAPHY

PAPER 1

TIME: 2¾ HOURS

NAME……

SCHOOL…… SIGN……

INDEX NO…… ADM NO……

INSTRUCTIONS TO CANDIDATES

- ✓ *Answer all questions in section A.*
- ✓ *In section B, Answer question 6 and any other two questions from the remaining questions.*
- ✓ *Answer all questions using the answer booklet provided.*
- ✓ *Candidate should check that all pages are printed and no questions are missing.*

FOR EXAMINATION USE ONLY.

	Maximum Score	Candidate Score
Section A.	25	
Question 6	25	
Question 7	25	
Question 8	25	
Question 9	25	
Question 10	25	
TOTAL	100%	

SECTION A

1. (a) What is geography? **(2marks)**

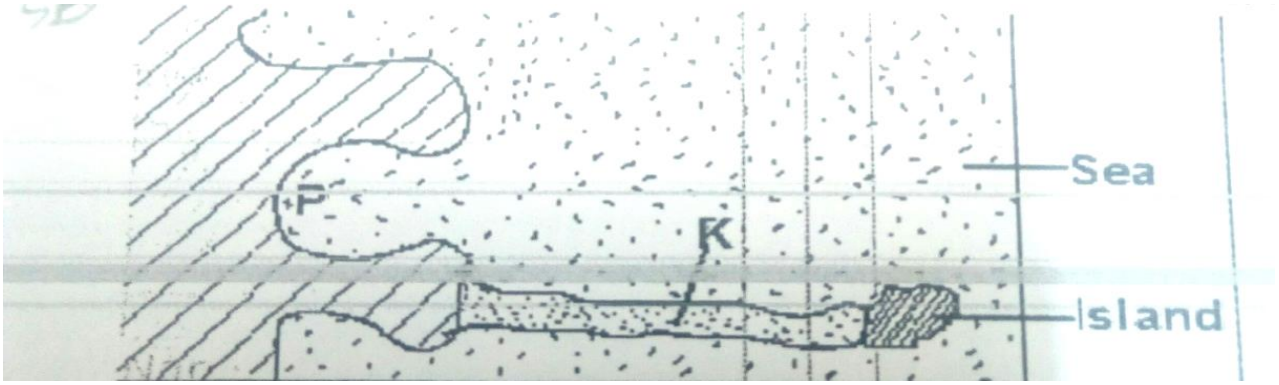
(b) Give three proofs that the earth is almost spherical in shape. **(3marks)**

2. (a) Differentiate between weathering and mass wasting. **(2 marks)**

(b) State three causes of landslides. **(3 marks)**

3. Describe the formation of planet earth according to the passing star theory. **(5 marks)**

4. The diagram below shows a coastal landform.



(a) Name the features marked P and K. **(2marks)**

(b) List down three types of ocean tides. **(3marks)**

5. (a) Name the types of earth movements that occur within the earth's crust. **(2marks)**

(b) Describe the origin of continents according to the theory of continental drift**.** **(3marks)**

SECTION B

Answer question 6 and any other two questions in this section

6. Study the map of **Yimbo** (East Africa 1:50,000) to answer questions that follow.

(a) (i) what is the sheet title **(1 mark)**

(ii) Find the magnetic declination of the map in January 1965. **(2 marks)**

(b) (i) Find the distance in kilometers of loose surface road c506 from port southby through the junction to where it ends at Kerebi. **(2 marks)**

(ii) Find the area of Busia district (in kilometer square) to the northwestern part of the map. **(2 marks)**

(c) Draw a rectangle 9 cm by 10 cm to represent the area north of northing 90 and east of easting 30. On it mark and label

- River Yala
- Road c501/2
- Maranda school **(5 marks)**

(d) Describe the drainage of the area covered by the map **(5 marks)**

(e) Students of Maranda school wanted to do a field study on vegetation on the area covered by the map.

i. Identify two means of transport they are likely to use. **(2 marks)**

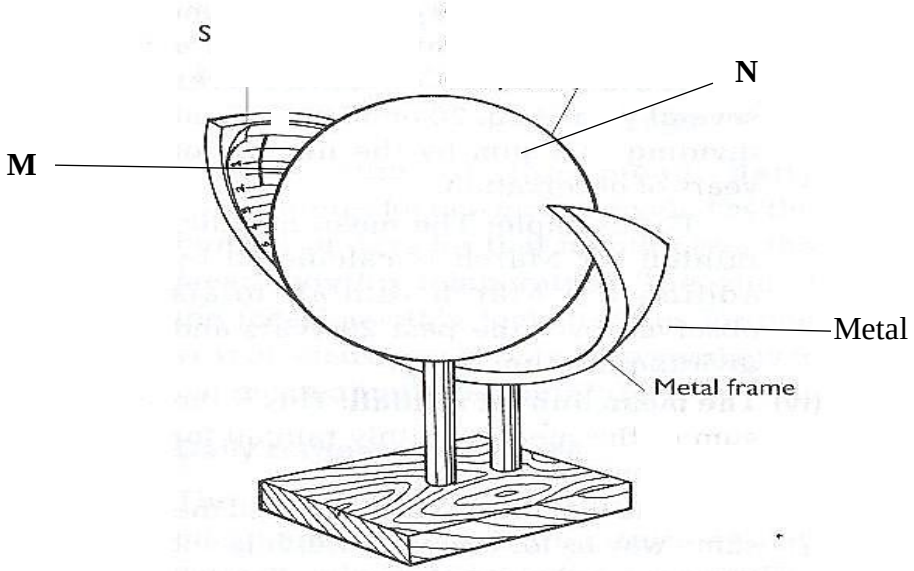
ii. Name three types of vegetation they are likely to identify **(3 marks)**

iii. State three preparations they could make. **(3 marks)**

iv. Identify two problems they are likely to encounter. **(2 marks)**

7. (a) Name two instruments kept in a Stevenson screen. **(2 marks)**

(b) The diagram below shows a weather measuring instrument. Use it to answer the questions below.



(i) Name the parts marked M and N. **(2 marks)**

(ii) Describe how the instrument works. **(4 marks)**

(c) The table below shows climatic figure for station Q. Use it to answer the questions that follow.

Months	J	F	M	A	M	J	J	A	S	O	N	D
Temp in ^{0}C	30	31	31	29	27	27	28	29	28	28	27	30
Rainfall in mm	257	246	231	234	207	201	218	227	234	240	235	230

(i) Calculate the annual range of temperature for station Q. **(2 marks)**

(ii) Give four characteristics of climate for station Q. **(4 marks)**

(d) With the aid of a well-labelled diagram, describe the formation of cyclonic **rainfall.(6 marks)**

(e) You intend to carry out a field study of a weather station in your school.

(i) Give two methods of recording data that you are likely to use. **(2 marks)**

(ii) State three reasons why the recording of data at a school weather station may be inaccurate. **(3 marks)**

8. (a) Name three types of faults: **(3 marks)**

(b) (i) With the aid of well labeled diagrams explain how compressional forces can lead to the formation of a rift valley. **(7 marks)**

(ii) Give two examples of Horst Mountains in east Africa: **(2 marks)**

(c) Describe two ways in which faulting may influence drainage systems. **(4 marks)**

(d) A part from the Rift Valley name two other relief features that were formed as result of faulting. **(3 marks)**

(e) Explain three ways in which features resulting from faulting are of economic importance: **(6 marks)**

9. (a)(i) What is a lake? **(2marks)**

(ii) Name three ways through which lakes are formed. **(3marks)**

(iii) List three sources of Lake Water. **(3marks)**

(b) Describe how L. Victoria was formed. **(4marks)**

(c) Explain two reasons why some Lakes in the Rift Valley have fresh water. **(4marks)**

(d) State three economic significance of Lakes. **(3marks)**

(e) Students from your school intends to carry out a field study on Lakes.

(i) State two objective for their study. **(2marks)**

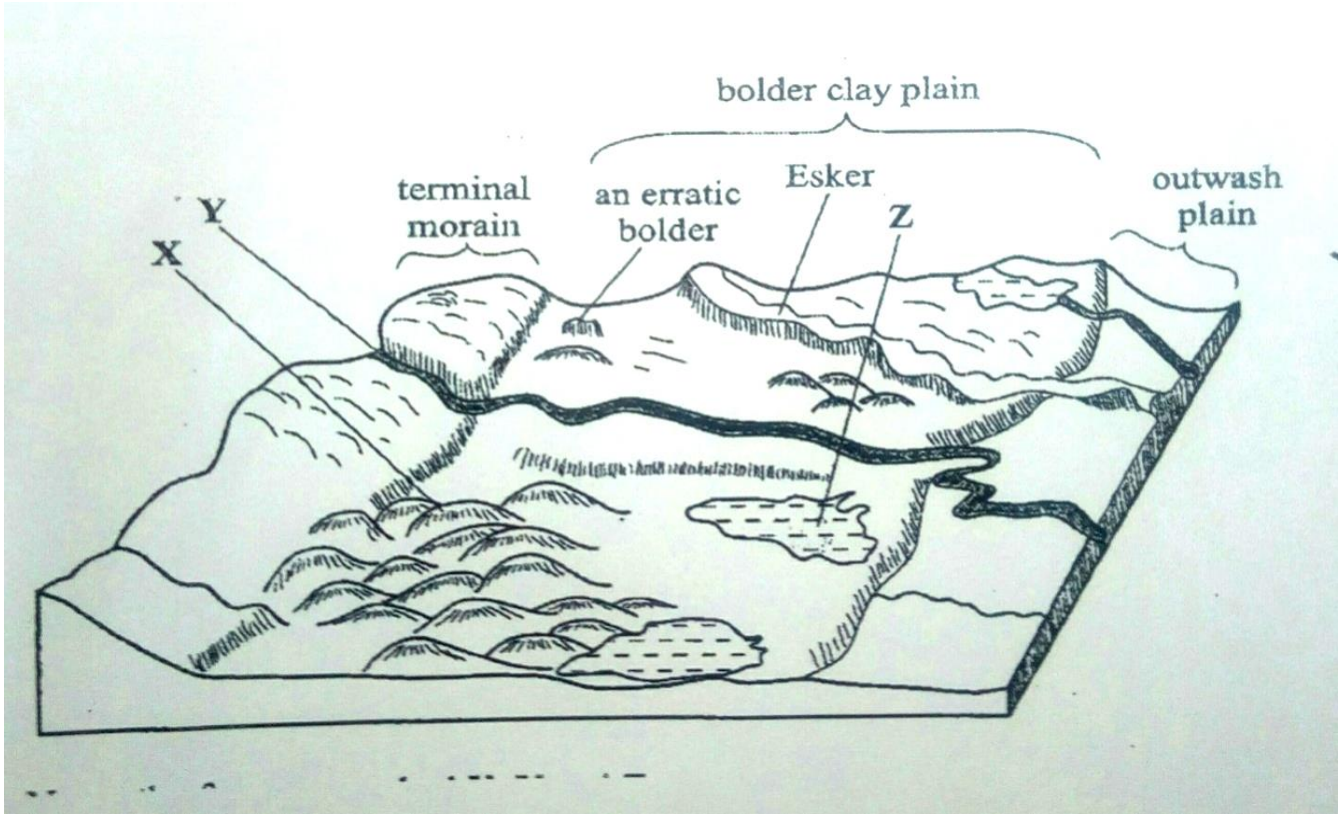
(ii) Identify two methods they will use to record the data collected. **2marks)**

(iii) Which human activity might they have found to be affecting the Lakes? **(2marks)**

10. (a) Describe plucking as a process in glacial erosion. **(4 marks)**

(b) Explain three conditions that lead to glacial deposition. **(6 marks)**

(c) The diagram below shows features resulting from glacial deposition in a lowland area.



(i) Name the features marked X, Y, and Z. **(3 marks)**

(ii) Describe how terminal moraine is formed. **(4 Marks)**

(d) Explain four positive effects of glaciation in low land area. **(8 marks)**

KCSE JOINT PREMOCK

2023 SERIES 1 EXAMS

GEOGRAPHY

PAPER 2

TIME: 2¾ HOURS

NAME……

SCHOOL…… SIGN……

INDEX NO…… ADM NO……

INSTRUCTIONS TO CANDIDATES

- ✓ *Answer all questions in section A.*
- ✓ *In section B, Answer question 6 and any other two questions from the remaining questions.*
- ✓ *Answer all questions using the answer booklet provided.*
- ✓ *Candidate should check that all pages are printed and no questions are missing.*

For Examination use only.

	MAXIMUM SCORE	CANDIDATE SCORE
Section A.	25	
Question 6	25	
Question 7	25	
Question 8	25	
Question 9	25	
Question 10	25	
TOTAL	**100%**	

SECTION A

Answer all questions in this Section

1. State five reasons for studying Geography. **(5marks)**

2. (a) Name biological factors influencing agriculture. **(2marks)**

(b) State three uses of sugar in Kenya. **(3marks)**

3. a) Name three main mining methods. **(3marks)**

b) Name two places where Gold is mined in Tanzania. **(2marks)**

4. a) Outline three characteristics of coniferous forests. **(3marks)**

b) Identify two fibre crops found in the tropical forests. **(2marks)**

5. (a)Name two tourist attractions found in Kenya Rift valley. (**2 marks)**

(b) State three factors that hinder domestic tourism in Kenya **(3 marks)**

SECTION B

Answer question 6 and any other questions from this section.

6. The table below shows the prices of sugar in Kenya Shillings per ton in some countries in Africa.

Use it to answer question a.(i)

YEAR	KENYA	SOUTHAFRICA	TANZANIA	ZAMBIA
2014	95,400	61,927	68,702	84,447
2015	111,713	67,462	66,985	93,798
2016	110,878	65,173	90,649	86,832

(a) (i) Draw a divided rectangle 16cm long to represent the prices of sugar in the year 2016. **(8 marks)**

(ii) State two advantages of using compound bar graph to present statistical data. **(2 marks)**

(b) State three physical conditions that favours cocoa farming in Ghana. **(3 marks)**

(c)Describe stages involved in processing of cocoa from harvesting to marketing. **(8 marks)**

(d)Apart from making oil give four other uses of oil palm. **(4 marks)**

7. (a) (i) Distinguish between a forest and forestry. **(2 marks)**

(ii) Name two indigenous softwood trees species found in Western Region of Kenya. **(2marks)**

(b)(i) State three characteristics of planted forests. **(3 marks)**

(ii) Name two forest reserves in Western region of Kenya. **(2 marks)**

c) (i) State four characteristics of temperate hardwood forests. **(4 marks)**

(ii) Explain three problems which have limited exploitation of tropical hardwood in Africa **(6marks)**

d) Give the differences between exploitation of softwood forests in Kenya and Canada under the following sub-headings:

(i)Tree species **(2 marks)**

(ii)Mode of exploitation **(2 marks)**

(iii)Marketing of product **2 marks)**

8. a) (i)Give three common methods through which land has been reclaimed in Kenya **(3 marks)**

ii) Give two methods that are used to drain swamps in Kenya. **(2 marks)**

b) (i)Name two rivers that supply water to the Mwea irrigation scheme **(2 marks)**

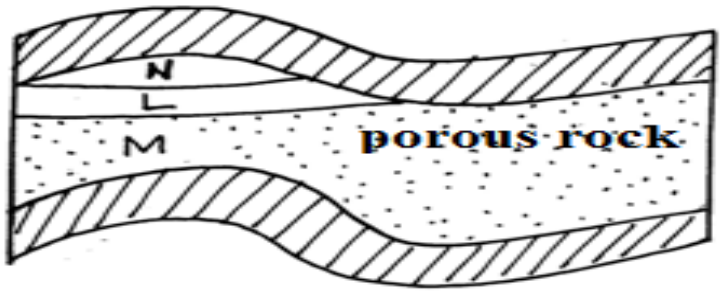
ii) Explain how the following factors influenced the establishment of Mwea irrigation scheme.

- Topography **(2 marks)**
- Soils **(2 marks)**
- Population **(2 marks)**
- Government policy **(2 marks**

c) i)Name three areas that make up the Zuider zee reclamation project in the Netherlands. **(3 marks)**

ii)Explain four differences between reclamation in Kenya and the Netherlands. **(8 marks)**

9. (a)The diagram below shows the occurance of petroleum in the earth's crust.Use it to answer question a i)



a) (i)Name the substance in the areas labelled L,M and N **(3marks)**

(ii)Give three by –products obtained when crude oil is refined **(3marks)**

(b)State five effects of mining on the environment **(5marks)**

(c) (i)Describe the stages involved in the processing of trona from lake Magadi. **(6marks)**

(ii)Explain four ways in which Kenya has benefited from the mining of trona on lake Maga*di* **(8marks)**

10. a) i) Name two types of fish reared in fish farms in Kenya. **(2marks)**

ii) State four efforts taken by the Kenyan government to improve fish farming. **(4marks)**

iii) Differentiate pelagic fishing from demersal fishing. **(2marks)**

b) Describe purse seining method of fishing. **(5marks)**

c) Compare fishing in Kenya and Japan under the following headings:

i) Nature of landscape **(2marks)**

ii) Market **(2marks)**

iii) Climate **(2marks)**

e) Explain the following problems of fishing in Kenya and suggest one possible solution for each.

i) Pollution. **(3marks)**

ii) Growth of weeds. **(3marks)**

KCSE JOINT PREMOCK

2023 SERIES 1 EXAMS

ENGLISH

PAPER 1

TIME: 2 HOURS

NAME……

SCHOOL…… SIGN……

INDEX NO…… ADM NO……

INSTRUCTIONS TO CANDIDATES

a) *Write your name and admission number in the spaces provided*

b) *Write the date of examination in the provided spaces*

c) *Answer all questions in this paper*

d) *All your answers must be written in the spaces provided in this paper.*

e) *Candidates should check and ensure that all the pages are printed as indicated and that no question(s) are missing.*

FOR EXAMINERS USE ONLY

QUESTION	MAXIMUM SCORE	CANDIDATE'S SCORE
1 Functional Skills	20	
2 Cloze test	10	
3Oral skills	30	
Total score	**60**	

1. Students in your school have raised concerns about poor hygiene in the school. In a bid to address these concerns, the principal appoints a four member committee to investigate the health situation and give recommendations. You are the secretary of the committee. Write down the report you will present to your principal. **(20mks)**

2. **Cloze test** **(10 MKS)**

Fill each blank space in the following excerpt with the most appropriate word.

Speakers often try to appeal to their audiences by speaking casually or by using "street language."(1) ……, however, can be shocking to an audience not expecting (2)…….
Use good judgment. While shocking language might (3) ……your audience's attention, it can also quickly turn (4)……. most people.
Obscene language is (5) ……language that offends by going (6) ……..common standards of (7) ……. . Since (8) ……is what is considered, speakers must avoid any (9)……..that their words might be (10) ……..as indecent.

3. ORAL SKILLS (30MKS)

Read the poem below and answer the questions that follow

Make me a grave where'er you will,
In a lowly plain, or a lofty hill;
Make it among earth's humblest graves,
But not in a land where men are slaves.

I could not rest if around my grave
I heard the steps of a trembling slave;
His shadow above my silent tomb
Would make it a place of fearful gloom

I could not rest if I heard the tread
Of a coffle going to the shambles led,

And the mother's shriek of wild despair
Rise like a curse on the trembling air
(by Frances Ellen Watkins Harper)

QUESTIONS

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

……

……

……

b) Apart from rhyme, mention two other ways they have achieved rhythm? **(4mks)**

……

……

……

……

c) Mention two ways in which you would know that your audience is fully participating during the recitation of the poem above. **(2mks)**

……

……

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

……

……

……

e) Indicate whether the following items have a falling or a rising intonation. **(4mks)**

i) Get out now! ……

ii) The man was accused of theft. ……

iii) How did you find the English exam? ……

iv) Could he have left? ……..

f) Underline the silent letters in the following words. **(4mks)**

i) Corps

ii) Parliament

iii) Leopard

iv) Fracas

g) Provide a homophone for each of the following words. **(4mks)**

i) Bury ……..

ii) Claws ……..

iii) Guest ……

iv) Male …….

h) The underlining indicates the stressed word in the sentences below. Briefly explain what each sentence mean **(3mks)**

i) The lady in a red dress lost her purse

ii) The lady in a red dress lost her purses

iii) The lady in a red dress lost her purse.

i) Identify the odd word out according to the pronunciation of the underlined sound. (2mks)

i)	Said	Head	Gate	Led
ii)	Face	Phrase	Shepherd	Phase

j) Below is a dialogue between Muthomi and James who are candidates. Read it and answer the questions that follow.

Muthomi: James, I'm worried about my performance in English. It's not encouraging.

James: Ah! I'm happy with mine in Biology. I got an A in the last exam.

Muthomi: I really don't know what to do about English, maybe…

James: I don't like History and P.E teacher. He thinks he is the only one who can a pick-up truck. My mum told me she would be buying one soon.

Muthomi: (Trying to bring him back to the topic) Tell me James, how do you revise English?

James: Oh! Is that Betty? She promised to bring me a movie. (Calling out) Betty! Betty! (The runs after her)

a) Identify the shortcomings in the dialogue above **(3mks)**

……

……

……

……

KCSE JOINT PREMOCK

2023 SERIES 1 EXAMS

ENGLISH

PAPER 2

TIME: 2½ HOURS

NAME……

SCHOOL…… SIGN……

INDEX NO…… ADM NO……

INSTRUCTIONS TO CANDIDATES

a) *Write your name and admission number in the spaces provided*

b) *Write the date of examination in the provided spaces*

c) *Answer all questions in this paper*

d) *All your answers must be written in the spaces provided in this paper.*

e) *Candidates should check and ensure that all the pages are printed as indicated and that no question(s) are missing.*

FOR EXAMINERS USE ONLY

Question	Maximum score	Candidate's score
1 Comprehension	20	
2 Excerpt	25	
3 Oral Literature	20	
4. Grammar	15	
Total score	**80**	

COMPREHENSION **(20 marks)**

Read the passage below and then answer the questions that follow.

Gender is probably the most important social issue in the world today. It affects and influences every aspect of our lives: politics, economics, religion and leisure. People in the 21st Century strongly believed that every project must get the gender dimension right in order to succeed. But what is gender?Basically, gender is the expectation that people should do or not do certain things according to their sex. Every normal human being is either female or male. This is sex and it is a biological fact. Indeed, sex is the most conspicuous difference between human beings.

The moment we look at a person, we can tell whether that person is a man or a woman, a boy or a girl. The question is if society should use this biological difference to tell people what they should or should not do. Yet, since time immemorial, this is what human communities all over the world have done. Some African societies bring up their boys to believe that men must be fighters, take whatever they want – by force if necessary and never cry. If anyone asks why they should or should not do this and that, the ready answer is always: you are a man, and that's what men are supposed to do. Girls are told to be gentle and quiet, to obey men, not to climb trees and not to eat certain kinds of food. A girl who asks why she should not climb trees or speak loudly in public is told, you are a woman, and women don't do that. In other words, society is always telling us what we can do and what we cannot do just because we are men or women. In most cases, there is no physical or logical reason for a man or a woman to do or not do certain things. Any girl can climb a tree as smartly as any boy. If a boy wants to go into the kitchen and cook, there is no reason why he should not do so. Indeed, some of the best cooks in the world, called 'chefs' are men. Yet in some societies, it is a taboo for a man or boy to enter the kitchen. Similarly, some societies do not allow their women to build houses, even work at building sites, whereas in other societies it is indeed the woman's role to build houses. Gender is thus society's assigning of roles to people according to their being ma le or female. On the face of it, there is nothing wrong with sharing roles – indeed, there are many cases where it is logical to expect that certain people should do or avoid some activities. For example, it would not be safe for a woman in advance stages of pregnancy to go hunting wild animals or grazing livestock many miles away from home. However, this should not be taken as a blanket excuse to declare that all women must not hunt wild animals. The problem is even worse when some people use gender roles to exploit or oppress other people. Men for example, have for a long time invoked gender roles to force women to do certain things and to prevent them from doing things the women may want to do. This oppressive practice may be called gender imposition, and it may be seen in all aspects of society. In social relations, boys and girls are segregated from the earliest years of life. Members of each sex are strictly drilled into what 'feminine' or 'masculine' in behaviour, speech, dress and every activity. Boys and girls are told what work they should or should not do, what places they

can or cannot go to. What games to play and even what foods to eat or not to eat; just because they are boys or girls. By the time a person is in his or her teens, he or she has learnt – from both example and direct teaching by older members of society – what exactly is expected of him or her as a man or a woman. These gendered roles often suggest that men should lead and command in everything, be 'tough' – meaning hard and even cruel – and 'strong', which often means aggressive and violent. The women on the other hand, are required to be soft and kind, submissive and unquestioningly obedient to men. Even in public affairs, such as politics or religion, the gendering of roles leads to some curious situations. In some places of worship for example, men and women are strictly separated. Several denominations do not permit women to preach in public or to be ordained as priests or pastors. Politics is widely regarded as a man's field.

Some societies insist that a woman cannot be a leader, like President or Army commander. The nagging question, which many women and enlightened men are asking today is: Why not? This is the challenge to the conventional gendering of roles. Is there any logical reason why a man should not change the nappies of his child, or go into the kitchen and cook? Why can a talented woman not become a top soccer or rugby player, or a bishop or a top business executive? Is it fair to prevent people from eating such nutritious foods as chicken and eggs simply because they are women? Should children be denied the right to inherit their parents' property on the grounds of sex? Is it not pathetic seeing men inflict beastly violence on their wives and children, or one another simply because men are expected to be 'tough' and 'strong'?

To avoid such absurdities, advocates of gender equity demand that sex should not be the main consideration in dealing with people. Assigning roles to people on the grounds of biological differences is a form of evil discrimination, like racism. A more sensible way of dealing with men and women is to take them strictly on the basis of their individual abilities. A human being is a human being, whether man or woman and each should be given every opportunity to realize his or her full human potential. An enlightened approach to gender equity is suggested by the old English saying "What's good for the goose is good for the gander".

Questions

(a) According to the passage, what is the difference between gender and sex? **(2 marks)**

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(b) What is gender imposition? **(1 mark)**

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(c) How are gender roles passed on? **(1 mark)**

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(d) Add a question tag to the following:

Any girl can climb a tree as smartly as any boy…… **(1 mark)**

(e) Identify a phrase in the passage that shows that it is not only women who are concerned with the problems created by gendering of roles. **(1 mark)**

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(f) In not more than 60 words write a summary onwhat women are not allowed to do simply because they are women. **(6 marks)**

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(g) In not more than three sentences, paraphrase the author's argument. **(3 marks)**

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(h) Change the following question into a statement: **(1 mark)**

Should children be denied the right to inherit their parents' property on the grounds of sex?

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(i) What is the meaning of the following: "What is good for the goose is good for the gander." **(1 mark)**

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(j) Explain the meaning of the following as they are used in the passage. **(3 marks)**

(i) Segregated

(ii) Absurdities

(iii) Blanket excuse

<u>Read the excerpt below and then answer the questions that follow</u>. (25 marks)

Krogstad: Are you sure of that?
Mrs. Linde: Quite sure, but -
Krogstad: (with a searching look at her) Is that what it all means? - that you want to save your friend **at any cost**? Tell me frankly. Is that it?
Mrs. Linde: Nils, a woman who has once sold herself for another's sake doesn't do it a second time.
Krogstad: I will ask for my letter back.
Mrs. Linde: No, no.
Krogstad: Yes, of course I will. I will wait here until Helmer comes; I will tell him he must give me my letter back-that it only concerns my dismissal-that he is not to read it -
Mrs. Linde: No Nils, you must not recall your letter.
Krogstad: But, tell me wasn't it for that very purpose that you asked me to meet you here?
Mrs. Linde: In my first moment of fright, it was. But twenty-four hours have **elapsed** since then, and in that time I have witnessed **incredible** things in this house. Helmer must know all about it. This unhappy secret must be disclosed; they must have a complete understanding between them which is impossible with all this concealment and falsehood going on.
Krogstad: Very well, if you take the responsibility. But there is one thing I can do in any case and I shall do it at once.
Mrs. Linde: (listening) You must be quick and go! The dance is over; we are not safe a moment longer.
Krogstad: I will wait for you below.
Mrs. Linde: Yes, do. You must see me back to my door -
Krogstad: I have never had such an amazing piece of good fortune in my life!

a) Explain what happens immediately before this extract. **(2 marks)**

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b) Why does Krogstad say he would ask for his letter back? **(3 marks)**

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c) "Nils, a woman who has once sold herself for another's sake doesn't do it a second time," Briefly explain what makes Mrs. Linde say this. **(3 marks)**

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d) Identify one character trait of Mrs. Linde in this excerpt. **(2 marks)**

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e) What is so surprising in this excerpt? Explain. **(2 marks)**

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f) "But there is one thing I can do in any case and I shall do it at once." What is it that Krogstad does and how does it affect the rest of the play? **(4 marks)**

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g) "I have never had such an amazing piece of good fortune in my life!" Rewrite beginning Never . . . **(1 mark)**

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……

h) What makes Krogstad say that he has never had such good fortune in his life? **(2 marks)**

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i) Explain the meaning of the following words and phrases as used in the excerpt. **(4 marks)**

(i) At any cost

(ii) Recall

(iii) Elapsed

(iv) Incredible things

j) Explain what happens immediately after his excerpt. **(2 marks)**

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2. <u>Read the narrative below and then answer questions that follow.</u>

There was a great famine in the land where Obunde and his wife, Oswera, lived with their nine children. The only creatures who had some food were the ogres and before they would part with their food, they demanded a lot of things.

One day, Oswera went to one Ogre's home and asked him for some food, for by then her children were almost dying of hunger.

'I have no more food except sweet potatoes, the ogre told her.

'I shall be happy to have the potatoes. We have nothing, not a grain of food at my house and the children are starving. Please let me have some and I shall repay you after the harvest.

'No, if you want food you must exchange with something right now. Will you give me one of your children in exchange for my potatoes? Oswera hesitated, her children were dear to her, but then they would die without food.

'Yes, I shall let you have one of them for his meal, if only you could let us have some potatoes,' Oswera answered. Then she took a big basket full of potatoes and told the ogre the exact time he could go to her home to collect one of her children for a meal.

Oswera thought hard and she decided she would not give a single one of her children to the ogre for a meal. She therefore cut young banana stalks and cooked them nicely.

When the ogre came, she gave them to him and the beast greedily went away satisfied. Soon the potatoes were finished and she had to go to the ogre again.

Oswera and Obunde, her husband kept on cooking banana stalks for the ogre each time he came for one of their children, until one day, she had no more banana stalks to cook for the animal.

"You have now eaten all my children, yet we still need the potatoes. What shall we give your now?" Oswera asked in despair.

'Then I shall come for you and your husband,' the ogre replied angrily as he helped Oswera to load her basket of potatoes on her head.

'Yes come tomorrow at the usual time in the afternoon and get me. I shall have cooked myself for you," Oswera said calmly.

The following day the ogre went promptly as Oswera had told him and he found the home almost deserted. He looked everywhere but a part from Obunde there was no trace of anybody.

Then he looked at the usual place and found a huge bowl of a big meal Oswera had cooked for him. The ogre did not realize they had prepared a dog instead of Oswera. When he had eaten the ogre told Obunde he would come for him the following day. Obunde got very worried and that night he could not sleep. The following day he started crying:

"Ah Oswera my wife, how did you cook yourself and how shall I cook myself for the ogre?" He sat down in the dust of his compound and wept. Oswera became very annoyed with her husband.

You, you stupid, foolish man! Why sit and cry there all day long? How do you think I cooked myself? Take one of the dogs and quickly prepare it for the ogre!'

Very quickly Obunde got up, caught, killed and prepared a dog for the ogre. Then he joined his wife and children in a huge hollow part of a tree in his compound where they had hidden.

That day the ogre knew he was going to have his last meal of juicy human flesh. Being a generous and unselfish ogre, he brought many of his fellow ogres. They were going to have a feat.

Suddenly as they were eating, they heard a man singing very happily. No they could not believe it! It was Obunde singing! And he was boasting of how he had cheated the ogre.

The greedy ogre ate banana stalks
Not my family;
The greedy ogre ate a dog
Not Obunde Magoro!
The greedy ogre ate banana stalks
Not my family;
Now come and get Obunde,
His children and wife.

Obunde sang the words and the ogres got very angry. The first ogre rushed into the hollow of the tree, but Oswera had heated a long piece of iron until it was white. She pushed the iron into the ogre's mouth. The beast fell down dead. The next one rushed into the hollow and

Oswera killed him in the same way. In this way she killed all the ogres and saved her husband and all their children.

My story ends there.

QUESTIONS

(a) Classify the above narrative. **(2marks)**

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(b) Whom do you consider to be the champion in this story? Why? **(2marks)**

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(c) Where do you think the pace setting of the story? Give a reason. **(2marks)**

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(d) Compare Obunde and the ogre as they are presented in this story. **(2marks)**

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(e) Illustrate **two** features of the story that makes it an oral narrative. **(4marks)**

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(f) Explain the moral lesson of this story. **(2marks)**

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(g) If you were to collect the above from the informant,

i. What methods of data collection would you use? **(3marks)**

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ii. What challenges are you likely to face? **(3marks)**

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GRAMMAR. (15 marks)

4. a) Complete the following sentences using the most appropriate preposition.(3 marks)

i) The wild animal was oblivious ..... the trap.

ii) The police officer was an expert ..... catching criminals.

iii) My uncle deals ..... second hand clothes.

b) Rewrite the following sentences according to the instructions given after each. (3 marks)

i) "Where is my assignment?" the angry teacher demanded

(Begin: The angry)

……

ii) So fearful is she that she cannot go out of their house at night.

(Rewrite using too)

……

iii) The principal is teaching Form two East. (change the sentence into the passive form)

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c) Fill the blank spaces with the appropriate form of the word in brackets. (4 marks)

i) The government should not only build roads but also schedule their..... (Maintain)

ii) I would like to renew my..... (Subscribe)

iii) We need to consider his..... (Argue)

iv) The queen's ..... impressed everybody. (Elegant)

d) Replace the underlined words with the appropriate phrasal verb. (3 marks)

i) The strike has been <u>cancelled</u>.

ii) The leader <u>postponed</u> the meeting

iii) The students <u>liked</u> him at once.

e) Explain the meaning of each idiomatic expression.

i) Living from hand to mouth.

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ii) A bitter pill to swallow.

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KCSE JOINT PREMOCK

2023 SERIES 1 EXAMS

ENGLISH

PAPER 3

TIME: 2½ HOURS

NAME……

SCHOOL…… SIGN……

INDEX NO…… ADM NO……

INSTRUCTIONS TO CANDIDATES

a) *Write your name and admission number in the spaces provided*

b) *Write the date of examination in the provided spaces*

c) *Answer all questions in this paper*

d) *All your answers must be written in the spaces provided in this paper.*

e) *Candidates should check and ensure that all the pages are printed as indicated and that no question(s) are missing.*

FOR EXAMINERS USE ONLY

QUESTION	MAXIMUM SCORE	CANDIDATE'S SCORE
1 Imaginative Composition	20	
2 Compulsory Text	20	
3 Optional Text	20	
Total score	**60**	

QUESTION 1: Imaginative Composition (Compulsory) (20mks)

Either

1 a) write a composition beginning with the following sentence

"The night was different from all the previous nights….."

Or

a) Write a composition explaining the importance of co-curricular activities in achieving a wholesome education in Kenya schools.

QUESTION 2 (COMPULSORY) (20 mks)

Though Resian is faced by numerous challenges, these challenges lead her to a victorious life." Write a composition to show the validity of this assertion using illustrations from '**Blossoms of the Savannah'.**

QUESTION 3:

(a) A Silent Song's and Other stories.

Godwin Siundu's A Silent Song and Other Stories ***Misuse of power*** leads to regret. Write an essay in support of the statement with illustrations from **A Man of Awesome Power by Naguib Mahfouz.** **(20 marks)**

Or

(b) An Artist of the Floating World by Kazuo Ishiguro

1) The teachers in "**An Artist of the Floating World**" have a passionate, paradoxical relationship to their most gifted students. Discuss. **(20 marks)**

(c) Inheritance, David Mulwa

"Lacuna represents the evil that bedevils our leaders." Write an essay to justify this using **Inheritance** by David Mulwa.

KCSE JOINT PREMOCK

2023 SERIES 1 EXAMS

KISWAHILI

PAPER 1

TIME: 2 HOURS

NAME……

SCHOOL…… SIGN……

INDEX NO…… ADM NO……

Maagizo

(a) ***Andika Insha mbili. Insha ya kwanza ni ya lazima.***

(b) ***Kisha chagua Insha nyingine moja kati ya hizo tatu zilizobakia.***

(c) ***Kila Insha isipungue maneno 400.***

(d) ***Kila Insha ina alama 20.***

(e) ***Kila Insha lazima iandikwe kwa lugha ya Kiswahili.***

(f) ***Karatasi hii ina kurasa 2 zilizopigwa chapa.***

1. LAZIMA

Mwandikie barua mhariri wa Gazeti la Baraka ukimweleza sababu za watoto wengi katika kaunti yako kuacha shule na kujiingiza katika ajira za mapema.

2. Vipakatalishi vimeleta manufaa mengi nchini .

Fafanua.

3. Andika insha itakayothibitisha ukweli wa methali:

Mcheka kilema hafi bila kumpata.

4. Andika kisa kitakachoanzia kwa maneno yafuatayo:

Kushoto kulikuwa na jitu la miraba minne ambalo lilitema cheche za matusi ungedhania ni karakana **…**

KCSE JOINT PREMOCK

2023 SERIES 1 EXAMS

KISWAHILI

PAPER 2

TIME: 2½ HOURS

NAME……

SCHOOL…… SIGN……

INDEX NO…… ADM NO……

MAAGIZO KWA WATAHINIWA

1. *Andika jina lako, shule na nambari yako katika nafasi ulizoachiwa hapo juu.*
2. *Andika tarehe ya mtihani na utie sahihi yako katika nafasi ulizoachiwa hapo juu.*
3. *Jibu maswali yote.*
4. *Andika majibu yako katika nafasi ulizoachiwa baada ya kila swali katika kijitabu hiki cha maswali.*
5. *Watahiniwa ni lazima waangalie kama kurasa zote za karatasi hii zimepigwa chapa sawasawa na kuwa maswali yote yamo.*

KWA MATUMIZI YA MTAHINI PEKEE

SWALI	UPEO	ALAMA
1 UFAHAMU	15	
2 UFUPISHO	15	
3 MATUMIZI YA LUGHA	40	
4 ISIMU JAMII	10	
JUMLA	80	

SEHEMU YA A: UFAHAMU **(alama 15)**

Soma taarifa ifuatayo kisha ujibu maswali

"Swala la idadi kubwa ya watoto wadogo wanaoendelea kumiminika mijini na kuonekana wakiranaranda mijini ovyo,halijapewa umuhimu wowote wa haja na serikali za nchi nyingi,licha ya mijadala katika warsha anuwai,zilizofanyika kujadili swala hili nyeti.

Kwa kutokuwa na sheria ama sera iliyo wazi kuhusu haki na usalama wa watoto,sarikali zetu hazina budi kukubali kubeba uzito wote wa lawama. Hii ni kwa sababu, serikali zetu zimelipuuza na kuvalia miwani swala hili kwa kuchukulia kuwa litapotea lenyewe katika hewa yabisi. Yafaa ifahamike kuwa usalama wetu katika siku zijazo utategemea jinsi tutakavyolikabili ana kwa ana tatizo hili wakati huu. Wakati wa kutenda ni sasa. Aidha, watoto hawa wanaokulia mitaani bila malezi,maelekezo wala mwongozo mwafaka wa kimaisha, wanakua bila mapenzi hivyo hawajui maana ya kupenda. Wanachokijua ni chuki na haja ya kulipiza kisasi didhi ya jamii iliyowachonga jinsi walivyo. Hawajali lolote hata kifo. Wako tayari kujikabidhi kwa haini yeyote mwenye nia mbaya,bila kujali matokeo, muradi tu, wapate riziki.

Tunapendekeza kwa serikali, washika dau kama vile mashirika ya kujitolea, viongozi wa dini, shule, vyuo na wananchi kwa jumla wachange bia katika kutafuta mikakati ya kulitatua tatizo hili kabla halijageuka kuwa janga la kijamii ambalo tutashindwa kulimudu. Mpango wa vijana hawa kujiunga na huduma ya taifa ni jambo linalofaa kutiliwa maanani.

Tunapendekeza makao Zaidi ya watoto wanaozurura mijini yajengwe ambapo watapata mafunzo ya kiufundi yatakayowawezesha kujitegemea maishani. Badala ya kulitegea mgongo swala hili, serikali zinawajibika kuwasajili hawa watoto ili waweze kuunganishwa na familia na koo zao. Utafiti uliofanywa na wataalamu wa Elimu jamii umebainisha kuwa ni asilimia kumi tu ya watoto hawa wa mitaani wasiokuwa na mahali wawezapo kupaita nyumbani. Asilimia tisini iliyobaki, angalau wana mahali wanapoweza kupaita nyumbani ilhali wanaendelea kuwa mitaani. Wazazi tumesahau wajibu wetu. Wengi wetu tumelikimbia jukumu la ulezi tulilopewa na muumba. Hawa waliojipaka masizi mwilin mzima, wanaozurura ovyo mitaani, si matokeo ya maumbile;hawakuja duniani kwa sadfa, hawakuulizwa wala kushauriwa. Makosa ni yetu wazazi. Tuliwaleta hapa duniani, kisha tukawakimbia.Hatutasamehewa duniani na akhera.

Mwenye njaa hana miiko. Ili kijiruzuku, hawa watoto daima wanachumia jaani.Kwa kudura ya jalia, huenda siku moja watalia kivulini. Asiyekuwa na wake ana mungu.Aghalabu, watoto wanaozurura mitaani hupewa pesa na wafadhili. Wakati mwingine wanaiba. Maisha haya ya kuomba au kuiba wanaona yanaridhisha Zaidi kuliko kumenyeka na kazi ya kibarua kutwa kucha. Kwa bahati mbaya, watoto hawa wamatumia pesa wanazopata kutoka kwa wafadhili kujichimbia kaburi. Aidha pesa wanazopatiwa watoto hawa wanazitumia kununulia gundi badala ya chakula.

Wafadhili wanashauriwa wawape chakula hawa watoto badala ya pesa taslimu. Kusema kweli, unapompa mtoto wa mitaani pesa,utakuwa unainua biashara ya mwenye kiwanda cha gundi,jambo ambalo litakuwa sawa na kuweka sahihi mkataba wa kifo cha mtoto mwenyewe.

Wataalamu wa afya wanaonya kuwa gundi ikivutwa kwa muda mrefu inaweza kusababisha upofu au kifo.Wataalamu hawa wanazidi kutuarifu kuwa matumizi ya muda mrefu ya gundi huathiri ubongo,figo na maini. Mtumiaji pia anaweza kupoteza uwezo wa kutembea na hata kupooza kabisa.

Sababu wanazotoa hawa watoto ni kwamba, uvutaji gundi,huwaondolea njaa,baridi ya usiku na kuwatuliza mawazo. Ni jambo la kusikitisha kwamba tunaendelea kushuhudia bila kujali hawa watoto ambao ni kiungo cha jamii yetu,wakijiangamiza. Wananchi kwa ujumla hawaha budi kuhamasishwa dhidhi ya athari ya matumizi ya gundi.Wafanya biashara wanaowauzia watoto hawa gundi yafaa wakome,la sivyo wachukuliwe hatua.Kutolitatua tatizo hili la watoto wa mitaani hivi sasa,kutapeleka kuwako kwa kizazi cha mitaani ambacho kitazaliwa mitaani,kulelewa mitaani,kuoa mitaani na kufia mitaani.Kadiri mataifa yanavyoendelea kujitia hamnazo kuhusiana na swala hili,ndivyo tunavyokubalia jinai itawale,sasa na wakati ujao.

Hawa watoto watakapokua,watageuka kuwa wapigaji watu kabari,majambazi,wezi wa kutumia nguvu ama watatumiwa na mahaini kutimiza uhaini wao.Hawa watoto wenye njaa,watalazimika hatimaye,kuwatoa wenywe shibe tonge mdomoni.Matokeo ya hali hii ni kwamba katika siku zijazo,hawa ndio watu watakaotunyima starehe ya kulala unono.Watatuchafya mitaani,majumbani,vijijini na kutuvizia mabarabarani.Tuna sababu nzuri ya kutiwa hofu na tatizo hili,kwani jinsi kizazi kinavyozidi kupanuka,inaonekana tumelitega bomu ambalo litakuja kutulipukia usoni mwetu."

MASWALI

(a) Taja jambo moja linalochangia kuweko kwa watoto wanaorandaranda mitaani. **(alama 1)**

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(b) Maisha ya mitaani huathirije watoto? **(alama 3)**

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(c) Tatizo la watoto wanaorandaranda mitaani laweza kutatuliwaje? **(alama 3)**

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(d) Eleza maana ya**:** **(alama 2)**

i. Hawa watoto wanachumia jaani

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ii. Jinsi kizazi cha mitaani kinavyozidi kupanuka,inaonekana tumelitega bomu ambalo litakuja kutulipukia usoni mwetu. **(alama 2)**

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iii. Mwenye njaa hana miiko. **(alama 2)**

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(e) Eleza maana ya maneno yafuatayo kama yalivyotumika kwenye taaria: **(alama 2)**

i. Aidha:

……

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ii. Gundi:

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2.UFUPISHO:(ALAMA 15)

Soma makala yafuatayo kisha ujibu maswali yafuatayo

Lugha ndio msingi wa maandishi yote. Bila lugha hakuna maandishi. Kila jambo tufanyalo kuhusiana na lugha husitawisha ufahamu wetu wa mambo tusomayo. Mazoezi katika kuandika husitawisha ufahamu katika kusoma kwa sababu katika kuandika ni lazima kuyatumia maneno vizuri na kufahamu ugumu wa usemi. Twajifunza matumizi ya lugha katika kuzungumza na kuwasikiliza wengine wakizungumza. Lugha tusomayo ni anina ya lugha ya masungumzo.

Kuna ujuzi mwingi katika kuzungumza kama vila michezo ya kuigiza, hotuba, majadiliano na mazungumzo katika darasa. Haya yote husaidia katika uhodari wa matumizi ya lugha. Ujuzi wa kila siku utasaidia katika maendeleo ya kusoma na usitawi wa msamiati. Ikiwa mwanafunzi amemwona ndovu hasa, atakuwa amejua maana ya neno ndovu vizuri zaidi kuliko mwanafunzi

ambaye hajawahi kumwona ndovu bali ameelezwa tu vile ilivyo. Vilevile ujuzi wa kujionea sinema au michoro husaidia sana katika yaliyoandikwa. Ikiwa mwanafunzi ana huzuni au ana furaha, akiwa mgonjwa au amechoka au amefiwa, haya yote ni ujuzi. Wakati juao mwanafunzi asomapo juu ya mtu ambae amepatikana na mambo kama huyo hana budi kufahamu zaidi.

Karibu elimu yote ulimwenguni huwa imeandikwa vitabuni. Hata hivyo, lugha zote hazina usitawi sawa kuhusu fasihi. Kwa bahati mbaya lugha nyingine hazijastawi sana na hazina vitabu vingi. Fauka ya hayo , karibu mambo yote yanayohusiana na elimu huweza kupatikana katika vitabu kwenye lugha nyingine.

Inambidi mwanafunzi asome vitabu au majarida juu ya sayansi au siasa au historia, lakini haimbidi kusoma tu juu ya taaluma fulani anayojifunza . Inafaa asome juu ya michezo, mambo ya mashairi na juu ya mahali mbalimbali ili kupata ujuzi wa mambo mengi.

a) Fupisha aya za kwanza mbili kwa kutumia maneno 65 (alama 10, 1 ya utiririko)

Matayarisho

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Jibu

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b) Kwa kuzingatia habari zote muhimu na bila kupoteza maana asilia, fupisha aya ya mwisho (Maneno 30) (alama 5 utiririko)

Matayarisho

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Jibu

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MATUMIZI YA LUGHA (ALAMA 40)

(a) Toa mifano miwili miwili **ya** **(al.2)**

i. Sauti ghuna ambazo ni vipasuo ……..……..

ii. Sauti sighuna ambazo ni vikwamizo …….……

(b) Onyehsa mofimu katika neno Aliyemcha **(al.2)**

……

(c) Andika sentensi yenye muundo ufuatao **(al.2)**

KN(W+V) + KT (t +RH)

……

(d) Tumia neno shirika kama nomino na kama kielezi katika kutunga sentensi moja (**al.2)**

……

(e) Kwa kutunga sentensi vumisha nomino nguruwe kuwa kivumishi cha idadi bainifu.

(al.1)

……...……

(f) Andika sentensi ifuatayo katika hali ya kutendewa **(al.1)**

Mtoto wa waziri amekufa

……

(g) Yakinisha sentensi ifuatayo katika wakati ujao hali timilifu wingi **(al.2)**

Msomi hakutuzwa siku hiyo

……...

(h) Tunga sentensi moja inayobainisha maana mbili tofauti za neno chuma **(al.2)**

……..

(i) Tambua kiima na aina za yambwa katika sentensi ifuatayo. **(al.4)**

Mwalimu mkuu hupigiwa nguo pasi na Maria

……

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(j) Kwa kutumia mifano mwafaka fafanua miundo yoyote miwili ya kirai nomino **(al.2)**

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(k) Andika sentensi ifuatayo kwa **wingi** **(al.2)**

Mgeni huyo na mwingine walikula wali kwa uma

……

(l) Andika neno lenye silabi funge yenye muundo wa konsonanti moja **(al.1)**

……

(m) Badilisha sentensi ifuatayo iwe katika udogo **wingi** **(al.2)**

Ng'ombe wangu ana ndama mdogo

……....

(n) Tunga sentensi zenye mipangilio ifuatayo; **(al.4)**

i. Kishazi tegemezi na kishazi huru

……..……..…

ii. Kishazi tegemezi na kishazi tegemezi

……

(o) Eleza matumizi ya 'ki' katika sentensi ifuatayo**:** **(al.3)**

Nyamunga na kitoto wamekuwa wakila, wakiimba kikasuku

……

……

……

(p) Changanua sentensi ifuatayo kwa kutumia mchoro wa matawi**.** **(al.4)**

Mtoto wa mjomba alikuja kwetu nyumbani jana

(q) Andika kwa msemo wa taarifa**.** **(al.2)**

'Yafaa tumwendee mama mkubwa ili atushauri juu ya jambo hili,' Amina alipendekeza.

……

…….....

(r) Andika kinyume cha: **(al.1)**

Chakula hiki kitamu nitakimeza

……

(s) Tunga sentensi ukitumia viwakilishi vifuatavyo. (al.2)

(i) Kiwakilishi nafsi huru

.....

(ii) Kiwakilishi nafsi kiambata

……

4. ISIMUJAMII (alama10)

(a)Tofautisha kati ya kuhamisha msimbo na kuchanganya msimbo. **(alama 2)**

.....

.....

.....

(b)Taja mambo mawili yanayochangia katika uhamishaji msimbo. **(alama 2)**

.....

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.....

(c)Taja kaida mbili zinazotawala maamkizi katika jamii huku ukitoa mifano mwafaka.**(alama2)**

.....

.....

.....

(d) Fananisha sifa zozote nne za sajili ya maabadini na mahakamani. **(alama 4)**

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KCSE JOINT PREMOCK

2023 SERIES 1 EXAMS

KISWAHILI

PAPER 3

TIME: 2½ HOURS

NAME……

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Maagizo

(a) Jibu maswali manne pekee.

(b) Swali la kwanza ni la lazima.

(c) Maswali mengine matatu yachaguliwe kutoka sehemu zilizosalia yaani.

(d) Usijibu maswali mawili kutoka sehemu moja.

(e) Kila swali lina alama ishirini (20)

(f) Majibu yaandikwe kwa lugha ya Kiswahili.

(g) Watahiniwa ni lazima wahakikishe kwamba kurasa zote za karatasi hii zimepigwa chapa sawasawa na kuwa maswali yote yamo.

SEHEMU YA A: TAMTHILIA

Bembea ya Maisha; Timothy Arege

1. Lazima

Kwa kurejelea mifano mbalimbali thibitisha namna ndoa katika tamthilia ya **Bembea ya maisha** zimemulika uhalisia wa jamii za kiafrika. **(alama20)**

SEHEMU YA B

RIWAYA: CHOZI LA HERI

(Assumpta K. Matei)

Jibu swali la Pili au la Tatu

2. "Watu husema kuwa binadamu hawawi sawa ila kifoni…"

a) Eleza muktadha wa maneno haya. **(alalama 4)**

b) Tambua mbinu moja ya lugha iliyotumiwa katika dondoo hili. **(alama 2)**

c) Eleza sifa na umuhimu wa mzungumzaji wa maneno haya. **(alama 6)**

d) Thibitisha kuwa hakuna usawa baina ya wanadamu. **(alama 8)**

Au

3. Jadili nafasi ya sehemu zifuatazo katika riwaya ya Chozi la Hari:

(a) Hotuba **(alama 10)**

(b) Uozo katika jamii **(alama 10)**

SEHEMU C

HADITHI FUPI

4. Fafanua jinsi mwanamke alivyosawiriwa katika hadithi ya Nipe nafasi **alama 20**

5. "Thank you. U mteja wa pekee, unajua kuthamini huduma nzuri unapopewa."

i) Fafanua muktadha wa dondoo hili. **(al.4)**

ii) Taja na ueleze mbinu mbili za kimtindo katika dondoo hili. **(al.4)**

iii) Kwa kurejelea hadithi ya "Kila Mchezea Wembe," Fafanua changamoto zinazowakumba watumiaji wa vileo kupita kiasi. **(al. 12)**

SEHEMU YA D;*USHAIRI*

Jibu swali 6 au 7

(6) **USHAIRI**

Soma shairi lifuatalo kisha ujibu maswali

Daima alfajiri na mapema
Hunipitia na jembe na kotama
Katika njia iendayo kondeni
Kama walivyofanya babuze zamani;
Nimuonapo huwa anatabasamu
Kama mtu aliye na kubwa hamu
Kushika mpini na kutokwa jasho
Ili kujikimu kupata malisho.
Anapotembea anasikiliza
Videge vya anga vinavyotumbuiza
Utadhani huwa vimemngojea
Kwa usiku kucha kuja kumwimbia;
Pia pepo baridi kumpepea
Rihi ya maua zikimletea
Nao umande kumbusu miguu;
Ni miti yote hujipinda migongo
Kumpapasa, kumtoa matongo;
Na yeye kuendelea kwa furaha
Kuliko yeyote ninayemjua
Akichekelea ha ha ha ha ha ha ha …
Na mimi kubaki kujiuliza
Kuna siri gani inayomliwaza?
Au ni kujua au kutojua?
Furaha ya mtu ni furaha gani
Katika dunia inayomhini?
Ukali wa jua wamnyima zao
Soko la dunia lamkaba koo;
Dini za kudhani zamsonga roho
Ayalimia matumbo ya waroho;
Kuna jambo gani linamridhisha?
Kama si kujua ni kutokujua
Laiti angalijua, laiti angalijua!

(a) Eleza matatizo manne yanayompata mzungumziwa. **(Alama 4)**

(b)Eleza mtindo wa lugha uliotumiwa na mshairi na utoe mifano. **(Alama 8)**

(c) Taja nafsineni katika shairi hili. **(Alama 1)**

(d) Eleza toni ya shairi hili. **(Alama 1)**

(e) Taja mbinu mbili za uhuru wa kishairi uliotumika na utoe mifano. **(Alama 2)**

(f) Andika ubeti wa kwanza kwa lugha ya nathari. **(Alama 4)**

(7)*Soma shairi lifuatalo kisha ujibu maswali.*

Leo kitaka nifike, natamani, ila wauma mwili
Kwa kazi nihusike, samahani, unahiliki mwili
Napenda nihesabike, makundini, ila huwezi mwili
Vitisho pamwe kelele, ninavicha, kwa nafsi na mwili
Ila ugonjwa utimile, umechacha, na kuudhili mwili
Msikose simile, magalacha, si gurudumu mwili.
Vingekuwepop viraka, kuutia, ngeushuruti mwili
Kifundi kivipachika, kuingia, hata kuridhi mwili
Upya ukaungilika, kuvutia, roho na wake mwili.
Lakini kamwe haiwi, kuvipata, vipande vyake mwili
Sihofu kupata mawi, sitajua, kupigania mwili
Hata kufutwa sikawi, nitakita, kidete nao mwili.
Kazi ninaithamini, ni hakika, akilini na mwili
Ila kamwe siamini, kusagika, damu, jasho na mwili
Uwele hususani, kioneka, nguvu hitishi mwili.

(a)Liweke shairi hili katika bahari tatu. **(Alama 3)**
(b)Eleza dhamira ya mshairi. **(Alama 2)**
(c) Eleza muundo wa shairi hili. **(Alama 4)**
(d) Toa mifano ya uhuru wa kishairi uliotumika. **(Alama 4)**
(e)Eleza kwa kifupi maudhui matatu yanayojitokeza katika shairi hili. **(Alama 3)**
(f) Andika ubeti wa kwanza kwa lugha ya nathari. **(Alama 4)**

SEHEMU D

FASIHI SIMULIZI

A(i) Miviga ni nini? **(Alama 2)**

(ii) Eleza sifa nane za miviga. **(Alama 8)**

B (i) Ulumbi ni nini? **(Alama 2)**

(ii) Eleza sifa nane za ulumbi **(Alama 8)**

KCSE JOINT PREMOCK

2023 SERIES 1 EXAMS

MATHEMATICS

PAPER 1

TIME: 2½ HOURS

NAME……

SCHOOL…… SIGN……

INDEX NO…… ADM NO……

INSTRUCTIONS TO THE CANDIDATES

- *This paper contains two sections;* ***Section*** *I and* ***Section II****.*
- *Answer all the questions in* ***section I*** *and only* ***five*** *questions from* ***Section II.***
- *All workings and answers must be written on the question paper in the spaces provided below each question.*
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- *Show all the steps in your calculations, giving your answers at each stage in the spaces below each question.*

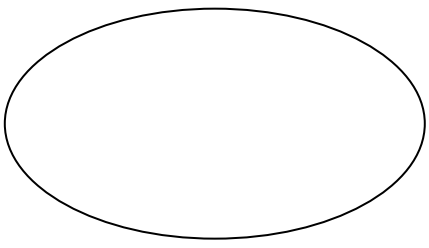
FOR EXAMINER'S USE ONLY

Section 1

Question	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	Total
Marks																	

Section 1I

Question	17	18	19	20	21	22	23	24	**Total**
Marks									



SECTION I (50MKS)

1. A rally car travelled for 2 hours 40 minutes at an average speed of 120km/h. the car consumes an average of 1 litre of fuel for every 4 kilometers. A litre of fuel costs Ksh.59. Calculate the amount of money spent on fuel. **(3mks)**

2. One interior angle of a polygon is equal to 80^0 and each of the other interior angles are 128°. Find the number of sides of the polygon. **(3mks)**

3. (a) Using a pair of compasses and a ruler only construct a triangle ABC and such that AB= 4cm, BC =6cm and angle ABC=135^o. **(2mks)**

(b) Construct the height of triangle ABC in (a) above taking AB as the base, hence Calculate the area of triangle ABC. **(2mks)**

4. Solve the following inequalities and state the integral values **(3mks)**

$2x - 2 \leq 3x + 1 < x + 11$

5. Without using mathematical tables or calculators, **evaluate** $\sqrt{\frac{1408 \times 0.594 \times 0.012}{6.05 \times 125}}$ leaving your answer as a simplified fraction **(3mks)**

6. Two similar solids have surface areas $48cm^2$ and $108cm^2$respectively. Find the volume of the smaller solid if the bigger one has a volume of $162cm^3$. **(3mks)**

7. A triangle flower garden has an area of $28m^2$. Two of its edges are 14 metres and 8 metres. Find the angle between the two edges. **(3mks)**

8. A watch which looses a half a minute every hour.It was set read the correct time at 0445hr on Monday. Determine in twelve hour system the time the watch will show on Friday at 1845hr the same week. **(3mks)**

9. Simplify the expression: $\frac{9t^2 - 25a^2}{6t^2 + 19at + 15a^2}$ **(3mks)**

10. Use reciprocal and cube root tables to evaluate **(3mks)**

$\frac{5}{63.34} - \sqrt[3]{0.0169}$

11. A Kenya company received US Dollars M. The money was converted into Kenya Shillings in a bank which buys and sells foreign currencies.

	Buying (in Ksh)	Selling (in (Ksh)
1 Sterling Pound	125.78	126.64
1 Us Dollar	75.66	75.86

(a) If the company received Ksh.15, 132,000, calculate the amount, M received in US Dollar.

(2mks)

(b) The company exchanged the above Kenya shillings into Sterling pounds to buy a car in Britain. Calculate the cost of the car to the nearest Sterling pound **(2mks)**

12. A trader sold a dress for Ksh 7200 allowing a discount of 10% on the marked price. If the discount had not been allowed the trader would have made a profit of 25% on the sale of the suit. Calculate the price at which the trader bought the dress. **(3mks)**

13. Use logarithms tables to evaluate. **(4mks)**

$$\sqrt[3]{\frac{36.72\times(0.46)^2}{185.4}}$$

14. A certain two-digit number is equivalent to five times the sum of the digits. It is found to be 9 less than the number formed when the digits are interchanged. **Find** the number. **(3mks)**

15. A man standing 20m away from the foot of a vertical pole observes the top of the pole at an angle of elevation of 30^0. He begins to walk along a straight line on level ground towards the pole. **Calculate** how far he walked before the angle of elevation of the top of the pole becomes 80^0. **(3mks)**

16. Find the acute angle y if $\sin 4y = \cos 2y$ **(2mks)**

SECTION B (50MKS)

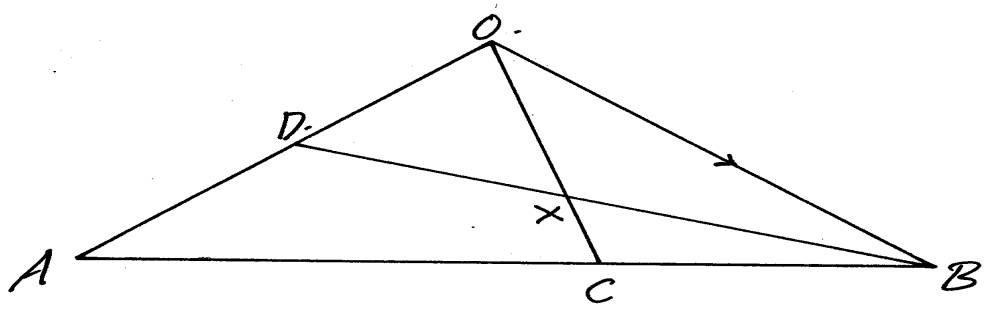
17. Mambo poured spirit into a test tube which has hemispherical bottom of inner radius 1.5cm. He noted that the spirit is 8cm high.

(a) What is the area of surface in contact with spirit? **(4mks)**

(b) Calculate volume of spirit in the test tube. **(4mks)**

(c) If Mambo obtained the mass of the spirit as 10g. Calculate the density of the spirit. **(2mks)**

18. The figure below C is a point on AB such that AC**:** CB=3:1 and D is the mid –point of OA. OC and BD intersect at X.



Given that **OA** = **a** and **OB** = **b**

(a) Write the vectors below in terms of **a** and **b**.

(i) **AB** **(1mk)**

(ii) **OC** **(2mks)**

(iii) **BD** **(1mk)**

(b) If **BX** = h **BD**, express **OX** in terms of **a**, **b**, and h. **(1mk)**

(c) If **OX** = K**OC**, find h and k. (**4mks)**

(d) Hence express **OX** in terms of **a** and **b** only. **(1mk)**

19. A straight line L_1 has a gradient $^{-}½$ and passes through point P (-1, 3). Another line L_2 passes through the points Q (1, -3) and R (4, 5). Find.

(a) The equation of L_1. **(2mks)**

(b) The gradient of L_2. **(1mk)**

(c) The equation of L_2. **(2mks)**

(d) The equation of a line passing through a point S (0, 5) and is perpendicular to L_2. **(3mks)**

(e) The equation of a line through R parallel to L_1. **(2mks)**

20. A certain number of people agreed to contribute to buy novels worth sh. 1200. Five of them pulled out and the others agreed to contribute an extra Sh. 10 each. Their contribution brought novels worth sh.200 more than they originally expected.

a) If the original number of people was x, write an expression of how much each was to contribute. **(1mk)**

b) Write down two expressions on how much each contributed after the five pulled out and reduced them to a single equation. **(2mks)**

c) Calculate how many people made the contribution **(5mks)**

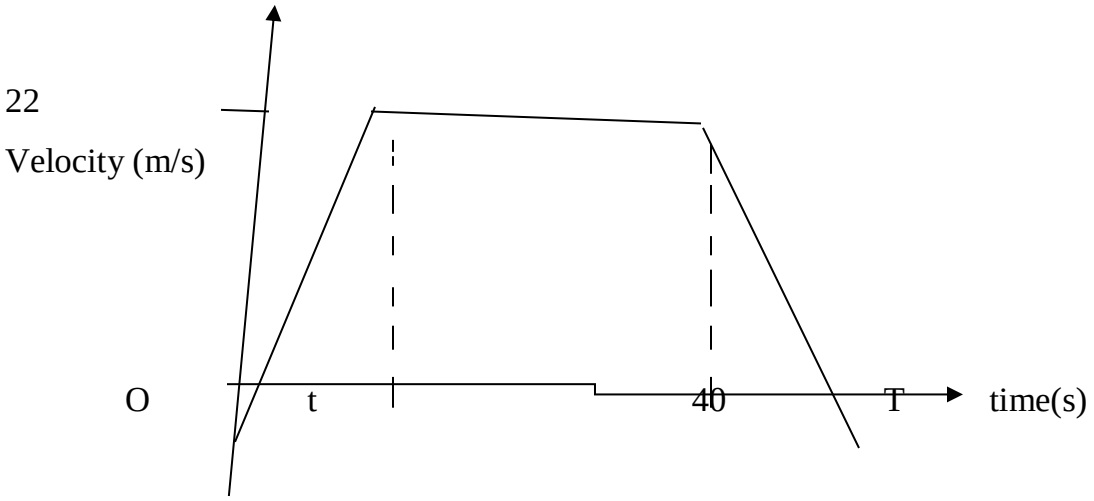
d) How much did each contribute? **(2mks)**

21. (a) In 2001 the total cost of manufacturing an article was Sh.1250 and this was divided between the cost of material, labour and transport in the ratio 8: 14: 3. In 2004 the cost of the material was doubled, labour cost increased by 30% and transport costs increased by 20%. Calculate the cost of manufacturing the article in 2004. **(6mks)**

(b) For the same article in (a) above, the cost of manufacturing in 2005 was sh. 1981 as a result of increase in labour costs only. Find the percentage increase in labour cost of 2004.

(4mks)

22. The figure below shows a velocity – time graph of a car journey.



The car starts from rest and accelerates at 2.75m/s^2 for t seconds until its speed is 22m/s. It then travels at this velocity until 40 seconds after starting. Its breaks bring it uniformly to rest. The total journey is 847m long and takes T seconds.

Calculate the

(i) Value of t **(3mks)**

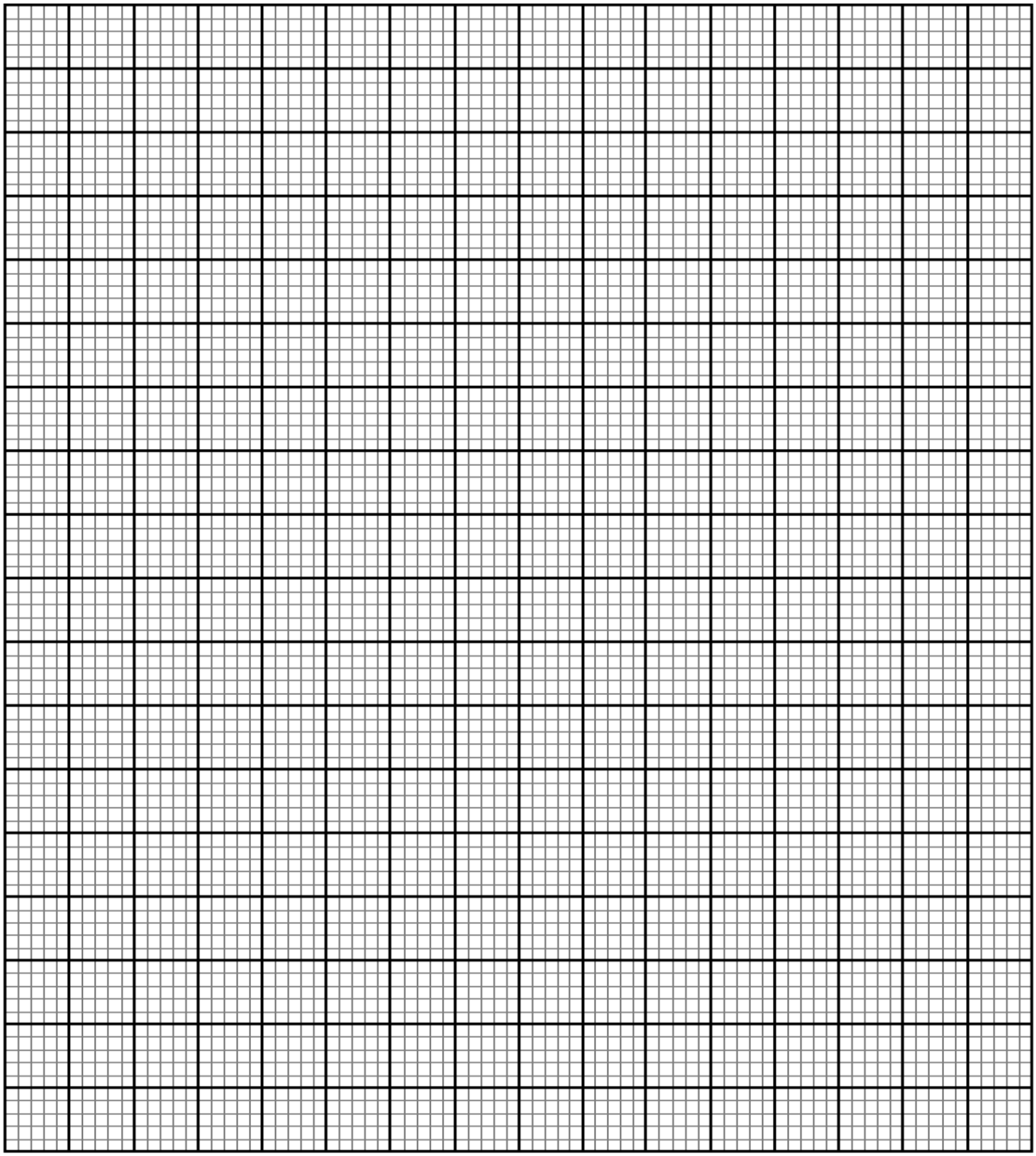
(ii) Distance travelled during the first t seconds **(2mks)**

(iii) Value of T **(3mks)**

(iv) Final deceleration **(2mks)**

23. A triangle with A(-4, 2), B(-6, 6) and C(-6, 2) is enlarged by a scale factor -1 and centre (-2, 6) to produce triangle $A^1B^1C^1$.

a) Draw triangle ABC and $A^1B^1C^1$.and state its coordinates **(4mks)**



b) Triangle $A^1B^1C^1$ is then reflected in the line y = x to give triangle $A^{11}B^{11}C^{11}$.draw $A^{11}B^{11}C^{11}$.and state its coordinates **3mks**

c) **If triangle** $A^{11}B^{11}C^{11}$ is mapped onto $A^{111}B^{111}C^{111}$ whose co-ordinates are $A^{111}(0, -2)$, $B^{111}(4, -4)$ and $C^{111}(0, -4)$ by a rotation. Find the centre and angle of rotation. **(3mks)**

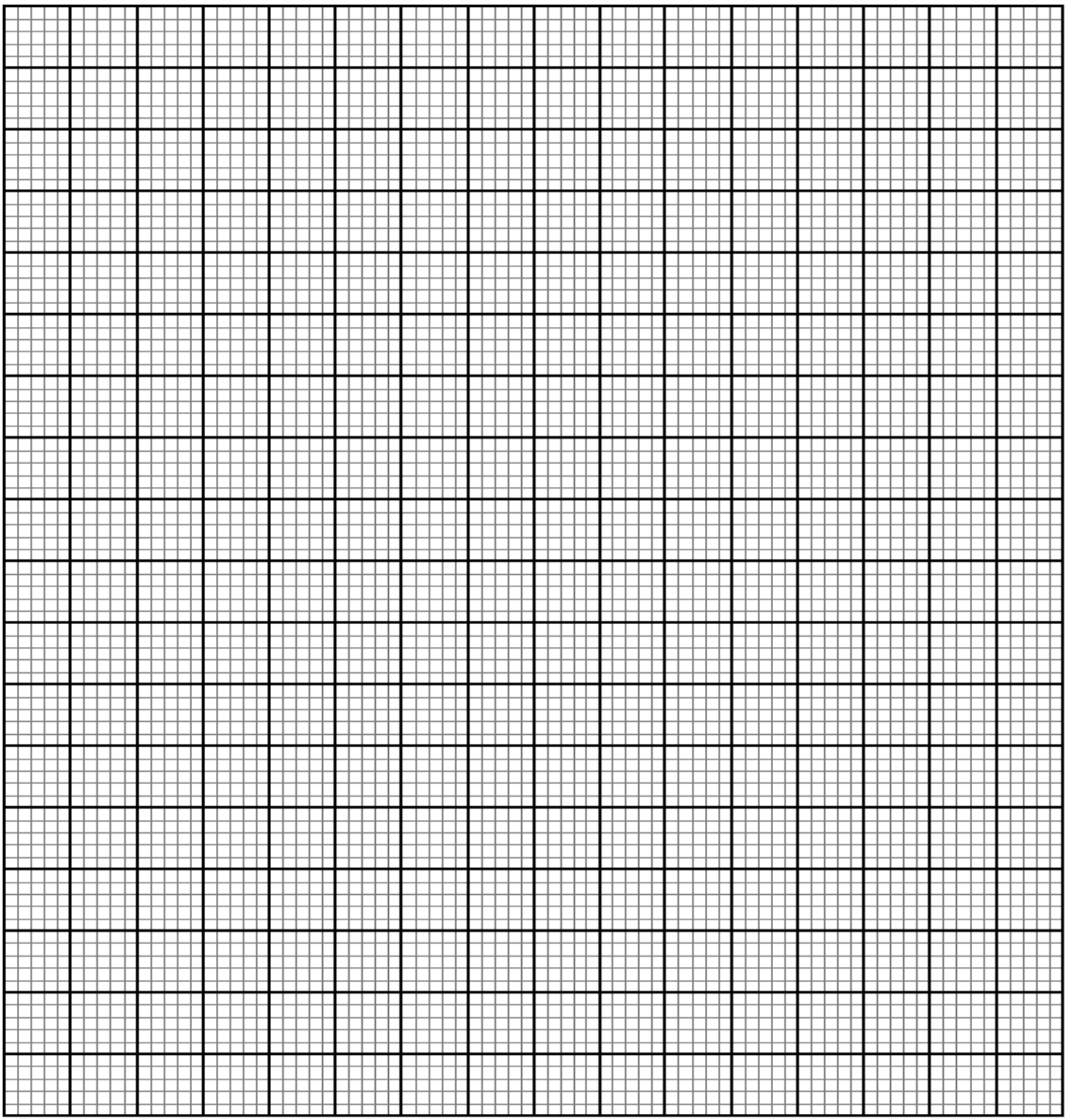
24. The following are masses of 25 people taken in a clinic.

20	35	29	45	60
66	56	29	48	37
59	64	24	28	32
35	45	48	52	55
54	55	36	39	35

(a) Using a class width of 8 and starting with the lowest mass of the people. Make a frequency distribution table for the data. **(3mks)**

(b) Calculate the median mass of the people. **(3mks)**

(c) On the grid provided, draw a histogram to represent the information. **(4mks)**



KCSE JOINT PREMOCK

2023 SERIES 1 EXAMS

MATHEMATICS

PAPER 2

TIME: 2½ HOURS

NAME……

SCHOOL…… SIGN……

INDEX NO…… ADM NO……

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Marks																	

Section 1I

Question	17	18	19	20	21	22	23	24	**Total**
Marks									

SECTION I (50MKS)

1. Simplify by rationalising the denominator

$$\frac{\sqrt{2} + \sqrt{3}}{\sqrt{6} - \sqrt{3}}$$ **(3mks)**

2. Find the value of x in the equation $\log_{10}(2x-1) + \log_{10} 3 = \log_{10}(8x-1)$. **(3mks)**

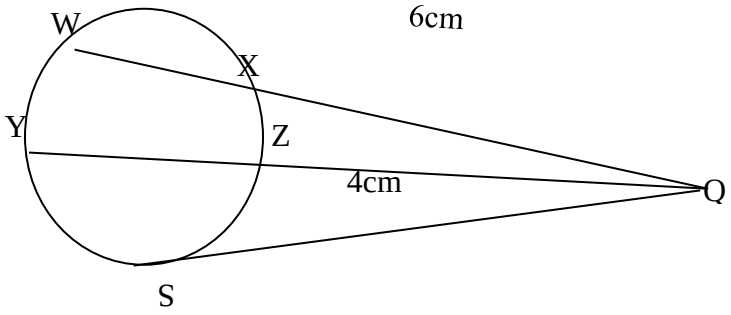
3. Find the compound interest on sh. 200,000 for 2 years at 14% pa. Compounded semi-annually. **(3mks)**

4. The ratio of 12^{th} to 10^{th} term in a geometric series is 9:1. Find the common ratio. **(3mks)**

5. i) Expand $(2 - \frac{1}{4}x)^5$ **(2mks)**

ii) Use your expansion to find the value of $(1.96)^5$ correct to 3 decimal places **(2mks)**

6. Chord WX and YZ intersect externally at Q. The secant WQ = 11cm and QX = 6cm while ZQ = 4cm.



(a) Calculate the length of chord YZ. **(2mks)**

(b) Using the answer in (a) above, find the length of the tangent SQ. **(2mks)**

7. Given that $\begin{vmatrix} y-1 & y+1 \\ 3y & y \end{vmatrix}$ is a singular matrix, find the possible values of y. **(3mks)**

8. The masses to the nearest kg of 50 adults were recorded as follows:

Mass (kg)	Frequency (f)
45 – 50	2
51 – 56	10
57 – 62	11
63 – 68	20
69 – 74	6
75 – 80	1

Calculate the quartile deviation. **(3mks)**

9. P varies as the cube of Q and inversely as the square root of R. If Q is increased by 20% and R decreased by 36%, find the percentage change in P. **(3mks)**

10. Solve $8\cos^2 x - 2\cos x - 1 = 0$ **(3mks)**

11. Make χ the subject of the formula:

$$A = \sqrt{\frac{3 + 2\chi}{5 - 4\chi}}$$ **(3mks)**

12. The position vectors of A and B are given as **a**= 2**i**-3**j**+4**k** and **b**= -2**i**-**j**+2**k** respectively.

Find to 2decimal places, the length of the vector $\overrightarrow{AB}$. **(3mks)**

13. Find the centre and the radius of a circle whose equation is

$x^2-6x+y^2-10y+30=0$ **(3mks)**

14. A point (x, y) is mapped onto (13, 13) by two transformations M followed by T where

$T = \begin{pmatrix} -4 \\ 3 \end{pmatrix}$ and $x = \begin{pmatrix} 3 & 1 \\ 2 & 4 \end{pmatrix}$. Find the point (x y) **(3mks)**

15. Given that $2 \leq A \leq 4$ and $0.1 \leq B \leq 0.2$. Find the minimum value of $\frac{AB}{A - B}$

(3mks)

16. In a transformation, an object with area $9cm^2$ is mapped onto an image whose area is $54cm^2$. Given that the matrix of transformation is $\begin{bmatrix} x & x-1 \\ 2 & 4 \end{bmatrix}$ find the value of x

(3mks)

SECTION II (50MKS)

17. The table below shows the rates of taxation in a certain year.

Income in K£ pa	Rate in Ksh per K£
1 – 3900	2
3901 – 7800	3
7801 – 11700	4
11701 – 15600	5
15601 – 19500	7
Above 19500	9

In that period, Juma was earning a basic salary of sh. 21,000 per month. In addition, he was entitled to a house allowance of sh. 9000 p.m. and a personal relief of ksh.105 p.m He also has an insurance scheme for which he pays a monthly premium of sh. 2000. He is entitled to a relief on premium at 15% of the premium paid.

(a) Calculate how much income tax Juma paid per month. **(7mks)**

(b) Juma's other deductions per month were cooperative society contributions of sh. 2000 and a loan repayment of sh. 2500. Calculate his net salary per month. **(3mks)**

18. Wainaina has two dairy farm A and B. Farm A produces milk with 3 ½ percent fat and farm B produces milk with 4 ¾ percent fat. Determine;

(a) The total mass of milk fat in 50kg of milk from farm A and 30kg from farm B. **(3mks)**

(b) The percentage of fat in a mixture of 50kg of milk from A and 30kg of milk from farm B. **(2mks)**

(c) Determine the range of values of mass of milk from farm B that must be used in a 50kg mixture so that the mixture may have at least 4 percent fat. **(5mks)**

19. A cupboard has 7 white cups and 5 brown ones all identical in size and shape. There was a blackout in the town and Mrs. Kamau had to select three cups, one after the other without replacing the previous one.

(a) Draw a tree diagram for the information. **(2mks)**

(b) Calculate the probability that she chooses.

(i) Two white cups and one brown cup. **(2mks)**

(ii) Two brown cups and one white cup. **(2mks)**

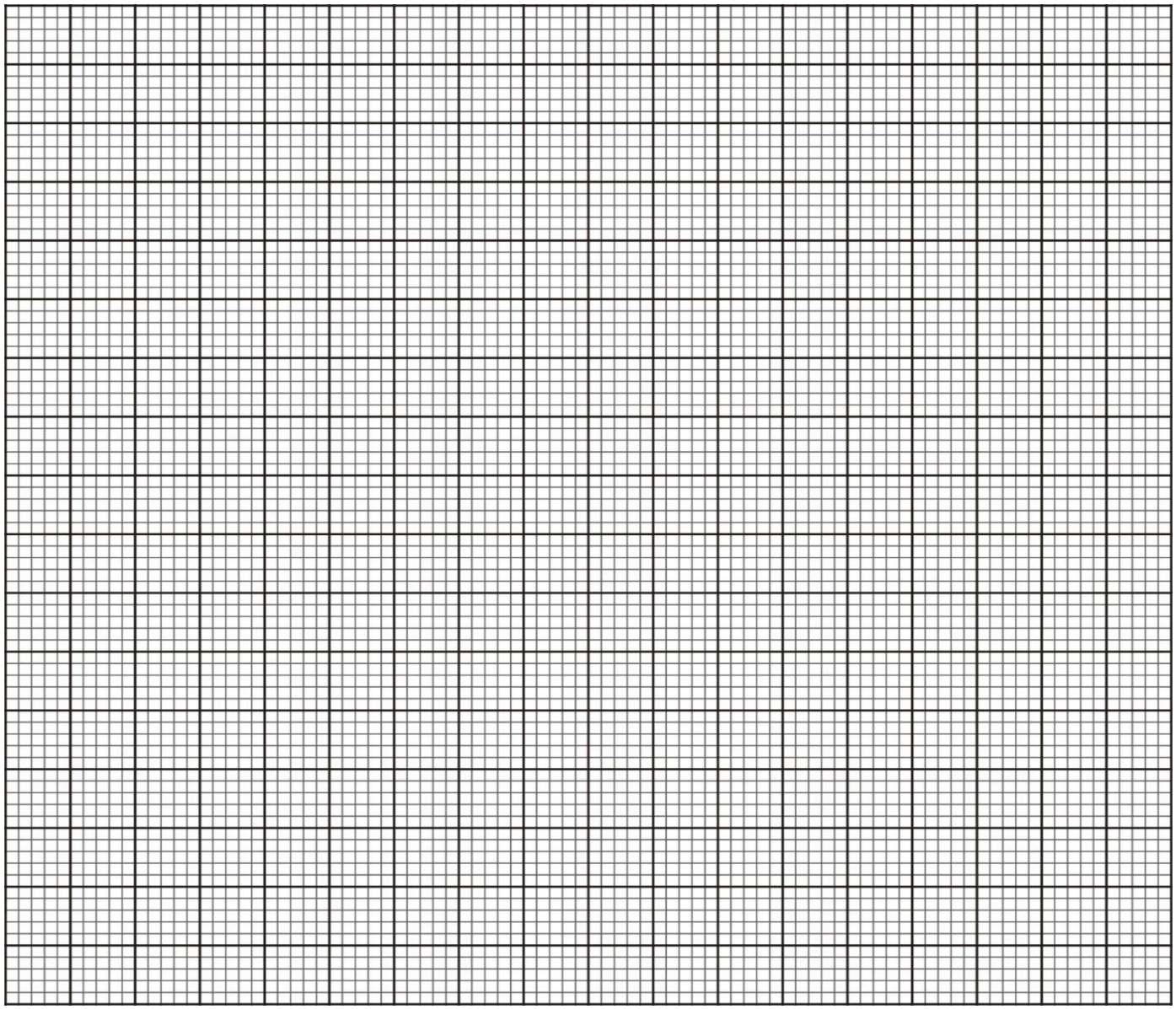
(iii) At least one white cup. **(2mks)**

(iv) Three cups of the same colour. **(2mks)**

20. (i) complete the table below, giving the values correct to 2 decimal places **(2mks)**

X^0	0^0	15^0	30^0	45^0	60^0	75^0	90^0	105^0	120^0	135^0	150^0	165^0	180^0
Cos $2X^0$	1.00	0.87		0.00	-0.5		-1.00		-0.5	0.00	0.50	0.87	1.00
sin (X^0+30^0)	0.50	0.71	0.87	0.97	1.00		0.87	0.71	0.50		0.00		-0.50

(ii) Using the grid provided draw on the same axes the graph of $y=\cos 2X^0$ and $y=\sin(X^0+30^0)$ for $0^0 \leq X \leq 180^0$. (**4mks)**



(iii) Find the period of the curve $y=\cos 2x^0$ **(1mk)**

(iv) Using the graph, estimate the solutions to the equations;

(a) $\sin(X^0+30^0)=\cos 2X^0$ **(1mk)**

(b) $\cos 2X^0=0.5$ **(1mk)**

21. The For a sample of 100 bulbs, the time taken for each bulb to burn was recorded. The table below shows the result of the measurements.

Time(in hours)	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74
Number of bulbs	6	10	9	5	7	11	15	13	8	7	5	4

(a) Using an assumed mean of 42, calculate

(i) the actual mean of distribution **(4mks)**

(ii) the standard deviation of the distribution **(3mks)**

(b) Calculate the quartile deviation **(3mks)**

22. (a) Using a ruler and a pair of compasses only, construct a parallelogram ABCD such that AB=9 cm, AD=7 cm and angle BAD=60^{o}. **(3mks)**

(b) On the same diagram, construct:

(i) The locus of a point P such that P is equidistant from AB and AD; **(1mk)**

(ii) The locus of a point Q such that Q is equidistant from B and C; **(1mk)**

(iii) The locus of a point T such that T is equidistant from AB and DC; **(1mk).**

(c) (i) Shade the region R bounded by the locus of P, the locus of Q and the locus of T. **(1mk)**

(ii) Find the area of the region shaded in (d)(i) above. **(3mks)**

23. The points A (1,4), B(-2,0) and C (4,-2) of a triangle are mapped onto $A^1(7,4)$, $B^1(x,y)$ and C^1 (10,16) by a transformation N = $\begin{pmatrix} a & b \\ c & d \end{pmatrix}$. Find

(i) Matrix N of the transformation **(4mks)**

(ii) Coordinates of B^1 **(2mks)**

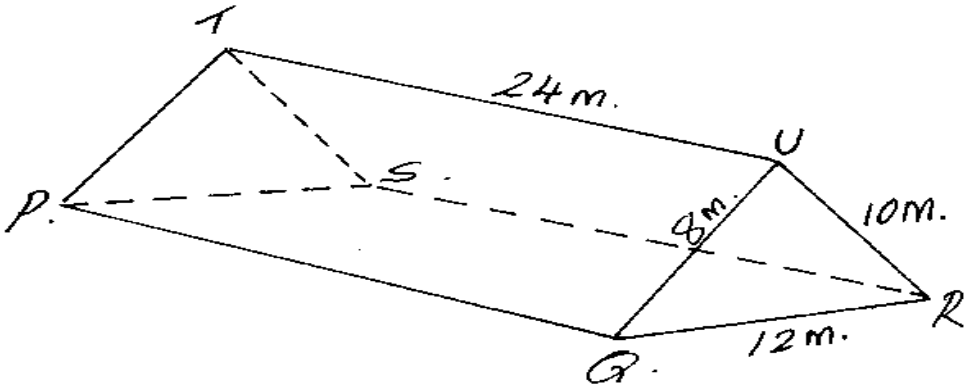
(iii) $A^{II}B^{II}C^{II}$ are the image of $A^1B^1C^1$ under transformation represented by matrix

M = $\begin{pmatrix} 2 & -1 \\ 0 & 0 \end{pmatrix}$ Write down the co-ordinates of $A^{II}B^{II}C^{II}$ **(2mks)**

(vi)A transformation N followed by M can be represented by a single transformation K.

Determine K **(2mks)**

24. The roof of a ware house is in the shape of a triangular prism as shown below



Calculate

(a) The angle between faces RSTU and PQRS **(3mks)**

(b) The space occupied by the roof **(3mks)**

(c) The angle between the plane QTR and PQRS **(4mks)**

KCSE JOINT PREMOCK

2023 SERIES 1 EXAMS

COMPUTER STUDIES

PAPER 1

TIME: 2½ HOURS

NAME……

SCHOOL…… SIGN……

INDEX NO…… ADM NO……

INSTRUCTIONS TO CANDIDATES

- *Write your name and index number in the spaces provided above*
- *Sign and write your name in the spaces provided above*
- *This paper consists of **two** sections; A and B*
- *Answer all questions in section A*
- *Answer question 16 and any other three questions from section B*
- *All answers should be written in the spaces provided on the question paper*

For official use only

Section	Question	Candidates score
A	1-15	
B	16	
	17	
	18	
	19	
	20	
TOTAL SCORE		

SECTION A (40 Marks)

*Answer **all** questions in this section*

1. Give **TWO** reasons why Powder type fire extinguishers are not recommended to be used in a computer laboratory. **(2 Marks)**

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……

……

2. State the purpose of each of the following memories in a computer system. **(2 marks)**

ROM

……

……

RAM

……

……

3. State two factors that one would consider when selecting data entry method in computing.

(2 Marks)

……

……

……

4. Describe the following types of printers and state one application area of each. **(3Marks)**

(a) Dot matrix

……

……

……

(b) Thermal printer.

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……

……

5. Differentiate between in-house software and freeware. **(2 Marks)**

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6. Give two importance of feedback mechanism in systems **(2 Marks)**

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7. With an aid of a diagram, explain one-to-one database relationship. **(2 Marks)**

8. KASSU Secondary School intends to set up internet connection in their school for e-learning purposes. Advise the school management on four internet connectivity requirements that is required for them to be able to access internet. **(2 Marks)**

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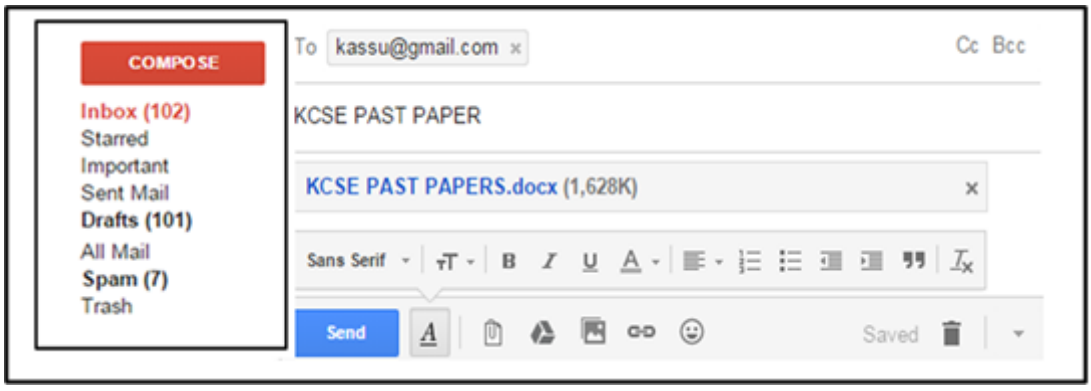
9. The figure below shows an extract of an e-mail application.



What is meant by each of the following terms: **(3 Marks)**

(a) Trash

……..……

……..……

(b) **Spam**

……..……

……..……

(c) ***Inbox***

……..……

……..……

10. State two ways in which users in an organization can be a security threat to data in an information system. **(2 Marks)**

……..……

……..……

11. State three negative impact of information communication technology on the Environment. **(3 Marks)**

……..……

……..……

……..…….

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12. In a computer based information system, state the purpose of the following files and give **one** example where such a file may be required in a school. **(4 marks)**

a. Report file.

……

……

b. Sort file.

……

……

……

13. State three responsibility of a Database administrator in an organization. **(3 Marks)**

……

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……

14. With an example for each, describe how computers are used in the following areas of education; **(3 Marks)**

a. Simulation

……

……

b. Tutorial

……

……

15. a. Dan a computer student noticed that every time a person enters the computer lab the computer screen flickers. Identify three reasons why the monitor might be flickering **(3 Marks)**

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b. State two ways in which the problem can be solved **(2 Marks)**

……

……

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……

SECTION B (60 Marks)

*Answer **question 16** and any other **three** questions*

16. a. State two advantages and two disadvantages of high level programming language **(2 Marks)**

b. State three situations when REPEAT .. UNTIL structure can be used in writing a program **(3 Marks)**

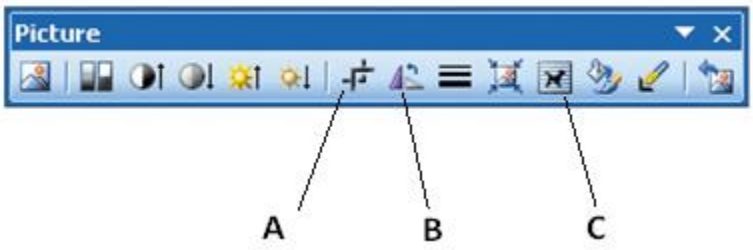
c. The roots of the equation $\mathbf{ax^2 + bx + c = 0}$ are given by the formula

$$x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$$

i. Write a pseudocode for the above program **(5 Marks)**

ii. Draw a flow chart for the above pseudocode **(5 Marks)**

17. (a) (i) The figure below shows a picture tool bar



Name and state the functions of the features marked **A, B and C:**

(i) A **(1 Mark)**

(ii) B **(1 Mark)**

(iii) C **(1 Mark)**

(b) State the importance of Column breaks as used in word processor. **(1 Mark)**

(c) Change case is where a user applies so that the text can have some contrast in size. Write the word Digital SIGNAL (2 Marks)

(i) Title case

(ii) Toggle case

(d) Define the following terms as used in charts. (2 Marks)

(i) Legend

……

(ii) Data range

(e) The table below shows how a kiosk owner uses a spread sheet to keep records in a shop.

	A	B	C	D	E	F
1	ITEM NAME	NUMBER OF ITEMS	UNIT COST	TOTAL BUYING PRICE	TOTAL SELLING PRICE	PROFIT
2	Blue band	*150*	*120*			*3600*
3	Toss	*135*	*50*			*1350*
4	Cow boy	*120*	*120*			*2880*
5	Panga soap	*118*	*50*			*1180*

(I) Write a **function** to calculate the total buying price. **(2 Marks)**

(II) Write a **formula** to calculate the Profit. **(2 Marks)**

(III) The total buying prices of all items was increased by 12% and the value 12% is placed in cell B6. Using cell addresses with absolute referencing, write a formula to calculate the Total Selling Price in cell E2. **(2 Marks)**

(IV) State the output of the expression =SUMIF(F2:F5,"<1 500")would return.(1 Mark)

18. a. Describe the term prefixing an extra sign bit as used in data representation.**(2 Marks)**

b. Convert each of the following numbers system.

(i) 0.78125_{10} to binary **(2 Marks)**

(ii) $3A9_{16}$ to Octal **(2 Marks)**

c. Perform the following binary operation. **(3 Marks)**

1010.11+111.10-101.11

d. Using one's complement, perform the following binary arithmetic leaving the answer decimal notation. $17_{10} - 45_{10}$ **(6 Marks)**

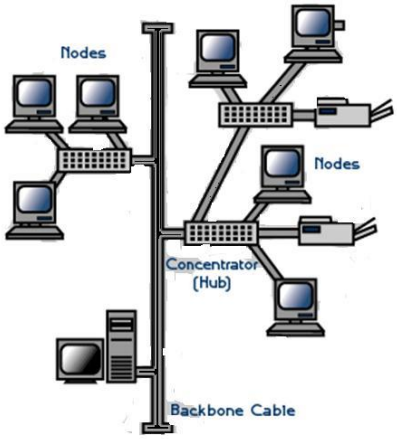
19. a. Distinguish between the following terms as used in data communication (6 Marks)

i. Guided transmission medium and unguided transmission media

ii. Multiplexing and demultiplexing

iii. Logical and physical Topology

b. Below is a diagram of a network topology.



i. Name the above topology **(1 Mark)**

ii. State two advantages and two disadvantages of using the topology named above **(4 Marks)**

c. List and explain the two data transmission techniques **(4 Marks)**

20. a. Distinguish between a computer drive and computer driver **(2 Marks)**

b. State any four factors to consider when selecting an operating system **(4 Marks)**

c. Explain any four factors that dictates how the operating system organizes data in a computer **(4 Marks)**

d. Define the term file in relation to the operating system **(1 Mark)**

e. The operating system stores details of a file for easy identification and retrieval of files. Explain any four file details the operating system uses to search and identify a file **(4 Marks)**

f. Distinguish between a menu driven operating system and graphical user interface operating system **(2 Marks)**

KCSE JOINT PREMOCK

2023 SERIES 1 EXAMS

COMPUTER STUDIES

PAPER 2

TIME: 2½ HOURS

NAME……

SCHOOL…… SIGN……

INDEX NO…… ADM NO……

INSTRUCTIONS TO CANDIDATES

1. *Type your name and index number at the top right hand corner of each printout*

2. *Sign and write the date of the examination below the name and index number on each printout*

3. *Write your name and index number on the compact disks*

4. *Write the name and version of the software used for each question attempted in the answer sheet*

5. *Passwords should not be used while saving in the compact disks*

6. *Answer all the questions*

7. *All questions carry equal marks*

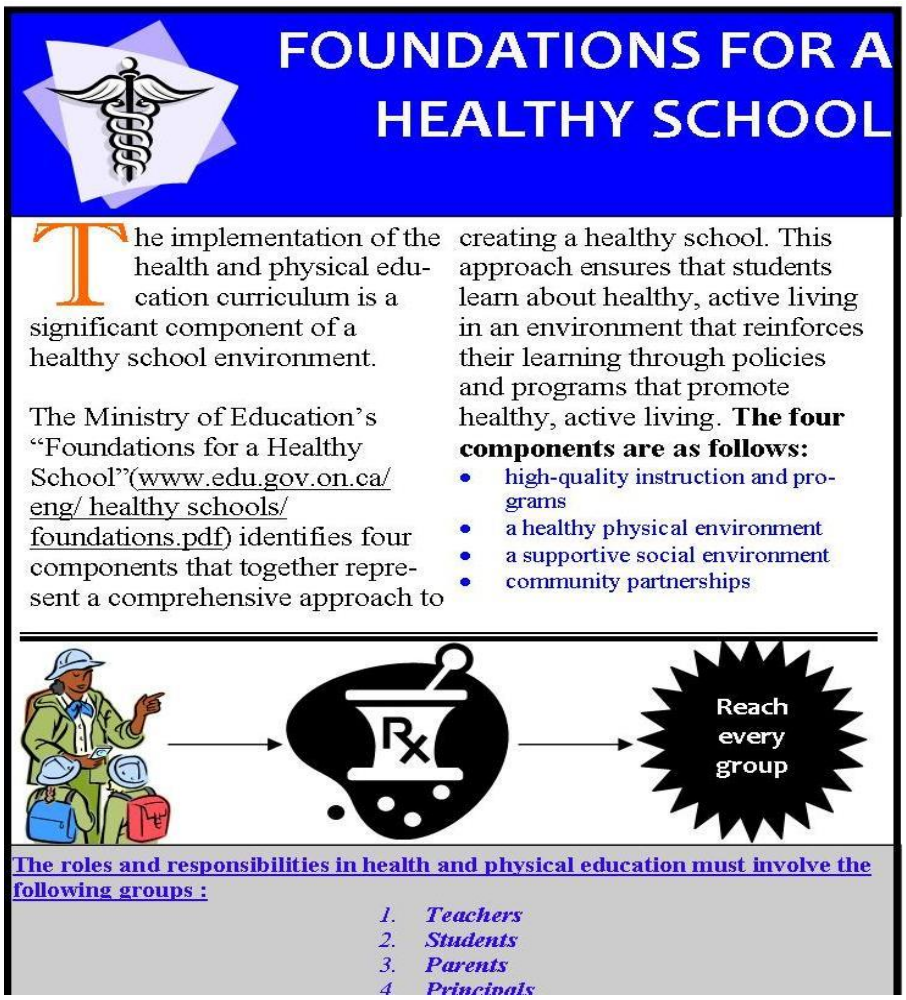
8. *All answers must be saved in your compact disks*

9. *Make a printout of the answers on the answer sheets provided*

10. *Hand in all the printouts and the compact disks*

QUESTION 1

(a) Using Desktop Publishing application program, design the following publication. Name the file as HEALTHY_SCHOOL **(19mks)**



(b) Prepare the page layout out as follows:

(i) Custom paper size: Width = 11.6", Height = 8.268 **(2mks)**

(ii) Set the margins to 0.787" all round **(2mks)**

(iii) Divide the page into TWO equal horizontal parts using a ruler guide. **(2mks)**

(iv) The border of the design should start from the set margins **(2mks)**

NB: After designing one part of the divided page, TWO copies of the publication should fit into one page in landscape as set up above.

(c) Create a logo as shown to measure **height** 1.213" and **width** 1.118" **(3mks)**

(d) (i) The main title text (near the logo) should be of **Candara, Font size 26, Bold and Right aligned** **(4mks)**

(ii) Set-up the rectangular object with the main heading to a background color of **Accent 1 (1mk)**

(e) The text on the lower part of the publication should to be formatted as follows: **(3mks)**

- Color: **Custom color combination (Red=51, Green=4, blue=252)**
- Alignment: **Left**
- Font: **Size 10**

(f) Format all other text to **times new roman font type** and **font size 12** (2mks)

(g) Apply a style to the line below the text in columns and a thickness of 4.5" in weight **(1mk)**

(h) Enforce hyphenations to the text in columns **(1mk)**

(i) The star object with text "Reach every group" should be a 24-point star. Format the text inside to font type **calibri** **(2mks)**

(j) Make the designs to fit one page **(1mk)**

(k) Group all objects in the two designs as one. **(2mks)**

(l) Insert a footer using your name index number, aligned to the center **(2mks)**

(m) Print the publication. **(1mk)**

Question 2

The information in the table below was obtained from the books of Safiri Transport Company.

CAR	MODEL	REGNo	YEAR OF MANUFACTURE	DRIVER	IDNO	EMPLOYMENT No	TRIPS MADE	DESTINATION	ALLOWANCE PER TRIP	DAILY RATE
TOYOTA	PICKUP	KAG 725 H	1996	JOHN	122834	DI1223	5	NAIROBI	1250	1500
ISUZU	SALOON	KCB 725 D	2010	MARY	153458	DI9853	3	KERICHO	3400	1500
MAZDA	S/SAGON	KBC 763 L	2006	BETTY	986732	DO4587	15	KISUMU	4300	1500
IVECO	TRUCK	KAG 625 H	1987	KYLE	985443	DO6592	20	KERICHO	3400	1500
TATA	TRUCK	KZG 725	2011	PETER	758849	DI4010	25	KERICHO	3400	1500
JAC	TRUCK	KAA 740 H	1992	JERRY	985873	DO9203	40	NAIROBI	1250	1500
NISSAN	S/WAGON	KAG 552 M	1990	PAUL	857330	DO8345	2	MUHORONI	4100	1500
MAZDA	SALOON	KCB 678 J	2010	SETH	764943	DI9352	15	M0MBASA	8000	1500
MITSUBISHI	TRUCK	KCC 345 F	2006	KATE	934472	DI8754	2	KERICHO	3400	1500
TOYOTA	S/WAGON	KCA 892 U	1987	CALEB	109456	DI6557	1	MUHORONI	4100	1500
TOYOTA	S/WAGON	KAP 544 R	2011	TIM	678842	DO7395	1	KISUMU	4300	1500
ISUZU	S/WAGON	KAP 711 R	1992	PATRICK	764484	DO5764	7	NAIROBI	1250	1500
BENZ	SALOON	KBN 877 C	1991	BRIAN	769973	DI2343	3	KISUMU	4300	1500

a. Using a database management application split the information in the above table into two tables namely vehicle and drivers respectively and save the database as Safiri Transport Company **(15 Marks)**

b. Create a relationship between the two tables **(2 Marks)**

c. Create an appropriate form that would be used to enter new records in the driver's table and save it as form driver **(7 Marks)**

d. Create a query that will display a list of all the drivers who made more than 5 trips to kericho, include all the necessary details. Save it as kericho. **(5 Marks)**

e. Create a query with a calculated field named total allowance to display the total allowance earned by each driver, include all the necessary details. Save it as allowance **(5 Marks)**

f. Using both tables, create a query that would be used to complete each driver's earnings and save it as pay roll. **(3marks)**

g. Using the payroll query in (f) design a report for Safari Transport Company that would used to calculate total allowance and monthly pay for each driver, assuming that each driver works for 25 days in a month. **(7marks)**

h. Print vehicle, driver, form driver, kericho, allowance and payroll **(6 Marks)**

KCSE JOINT PREMOCK

2023 SERIES 1 EXAMS

HOME-SCIENCE

PAPER 1

TIME: 2½ HOURS

NAME……

SCHOOL…… SIGN……

INDEX NO…… ADM NO……

INSTRUCTIONS TO THE CANDIDATES

Write your name and index number in the spaces provided above.

This paper consists of **THREE** sections A, B, and C.

Answer **ALL** the questions in section A and B

Answer any **TWO**questions from section C

FOR EXAMINERS USE ONLY

Section	Questions	Maximum score	Candidates score
A	1- 16	40	
B	17	20	
C		20 20	
	TOTAL SCORE		

SECTION A (40 MARKS)

Answer ALL questions in this section in the spaces provided

1. Mention two functions of cholecalciferol in the body. (2 **Marks**)

……

……

2. Suggest three causes of malnutrition. (3 **Marks**)

……

……

……

3. What are the effects of immersing a hot aluminium frying pan in cold water? (2 **Marks**)

……

……

4. Explain three forms of advertisements. (2 **Marks**)

……

……

……

5. Write the following abbreviations in full (2 **Marks**)

- BCG……
- TBA……

6. Name two methods which could be used to serve meals at home. (2 **Marks**)

……

……

7. What are the determinants of safe parenthood? (3 **Marks**)

……

……

……

8. Identify three points to bear in mind when buying land for a family house. (3 **Marks**)

……

……

……

9. State three basic instructions on the use of medicines. (3 **Marks**)

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10. Give three advantages of using credit cards. (3 **Marks**)

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11. Name four fabrics that should not be wrung during laundering. (2 **Marks**)

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12. State three functions of pressing cloth. (3 **Marks**)

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13. State two qualities to look for when choosing a stiletto. (2 **Marks**)

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14. Identify six substances that are added to soap during manufacturing. (3 **Marks**)

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15. Give two ways of purifying water for small scale use. (2 **Marks**)

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……

16. Differentiate between food fortification and food supplements. (2 **Marks**)

……

……

……

SECTION B (20 MARKS)

Compulsory

17. You are preparing to host your grandparents over the weekend.

a) Describe the method you would use to clean a varnished wooden table to be used in the dinning room. (6 **Marks**)

b) Give six principles you would observe when removing stains from the table clothe to be used. (6 **Marks**)

c) Outline the procedure you would use when cleaning a toilet to be used by your grand parents (8 **Marks**)

SECTION C (40 MARKS)

Answer ANY TWO questions from this section in the spaces provided after question 20.

18. a) What do the following terms mean as used in consumer education.

(i) Consumer (1 **Mark**)

(ii) Goods (1 **Mark**)

(iii) Services (1 **Mark**)

b) Explain four sources of information for the consumer. (8 **Marks**)

c) (i) Define a budget. 1 **Mark**)

(ii) Explain four factors that may affect a budget. (8 **Marks**)

19. a) Give four symptoms of food poisoning. (4 **Marks**)

b) Explain four causes of food spoilage. (8 **Marks**)

c) Suggest eight measurers to take in the prevention of food poisoning. (8 **Marks**)

20. a) List three types of scissors used in clothing construction. (3 **Marks**)

b) Identify three methods of transferring pattern Markings on a fabric. (3 **Marks**)

c) Give three features of well made permanent stitches. (3 **Marks**)

d) Without using a diagram outline how to make a double stitched seam. (11 **Marks**)

KCSE JOINT PREMOCK

2023 SERIES 1 EXAMS

HOME-SCIENCE

PAPER 2

TIME: 2½ HOURS

CONFIDENTIAL

441/2

HOME SCIENCE

(CLOTHING CONSTRUCTION)

PAPER 2

(PRACTICAL)

Time $2^{1}/_{2}$ hours

Kenya Certificate of Secondary Education

CONFIDENTIAL

INSTRUCTIONS TO SCHOOLS

The school is advised to provide the candidates with the following materials.

1. Plain light weight cotton fabric 50cm by 90 cm wide.

2. Sewing thread to match fabric.

3. Sewing machines at least 4 per 10 students.

KCSE JOINT PREMOCK

2023 SERIES 1 EXAMS

HOME-SCIENCE

PAPER 2

TIME: 2½ HOURS

NAME……

SCHOOL…… SIGN……

INDEX NO…… ADM NO……

A pattern of a girl's skirt is provided. You are advised to study the sketches, the question paper and lay out carefully before you begin the test.

MATERIALS PROVIDED

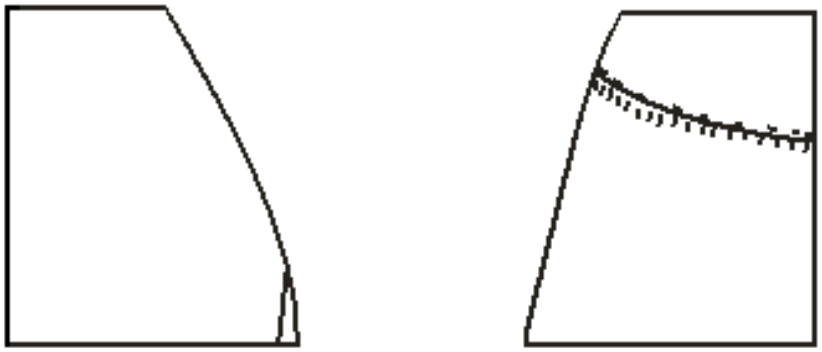
1. Pattern pieces
A. Skirt front
B. Skirt back
C. Pockets
D. Front yoke
2. Light weight cotton fabric 50cm by 90cm wide.
3. Sewing thread to match the fabric

THE TEST

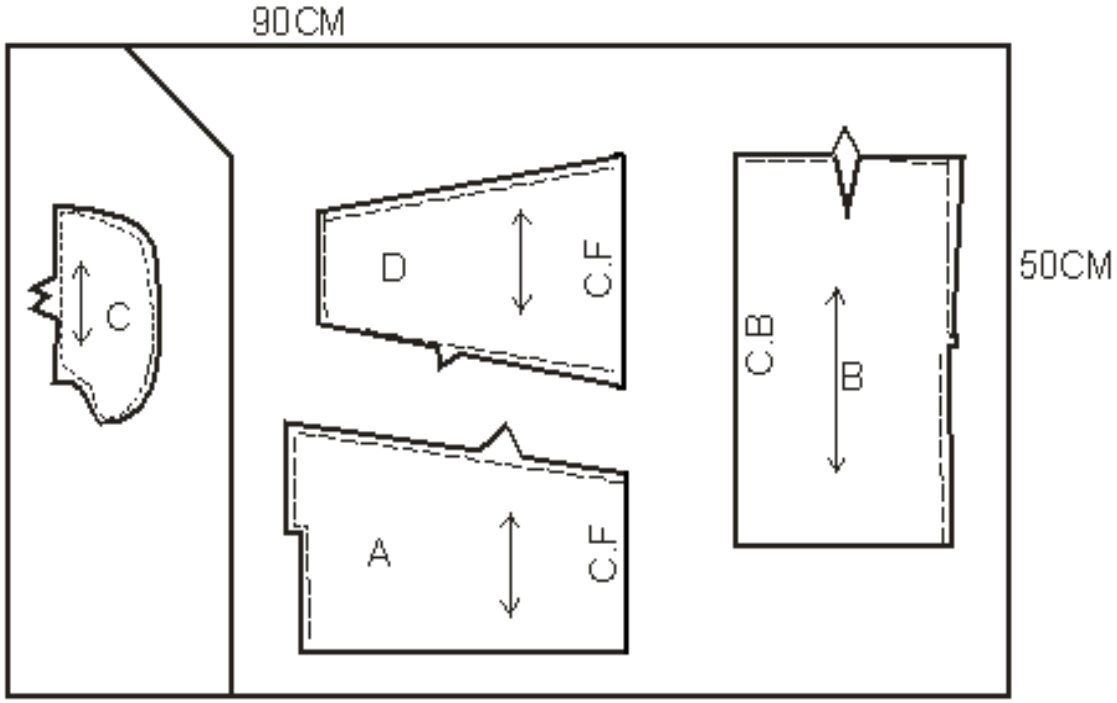
a. Using the materials provided, cut and make the right half of the skirt to show the following processes.
b. The preparation of the gathers on the skirt front piece.
c. Attachment of yoke piece to the skirt front piece using a neatened overlaid seam. Use loop stitches.
d. Attachment of front pocket piece to the skirt front and back pocket piece to the skirt back.
e. The making of an unneatened open seam at the side above and below the pocket mouth.
f. The joining of the pocket bag seam (do not neaten)
g. Use preparation of the skirt hem and slip hemming it.

At the end of the examination, firmly sew onto your work on a single fabric a label bearing your **Name**and **admission Number**. Remove the needles and pins from your work then fold it neatly.

SKIRT VIEW



THE LAYOUT (not drawn to scale)



THE END

FOR THE FOLLOWING;

- ✓ ONLINE TUITION
- ✓ REVISION NOTES
- ✓ SCHEMES OF WORK
- ✓ SETBOOKS VIDEOS
- ✓ TERMLY EXAMS
- ✓ QUICK REVISION KITS
- ✓ KCSE TOPICALS
- ✓ KCSE PREMOCKS
- ✓ TOP SCHOOLS PREMOCKS
- ✓ JOINT PREMOCKS
- ✓ KCSE MOCKS
- ✓ TOP SCHOOLS MOCKS
- ✓ JOINT MOCKS
- ✓ KCSE POSTMOCKS
- ✓ TOP SCHOOLS PREDICTIONS
- ✓ KCSE PREDICTIONS
- ✓ KCSE REVEALED SETS

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