KCSE 2023 PREMOCK

ALL SUBJECTS

Compilation of Standard set of KCSE Pre-Mock Questions for the Current KCSE 2023 Candidates. Contains both Paper 1, 2 & 3 where necessary.

SUBJECTS COMPILED;

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

SERIES 1

For Marking Schemes

Mr Isaboke 0746-222-000 / 0742-999-000

MWALIMU CONSULTANCY

KCSE 2023 PREMOCK EXAMS

SERIES 1

BIOLOGY

PAPER 1

TIME: 2 HOURS

NAME……

SCHOOL…… SIGN……

INDEX NO…… ADM NO……

(232/1)

BIOLOGY

TIME: 2 HOURS

PAPER 1

INSTRUCTIONS TO THE CANDIDATES

1. *All Questions are Compulsory*
2. *Write your Answers in the Spaces Provided*
3. *Wrong Spelling of Technical Terms shall be Penalized*

MAX SCORE	STUDENT'S SCORE
80	

Answer All the Questions

1. The photomicrograph shown below is a section of a cell



a) Using the letters provided, label the organelle that: **(2mks**

i) Is found in high number in kidney cells (**KC**)

ii) Is abundant in secretory glands (**SG**)

b) State the importance of cytoplasmic streaming to a cell **(1mk**

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2. An athlete experienced a muscle cramp after a sprint race

a) Name the acid that accumulated in her muscles to bring about the discomfort **(1mk**

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b) Describe the fate of this acid when the athlete takes a rest **(2mks**

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3. State the functions of the following cells **(3mks**

i) Sertoli cells

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ii) Interstitial cells

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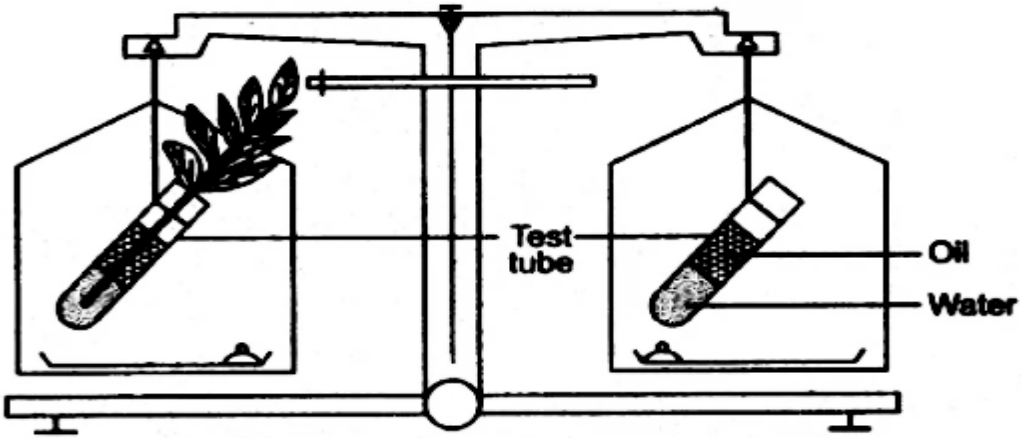
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iii) Guard cells

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4. The experimental set up shown below was placed in the sunshine for 2 hours to study a particular phenomenon in plants



a) What is the expected result after the 2hours of experiment? **(1mk**

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b) Account for the answer given in a) above **(2mks**

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c) What is the expected result if the experiment was done under high humidity? **(1mk**

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5. Name **(2mks**

a) A cell in the human body that lacks mitochondria

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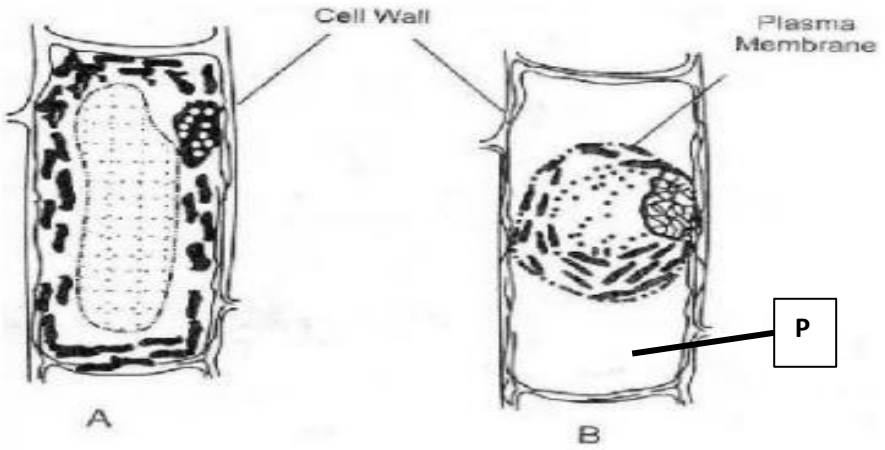
b) A Kingdom whose members lack mitochondria

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6. Fill the table below to show differences between guttation and transpiration **(2mks**

Guttation	Transpiration

7. A plant cell was placed in solution **X** and after a while it appeared as cell **B** shown below



a) Which **TWO** features show that cell **B** is plasmolysed? **(2mks**

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b) Which process facilitated the presence of solution **X** in part **P**? **(1mk**

……

c) What is the nature of solution **X**? **(1mk**

……

8. Name the tissue that forms the following hormones **(2mks**

a) Glucagon ……

b) Progesterone ……

9. Learners suspected that a liquid they found in the laboratory contained starch

a) Describe a procedure they will use to determine whether starch was present **(2mks**

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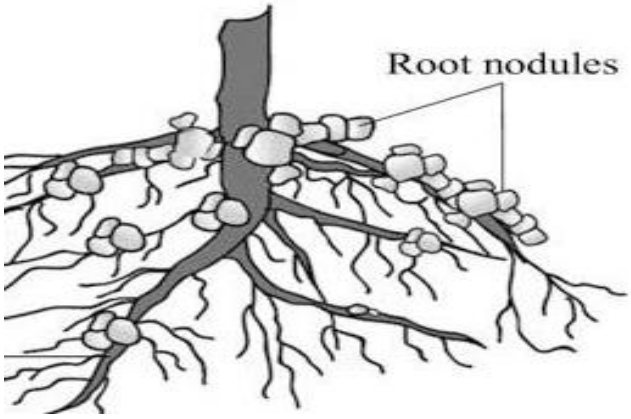
b) State the expected colour change for them to conclude that starch was present **(1mk**

……

c) What is the advantage of plants storing carbohydrates as starch? **(1mk**

……

10. The diagram below shows the root of a leguminous plant



a) Name the bacterium found in the root nodules **(1mk**

……

b) How are the bacteria named in a) important to the legume? **(1mk**

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11. The following data was collected from study of same crop grown in different temperature

Plot ID	Temperature(°C)	Yield (kg)
A	19	115
B	22	146
C	27	132
D	30	94

a) Which is the ideal temperature for the growth of this crop? **(1mk**

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b) Account for the yield obtained in plot **D** **(2mks**

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12. Explain the ways by which movement of the ovum is achieved along the oviduct. **(2mks**

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13. a) Name the salivary gland found beneath the tongue **(1mk**

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b) Outline **TWO** ways in which saliva is suited to its function **(2mks**

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14. The picture below shows a disorder that affects blood vessels in humans



a) Name the disorder shown above **(1mk**

……

b) Which blood vessel is affected by this disorder? **(1mk**

……

15. A tall garden pea plant was crossed with a dwarf garden pea plant.

a) Given that the allele '**d**' for dwarfness is recessive, write the genotype of the offspring if the tall garden pea used was: **(2mks**

i) Pure breed ……

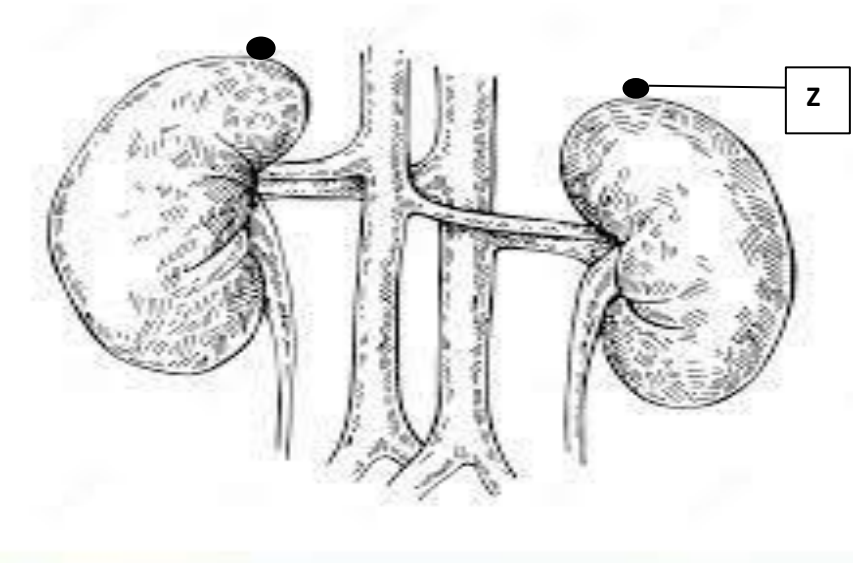
ii) Heterozygous ……...

b) Write the base sequence of the DNA from which the messenger-RNA shown below was derived.

ACUGAACCGUAU **(1mk**

……

16. Use the illustration shown below to answer the questions that follow



a) Why is the right kidney slightly pushed higher up compared to the left kidney? **(1mk**

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b) Explain how gland labelled **Z** help raise amount of Sodium ions (Na+) in the blood **(2mks**

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17. The illustration shown below is of a common organism



a) Why is the above organism medically important globally? **(2mks**

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b) Name the class to which the organism belongs. **(1mk**

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c) Give **TWO** reasons for your answer in b) above **(2mks**

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18. How are the following significant to the development of seeds

a) Seed dormancy **(2mks**

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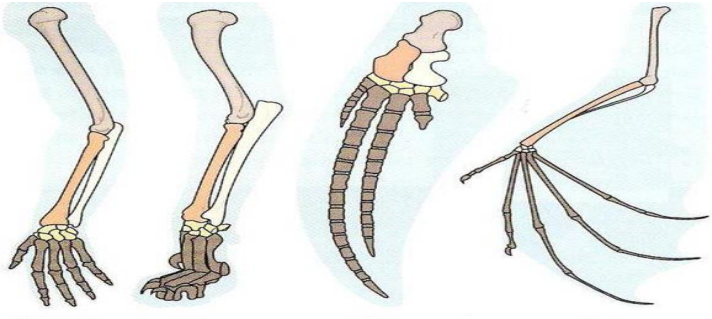
b) Seed dispersal **(2mks**

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19. Use the images shown below to answer questions that follow



a) Why are the structures above said to be homologous structures? **(1mk**

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b) Which type of evolution is represented above? **(1mk**

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c) What is the significance of the type of evolution named in b) to animals? **(1mk**

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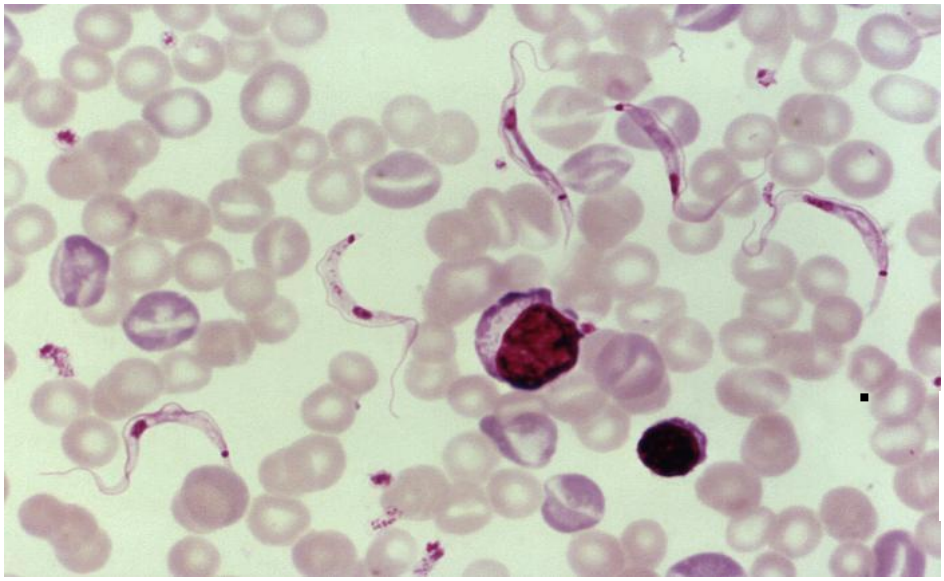
20. A protein has 100 amino acids. Calculate the number of nitrogenous bases in the gene for this protein **(2mks**

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21. Study the photomicrograph shown below and answer the questions that follow



a) Name the parasite shown in the photo above **(1mk**

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b) Which organism is the vector of the parasite? **(1mk**

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c) Calculate the magnification used to obtain the image shown above **(3mks**

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22. a) Name the chemical form in which the following are transported in the blood **(2mks**

i) Carbohydrates

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ii) Carbon (IV) Oxide

……

b) Explain why transfusion of blood from a blood group **B** donor to a recipient with blood group **A** may be fatal. **(2mks**

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23. Use the photograph shown below to answer questions that follow



a) Explain the role of prothoracic gland during this phase of metamorphosis **(2mks**

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b) State the significance of this process to the life of the insect **(1mk**

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24. An animal has 6 molars, 2 canines, 4 incisors and 6 premolars in the lower jaw while the upper jaw has 6 molars, 4 premolars, 0 incisors and 2 canines in the upper jaw

a) What is the significance of absence of incisors in the upper jaw to the feeding of the animal **(2mks**

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b) Write the correct dental formula for the animal **(1mk**

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c) Why do such animals have a longer alimentary canal? **(2mks**

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25. Describe double fertilization in flowering plants **(4mks**

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KCSE 2023 PREMOCK EXAMS

SERIES 1

BIOLOGY

PAPER 2

TIME: 2 HOURS

NAME……

SCHOOL…… SIGN……

INDEX NO…… ADM NO……

SECTION A: (40 MARKS)

Answer all questions in the spaces provided.

1. The diagrams below show samples of blood obtained from two different persons **A** and **B**.



PERSON A



PERSON B

a) What genetic disorder is person B suffering from? **(1 mark)**

……

b) State **one** advantage and **one** disadvantage of the disorder exhibited in person A **(2 mark)**

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c) Work out the genotypes and phenotypes of the resulting offsprings of a marriage between person A and person B **(5 marks)**

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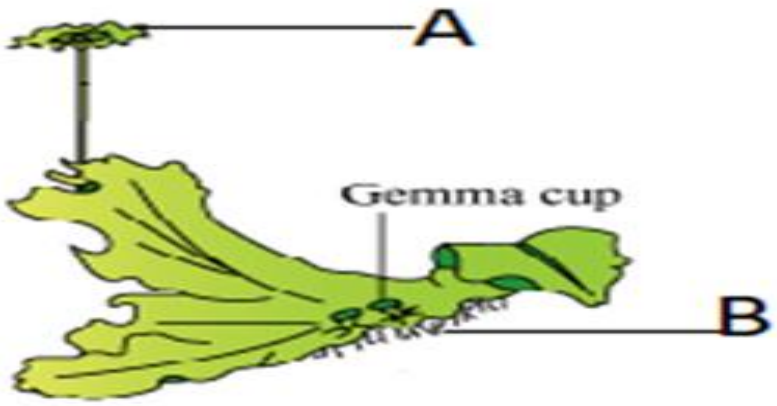
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2. Study the diagram below and answer the questions that follow.



a) Name the division to which the organism belongs giving two reasons for your answer **(3 marks)**

Division:……

Reasons…….……

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b) Name the function of the parts labelled

A ……(1 mark)

B ……(1 mark)

c) State **three** differences between the process of fertilization in the above named division and in a flowering plant. **(3 marks**)

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3a). Explain the meaning of the term tropism or tropic response . **1mk**

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b) Explain how tendrils of climbing plants coil around a support**.** **4mks**

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c) The leaves of some insectivorous plants make very rapid movements when they are touched byan insect.

i) Give an example of such plants. **1mk.**

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Ii) How does the response come about? **1mk.**

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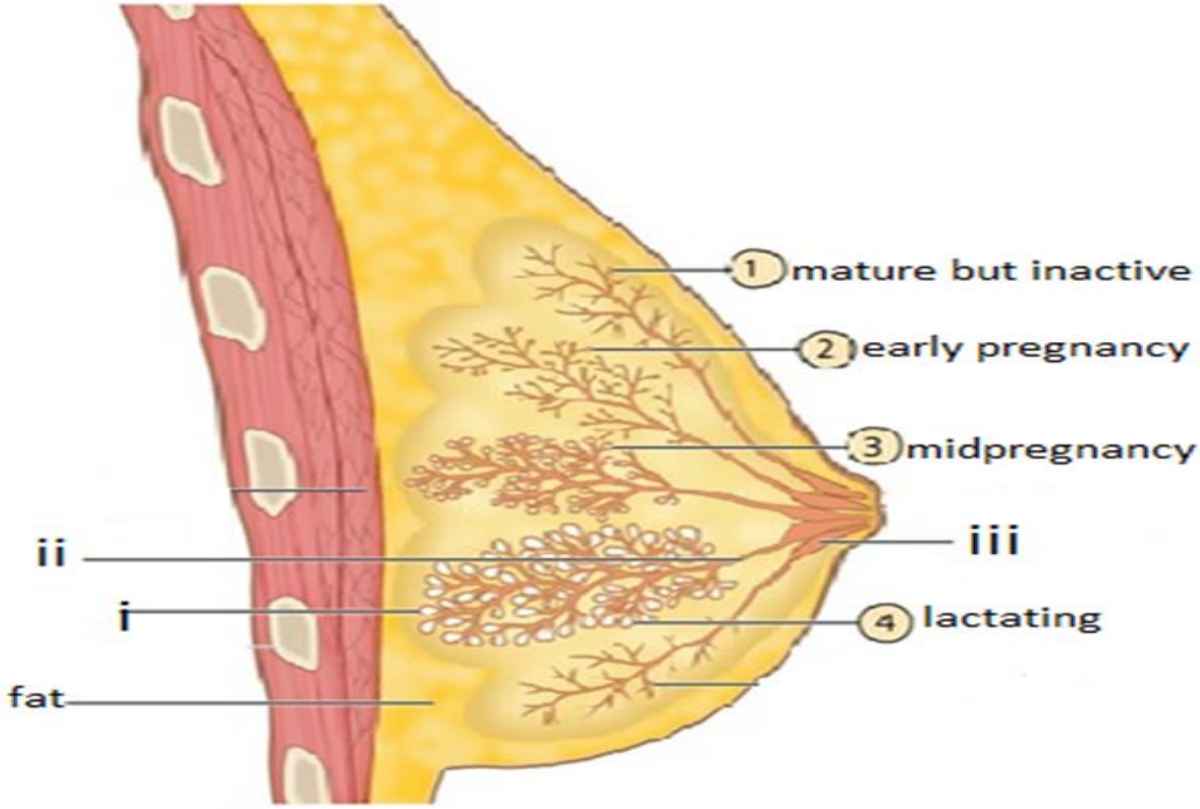
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iii) What is the importance of the response? **2mks**

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4. The diagram below is a section from the mammalian body. Study and use it to answer the questions that follow.



a) Name the parts labelled;

(i)……(1 mark)

(ii)……(1 mark)

(iii)……(1 mark)

b) Describe the process of milk letdown **(5 marks)**

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5. (i)In an experiment, food sample A was respired by an organism and the gaseous product was directed into a test tube containing calcium hydroxide solution through a glass capillary tube.

The same experiment was repeated using the same amount of food sample B. It was noted that it takes 15 minutes for the gaseous product of food sample A to turn calcium hydroxide solution white and 50 minutes by gaseous product of food sample B to do the same.

a) Suggest with a reason, the possible identity of food sample A and B **(4 marks)**

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b) Suggest the possible identity of the gaseous product of food samples A and B**.(1 mark)**

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ii) Explain how anaerobic respiration has been applied in making of beer and wines.

(3 marks)

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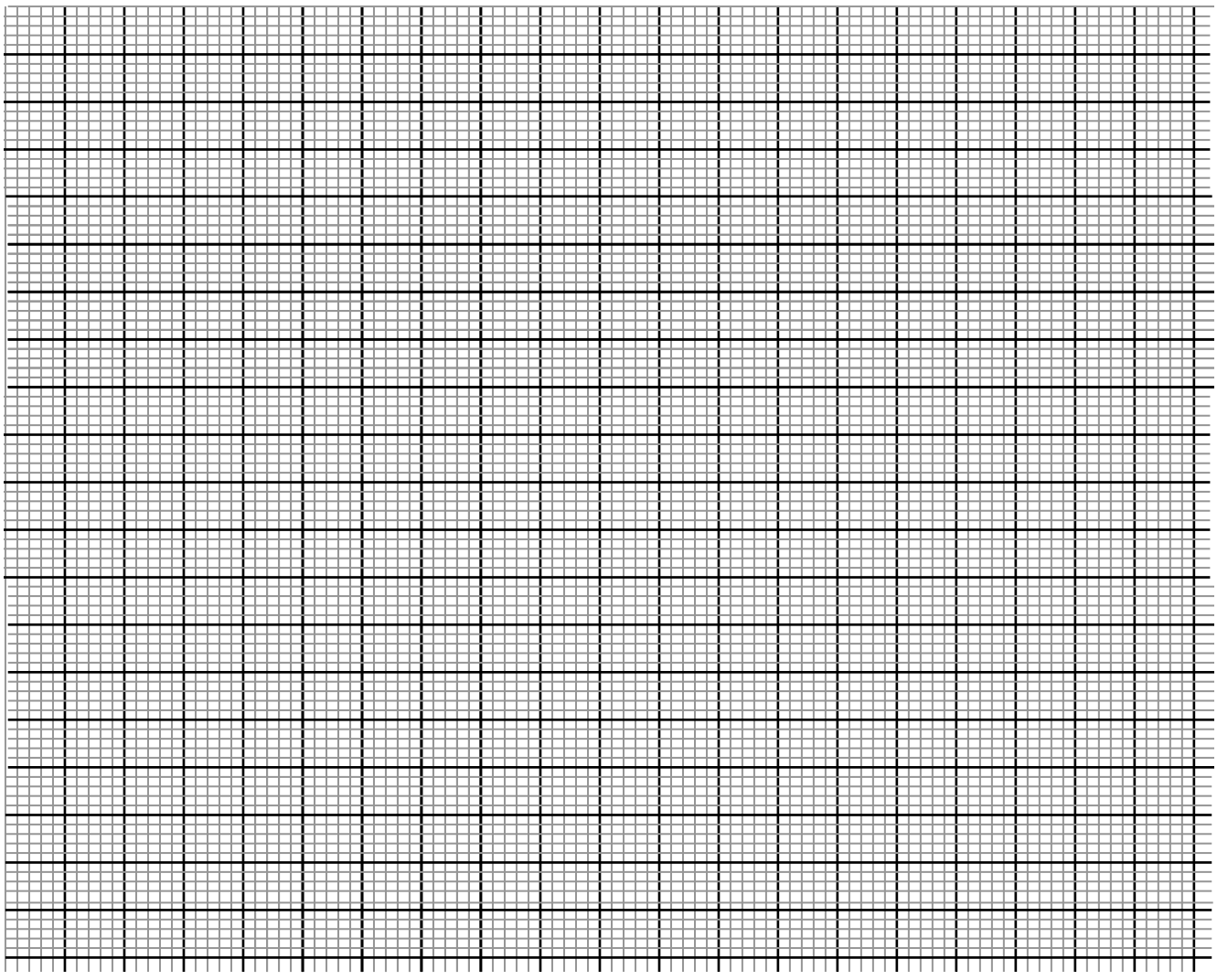
SECTION B: (40 MARKS

Answer question 6 (COMPULSORY) in the spaces provided and either question 7 or 8

6. The table below shows results of an experiment in which small pieces of tradescantia stems were placed in different salt concentrations. After 6 hours they were removed from the solutions, wiped to dry and weighed. The results are as shown below. Study the table and answer the questions that follow.

Salt concentration (mg)	Percentage change in weight
2.5	+11
5.0	+8
7.5	+5
10.0	+3
12.5	+2
15.0	+1
17.5	-2
20.0	-8
22.5	-9.5
25.0	-11

a) i)Draw a graph of the percentage change in weight against salt concentration**(6 marks)**



ii) From the graph determine the salt concentration that is equal to the concentration of the tradescantia cell sap. **(1 mark)**

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b) Account for the following changes in the weight.

(i) Percentage positive change **(4marks)**

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(ii) Percentage negative change **(3 marks)**

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c) Briefly describe how the above physiological process brings about upright posture in seedlings **(3 marks)**

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d)i) Define the physiological process in (c) above **(1 mark)**

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ii)State any **two** differences between the physiological process above and the physiological process that root hairs use to absorb mineral salts from a soil solution that is hypertonic to their cell saps **(2 marks)**

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7.a) Explain the biological importance of abiotic factors in seed germination. **(12 marks)**

b) Explain the following evidences of organic evolution.

(i) Comparative anatomy **(5 marks)**

(ii) Geographical distribution **(3 marks)**

8.In terms of homeostatic balance in the body, describe the function of the following body systems in regulation of blood sugar level. **(20 marks)**

a) Digestive system

b) Circulatory system

c) Respiratory system

d) Nervous system

e) Hormonal system

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KCSE 2023 PREMOCK EXAMS

SERIES 1

BIOLOGY

CONFIDENTIAL

Candidates require the following in the working bench

QUESTION 1

a. *Mixture J: Solution containing a mixture of sucrose and vitamin C.*

b. *Benedict's solution,*

c. *Dilute hydrochloric acid solution.*

d. *Iodine solution*

e. *Dichlorophenol – indophenol (DCPIP) solution,*

f. *Sodium hydrogen – carbonate,*

g. *Means of heating,*

h. *5 test tubes,*

i. *Test tube holder*

j. *Test tube rack*

QUESTION 2

a. Photograph Q: complete hibiscus flower (Each candidate should be provided with a coloured photograph of hibiscus flower)

KCSE 2023 PREMOCK EXAMS

SERIES 1

BIOLOGY

PAPER 3

TIME: 1¾ HOURS

NAME……

SCHOOL…… SIGN……

INDEX NO…… ADM NO……

1. You are provided with an unknown mixture labelled J

You are also provided with Benedict's solution, dilute hydrochloric acid solution, iodine solution, Dichlorophenol-Indophenol (DCPIP) solution. Sodium hydrogen-carbonate solution, means of heating, test tubes, test tube holder and a test tube rack.

a) Using the reagent provided only, test for the food substances in mixture J. Record inthe table below the chemical test, the procedure of the test, your observations and conclusions. **8mks**

Chemical test	**Procedure**	**Observations**	**Conclusions**

b) Which of the components of mixture J does not undergo digestion in the mammalian digestive system? **1mk**

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c) i)Name a deficiency disease that may result from a deficiency of the component identified in (b) above. **1mk**

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d) Name a common carbohydrate that could be present in mixture J. **1mk**

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e) State the role of hydrochloric acid and sodium hydrogen carbonate in the experiment. **2mks**

Hydrochloric Acid

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……

Sodium Hydrogen Carbonate

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2. The photographs below show a flower specimen. Study it carefully and use to answer the questions that follow.



a) On the photograph, label the following parts **3mks**

i. Stigma

ii. Style

iii. Staminal tube

b) i) Classify the plant from which the flower was picked into the taxonomic groups listed below.

4mks

Kingdom

……

Division

……

Sub division

……

Class

……

ii) Name three observable features from the photograph of the class you named in (a) (i) above.

3mks

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c) Suggest the pollination agent of this flower. Give reasons for your answer.

Pollinating agent **1mk**

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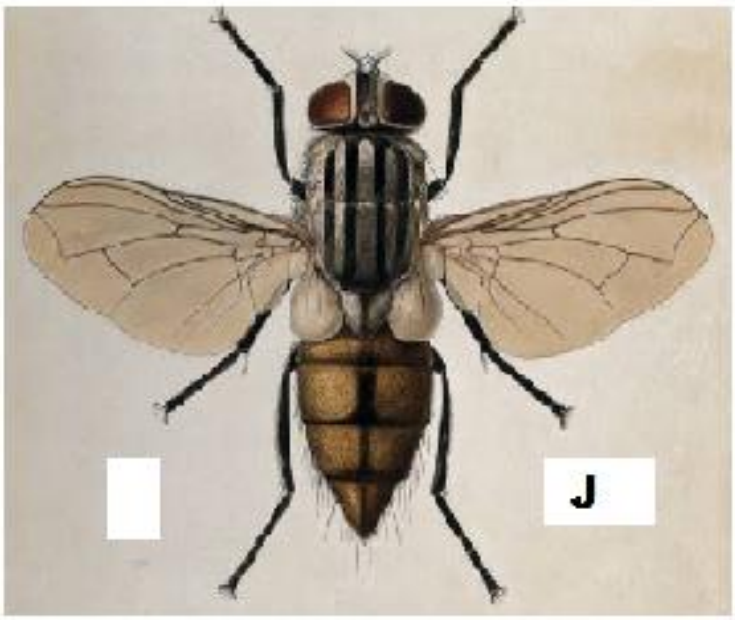
Reasons **2mks**

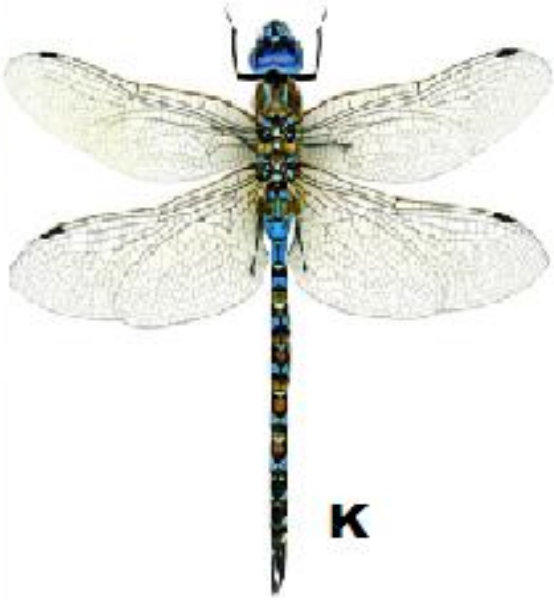
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3. Below are photographs of two specimens, **J** and **K.** Both of them belong to the same Phylum and Class. Observe them carefully before you answer the questions that follow.





a) Name the class to which **J** and **K** belong and support your answer with two reasons.

Class **1mk**

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Reasons **2mks**

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b. Suggest why the transport fluid in **J** and **K** has no haemoglobin. **2mks**

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c. The actual length of specimen K is 8cm, given that both J and K are under the same magnification, determine the actual length of J **3mks**

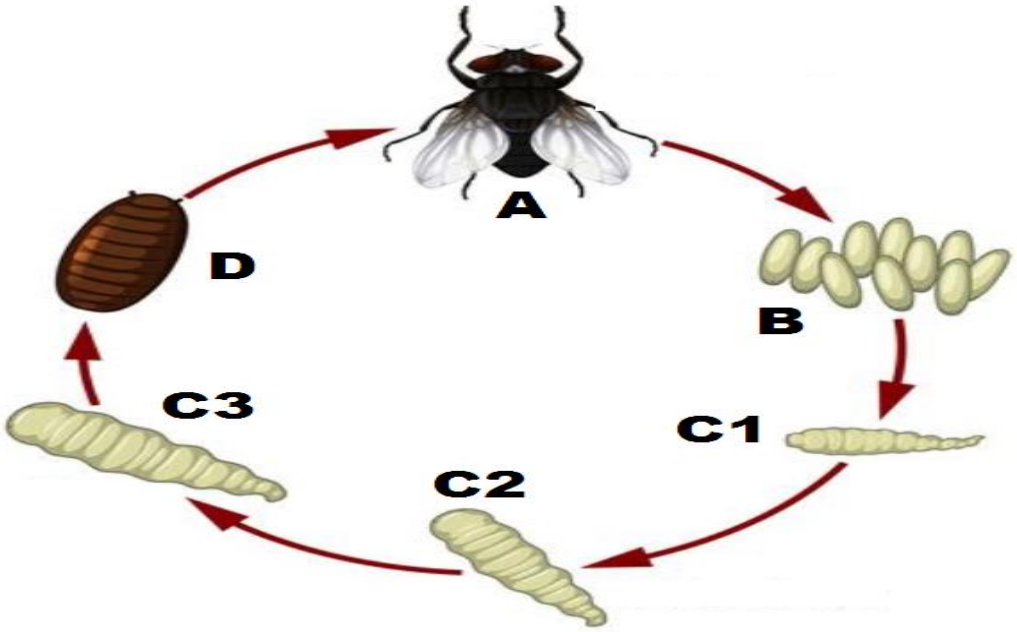
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d. Below is a diagram showing the life cycle of specimen J.



i. Identify the stage labeled **D.** **1mk**

……

ii. Name the hormone responsible for the change from **D** to **A**. **1mk**

……

iii. Explain the differences in the change from **C2** to **C3** and from **C3**

D. **2mks**

C2 to C3

……

……

C3 to D

……

……

iv. State the importance of the process illustrated above in the life cycle of the organism **2mks**

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KCSE 2023 PREMOCK EXAMS

SERIES 1

CHEMISTRY

PAPER 1

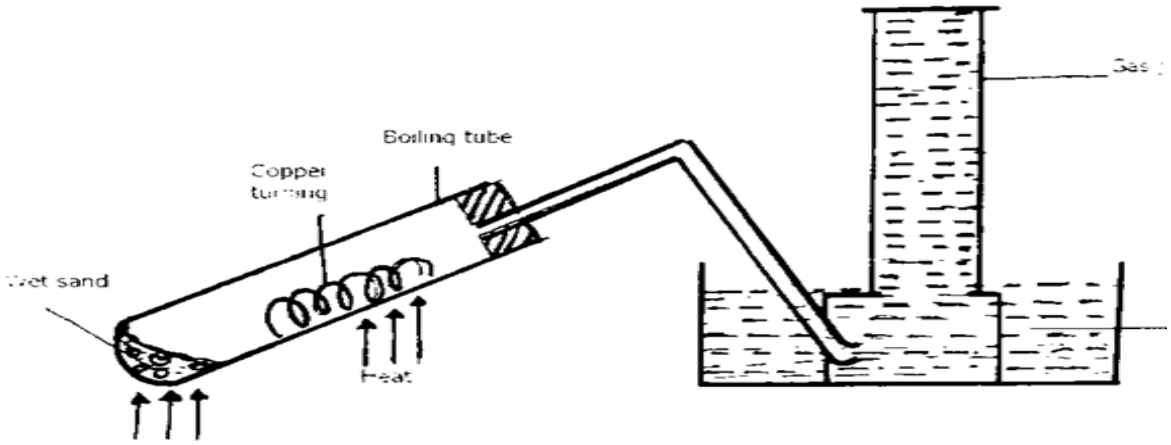
TIME: 2 HOURS

NAME……

SCHOOL…… **SIGN**……

INDEX NO…… **ADM NO**……

1. The set-up below was used to investigate the effect of steam on copper turnings.



(a) What was observed in the boiling tube? Explain **(2mks)**

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(b) Suggest one other metal that would behave as copper turnings in the above set up if used. **(1mk)**

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2. (a) State Graham's law of diffusion. **(1 mk)**

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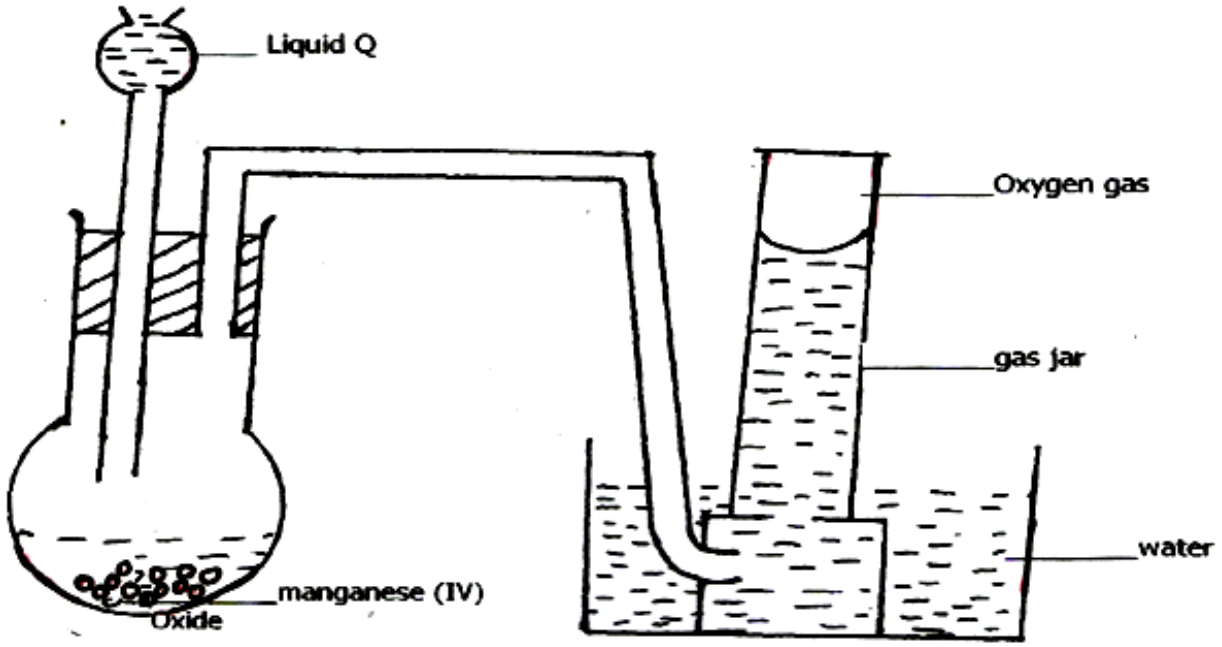
(b) A certain volume of gas S takes 180 seconds to diffuse through a porous plug. Molar mass of S is 18. Equal volume of gas Q takes 240 seconds to diffuse through the same plug. Calculate the molar mass of Q. **(2mks)**

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3. A student set-up the apparatus shown below attempting to collect oxygen gas.



(a) State one mistake the student made. **(1 mk)**

(b) Identify liquid Q. **(1 mk)**

(c) What property enables the gas to be collected as shown above? **(l mk)**

4. Sodium chloride is accidentally mixed with lead(II) sulphate. Explain how sodium chloride crystals can be obtained from the mixture. **(3mks)**

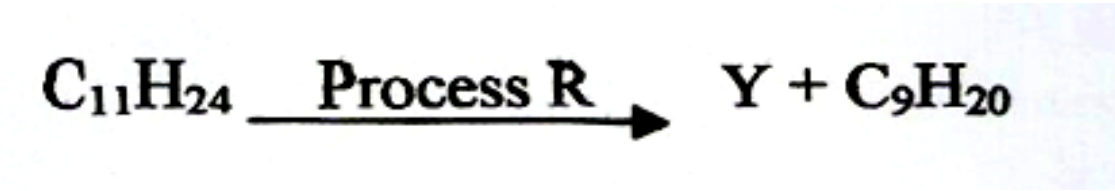
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5. The molecular formula of a hydrocarbon is $C_{11}H_{24}$,

The hydrocarbon can be converted into other hydrocarbons as shown below.



(a)Name process **R** …… **(½ mk)**

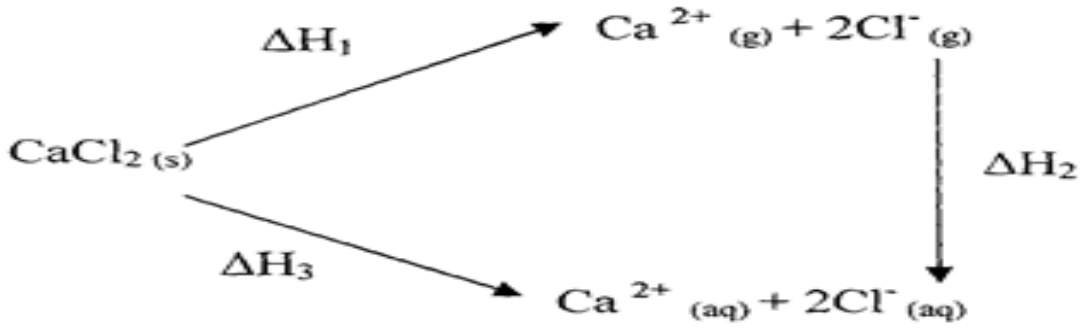
(b) Draw the structural formula of Y and give its name. **(1 ½ mks)**

6. The third number of the alkenes is converted to its corresponding saturated hydrocarbon by hydrogenation. Using the bong energy values given below, answer the questions that follow.

Bond	Bond energy kJ/Mol
H-H	432
C=C	610
C-C	346
C-H	413

Determine the enthalpy change for the conversion of the third member of the alkenes to its corresponding saturated hydrocarbon by hydrogenation. **(3mks)**

7. Use the information in the energy cycle below to answer the questions that follow.



(i) What is the name given to the energy changes? **(3mks)**

H1. ……

H2. ……

H3. ……

(ii) Given that Δ H1= 2237KJ/Mol and ΔH2=-2378KJ/Mol, calculate the value of ΔH3. **(l mk)**

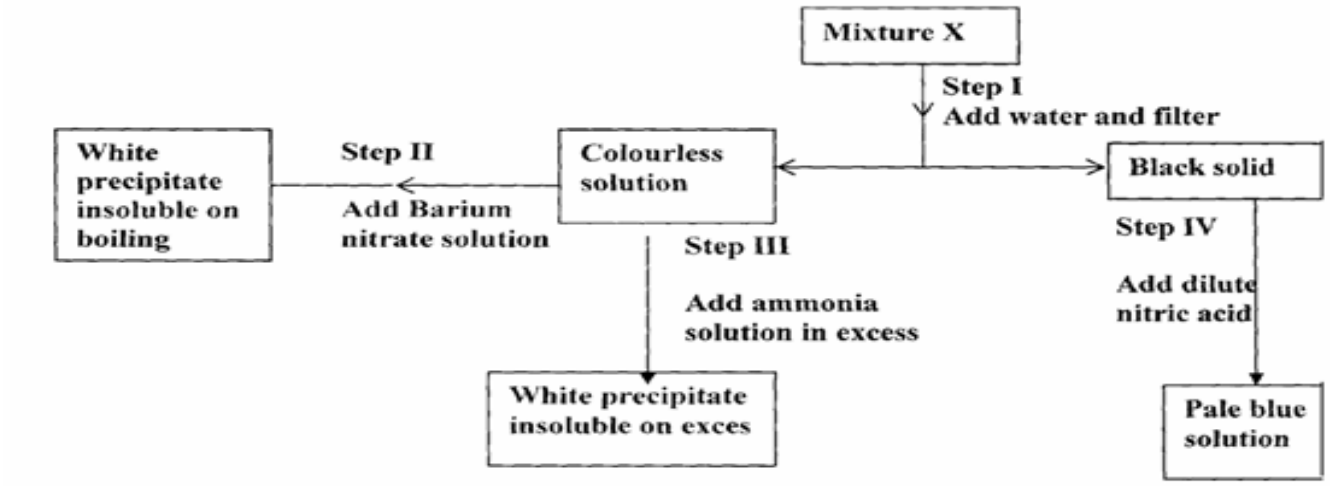
8. When solid Zinc carbonate was added to a solution of hydrogen chloride in methylbenzene, there was no observable change. On addition of some water to the mixture there was effervescence. Explain these observations. **(2mks)**

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9. Study the chart below and answer the questions that follow.



(a) Name:

(i) Cations present in mixture X. **(1mk)**

(ii) Anions present in the solution. **(1mk)**

(b) Write an equation to show how the white precipitate in step III dissolves. **(1mk)**

(c) Name the process outlined in step IV above. **(1mk)**

10. An element X has two naturally occurring isotopes ^{22} X1 and ^{20} X2. If its relative atomic mass is 21.8, calculate the percentage abundance of the more stable isotope. **(2mks)**

11. State two conditions that would make the boiling point of water to be higher than 100^{o}C.

(2 marks)

12. Study the following equilibrium equation.

$2X_2(g) + Y_2(g) \rightleftharpoons 2X_2Y(g)$ $\Delta H = -197kJ/mol$

(a) Suggest two ways of increasing the yield of X_2Y. **(1 mark)**

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(b) Draw the energy level diagram for the forward reaction. **(2 marks)**

13. 5.0g of calcium carbonate were allowed to react with 25cm3 of 1.0M hydrochloric acid until there was no further reaction. Calculate the mass of calcium carbonate that remained unreacted.
(3 marks) **(Ca = 40, C = 12, O = 16)**

14. A student fetched water from a river in a limestone area. He used it for washing and realized that it did not lather easily.

(i) Name the two ions that prevent lathering. **(1 mark)**

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(ii) Given that the structure of soap is C17H35COONa.

Explain by means of ionic equations how the above ions prevent lathering**.** **(2 marks)**

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15. M grams of a radioactive isotope decayed to 5 grams in100 days. The half-life of the isotope is 25 days.

(a) What is meant by half life? **(1 Mark)**

(b) Calculate the initial mass M of the radioactive isotope. **(2 Marks)**

16. 20cm³ of a dibasic acid required 25cm³ of 0.1M NaOH for complete neutralization.

(a) How many moles of sodium hydroxide reacted with the dibasic acid**?** **(1 mark)**

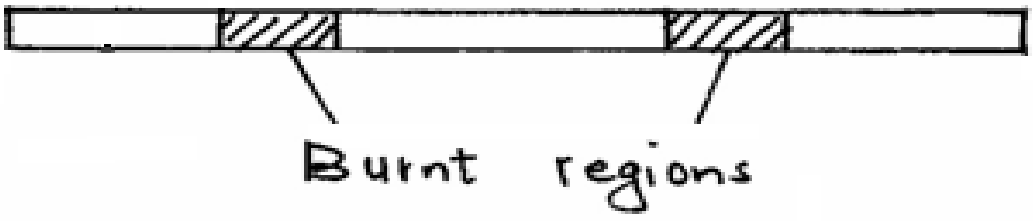
(b) Calculate the concentration of the dibasic acid in moles per litre. **(2 marks)**

17. When $25cm^3$ of 0.5M HCl is added to $25cm^3$ of 0.5M NaOH the temperature of the solution rose from 23 ®C to 26 ®C. Given that the density of the solution is $1gcm^{-3}$ and its specific heat capacity is $4.2Jg^{-1}K^{-1}$.

(a) Determine the amount f heat evolved that caused the temperature rise. **(1 mark)**

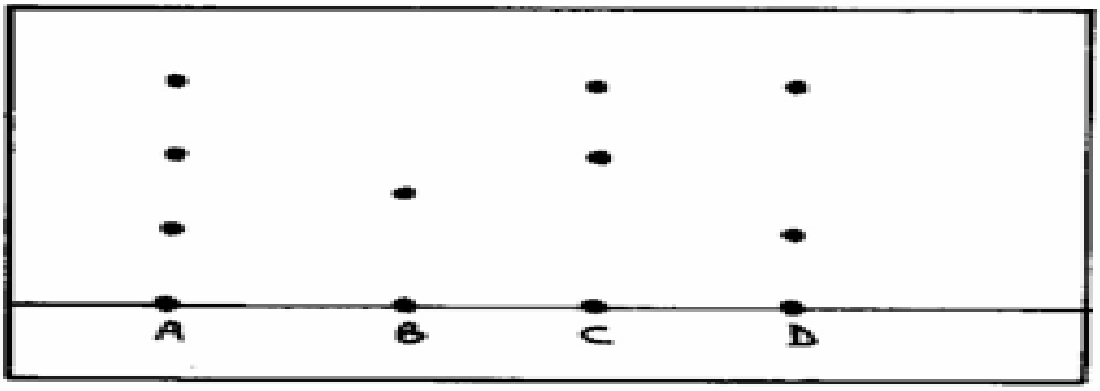
(b) Work out the molar enthalpy of neutralization for this reaction. **(2 marks)**

18. The figure below shows a burning splint that was put across the middle of a non-luminous flame. Explain the results. **(2 marks)**



19. 3.22g of hydrated sodium sulphate, Na2SO4.XH2O were heated to a constant mass of 1.42g. Determine the value of X in the formula. (Na = 23.0, S = 32.0, O = 16.0, H = 1). **(3 marks)**

20. The following chromatogram was obtained in an experiment to investigate the components present in certain dyes.



(a) Which two dyes when mixed would produce A? **(1 mark)**

(b) Which dye is pure? **(1 mark)**

(c) Indicate on the diagram the solvent front. **(1 mark)**

21. The following are electrode potentials of the half cells.

Half-cell	E® volts
M^{2+} (aq)/M(s)	-0.76
C^{2+} (aq)/C(s)	+0.34

a) Calculate the potential difference of the following cell. **(1 mark)**

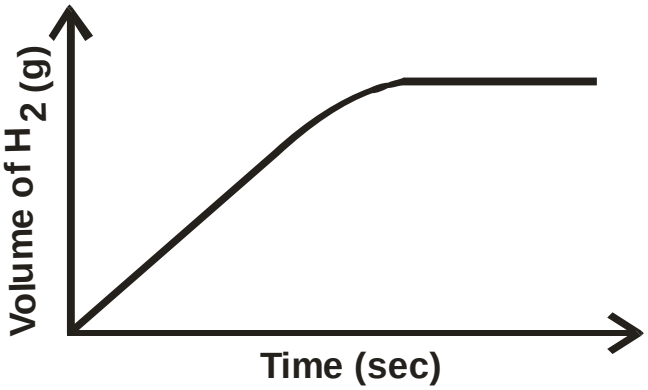
M(s)/M^{2+} (aq) //C^{2+} (aq) /C(s)

b) Draw an electrochemical cell for the cells in (a) above. **(3 marks)**

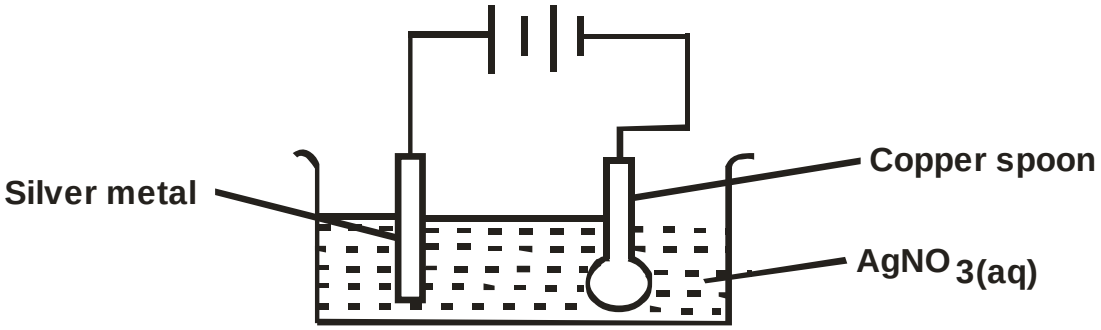
c) Show the electrode which represents the anode. **(1 mark)**

22. The diagram below shows the reaction of zinc granules with hydrochloric acid.

On the diagram sketch the graph that would be obtained if zinc powder of same quantity was used and label it C2. Explain. **(2 marks)**



23. A copper spoon was coated with silver metal as shown below.



i) Write an equation for the reaction that occurs at the copper spoon cathode. **(1 mark)**

ii) How many grams of silver would be deposited on the spoon in two hours using steady current of 0.03A? (1 F = 96500C, Ag = 108.0) **(3 marks)**

24. Copper (II) sulphate solution was electrolyzed using graphite electrodes.

a. State the observations made at the electrodes**.** **(2marks)**

Anode

Cathode

b. Write the equation for the anode reaction**.** **(1mark)**

25. Write down a balanced equation to show the effect of heat on each of the following substances.

i) Anhydrous copper (II) **sulphate** **(1mark)**

ii) Potassium nitrate **salt** **(1mark)**

iii) Silver **nitrate** **(1mark)**

26. A compound with the formula X (OH)3(not its actual chemical formula) reacts as shown below

$X(OH)_3(s) + OH^-(aq) \longrightarrow X(OH)_4(aq)$

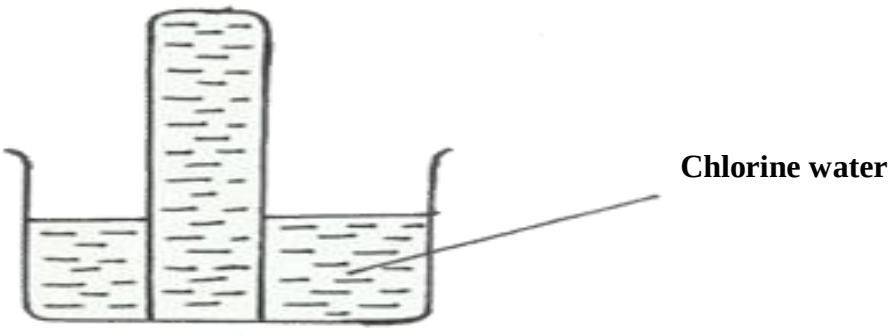
$X(OH)_3(s) + 3\ H^+(aq) \longrightarrow X^{3+}(aq) + 3H_2O(l)$

a) State the name of compounds that behave like X $(OH)_3$ in the two reactions above**.** **(1mark)**

b) Name two elements whose hydroxides behave like that of X**.** **(2marks)**

……

27. Chlorine water was exposed to sunlight for one day using the set up below.



After one day a gas was collected

a) Identify the gas that was collected**.** **(1mark)**

b) State the observations made in the liquid**.** **(2mark)**

……

……

c) What will happen to the pH of the solution after one day**?** **(1mark)**

……

KCSE 2023 PREMOCK EXAMS

SERIES 1

CHEMISTRY

PAPER 2

TIME: 2 HOURS

NAME……

SCHOOL…… **SIGN**……

INDEX NO…… **ADM NO**……

INSTRUCTIONS:

Answer all the questions in the spaces provided.

1. Below is a table of oxides of period 3 elements. Use it to answer the questions that follow.

Element	**Na**	**Mg**	**Al**	**Si**	**P**	**S**	**Cl**
Oxides	Na_2O Na_2O_2	MgO	Al_2O_3	SiO_2	$P2O_3$ P_2O_5	SO_2 SO_3	Cl_2O_7
Nature of oxides	I	II	III	IV	V	VI	VII

(a) Compare the electrical conductivity of oxides of Sodium to those of phosphorus. **(2 mks)**

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(b) Which oxides would react with dilute Sulphuric acid. Explain. **(2 mks)**

……

……

……

(c) Write down balanced equation to show how one of the oxides would react with both 2M hydrochloric acid and 2M Sodium hydroxide solution. **(2 mks)**

(d) What structure would be formed by the oxides of silicon? Explain your answer. **(2 mks)**

……

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……

The melting point of SO_2 is lower than that of MgO. MgO has a giant ionic structure while SO_2 has a simple molecular structure.

(e) Describe how you would prepare a dry sample of lead (II) nitrate from the following reagents. Lead (II) oxide and dilute nitric (V) acid. **(3 mks)**

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(f) Alum used in treating water is both advantageous and disadvantageous. Explain**.** **(2 mks)**

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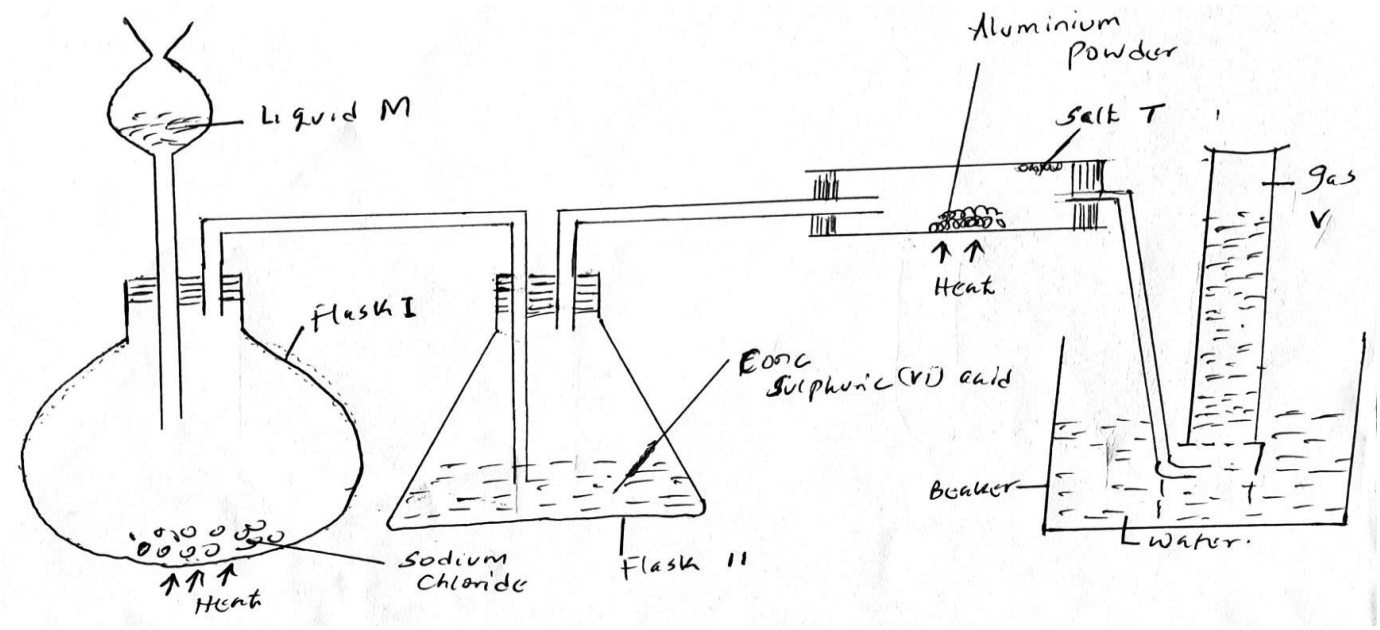
(g) When a blue litmus paper is dipped in a solution of aluminium Chloride it turns red. Explain.

……

……

……

2. The set up below was used to prepare hydrogen chloride gas and salt T. **(1 ½ mks)**



(a) Identify the following:

(i) Liquid M.

(ii) Gas V

(iii) Salt T

(b) Write down balanced chemical equations for reactions that occur at: **(2 mks)**

(i) Flask I

(ii) Combustion tube.

(c) Name the process that formed salt T as shown in the diagram. **(½ mks)**

(d) Sulphuric (VI) acid is used as a drying agent in this experiment. Explain why calcium oxide is unsuitable for the same purpose in this reaction. **(1 mk)**

(e) The water in the beaker was found to have a pH of 2.0 at the end of the experiment. Explain. **(1 mk)**

(f) Calculate the mass of salt T formed if 480cm^3 of hydrogen chloride gas measured at room temperature was reacted with aluminium powder (**Al = 27, Cl = 35.5 MGV = 24dm^3)** **(2 mks)**

(g) Draw a well labeled diagram showing how you would dissolve hydrogen chloride in water. **(2 mks)**

(h) Explain why hydrogen chloride gas dissolved in methyl benzene does not react with calcium carbonate. **(1 mk)**

(i) Using an equation, state the observation made when a gas jar containing hydrogen chloride gas is opened near an open bottle of liquid ammonia. **(1 mk)**

3. Use the information below to answer the questions that follow.

$Ca_{(s)} + \frac{1}{2} O_{2(g)} \longrightarrow CaO_{(s)} \quad \Delta H = -635 kj/mol-1$

$C_{(s)} + O_{2(g)} \longrightarrow CO_{2(g)} \quad \Delta H = -394 kj/mol$

$Ca + C + \frac{3}{2}O_2 \longrightarrow CaCO_{3(s)} \quad \Delta H = -1207 kj/mol$

(a) Calculate the enthalpy change for the reaction. **(3 mks)**

$CaO_{(s)} + CO_{2(g)} \longrightarrow CaCO_{3(s)}$

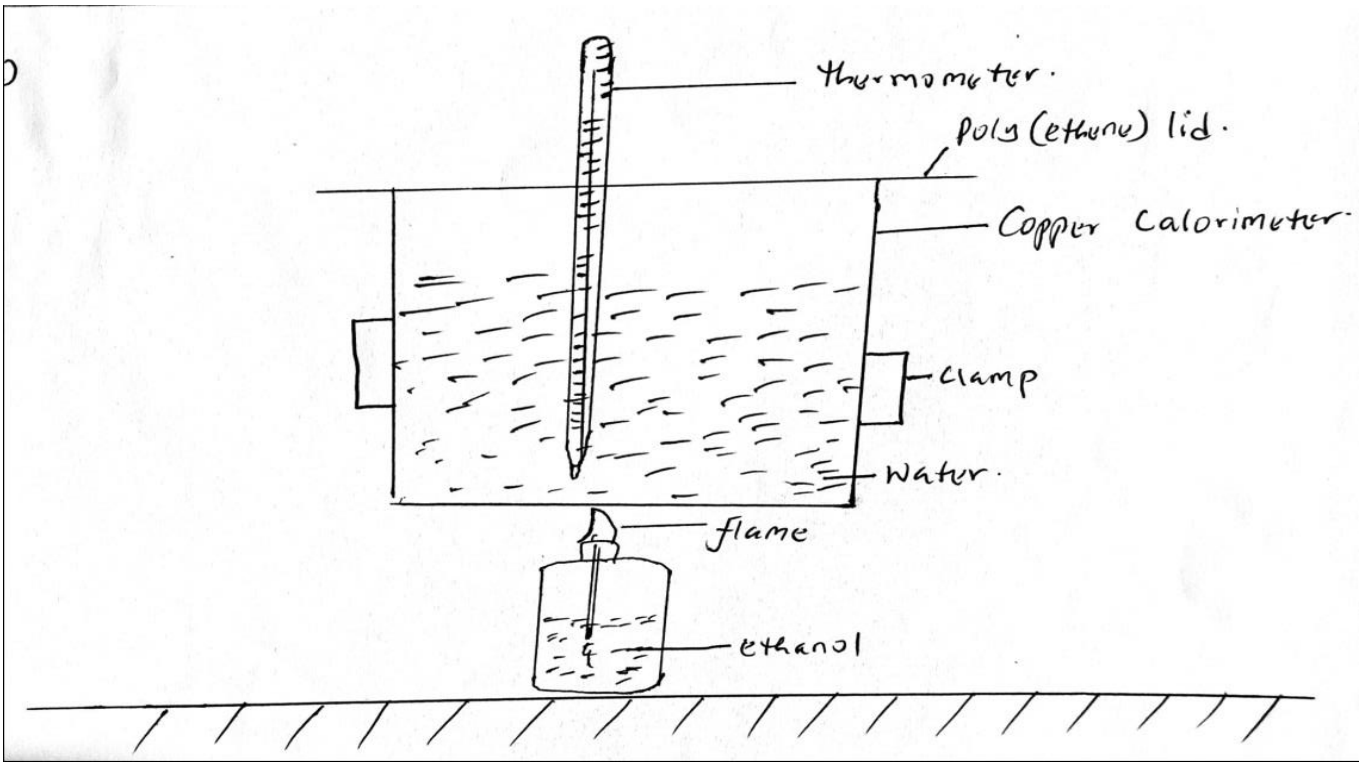
(b) State one factor that should be considered when choosing fuel for cooking**.** **(1 mk)**

……

……

(c) A student used the apparatus shown to calculate the energy released when ethanol burns.

The energy released by the burning ethanol raises the temperature of the water in the copper colorimeter.



Volume of water used = $500cm^3$

Initial temperature of water = 25^oC

Final temperature of water = 44.5^oC

Mass of ethanol + Lamp before burning = 121.5g

Mass of ethanol + lamp after burning = 120.0g

Calculate the:

(i) Heat evolved during the experiment (density of water = $1g/cm^3$, specific heat capacity of water = $4.2jg^{-1}K^{-1}$) **(3 mks)**

(ii) Molar heat of combustion of ethanol. **(3 mks)**

(C = 12, O = 16, H = 1)

(d) Write the thermo equation for the complete combustion of ethanol. **(1 mk)**

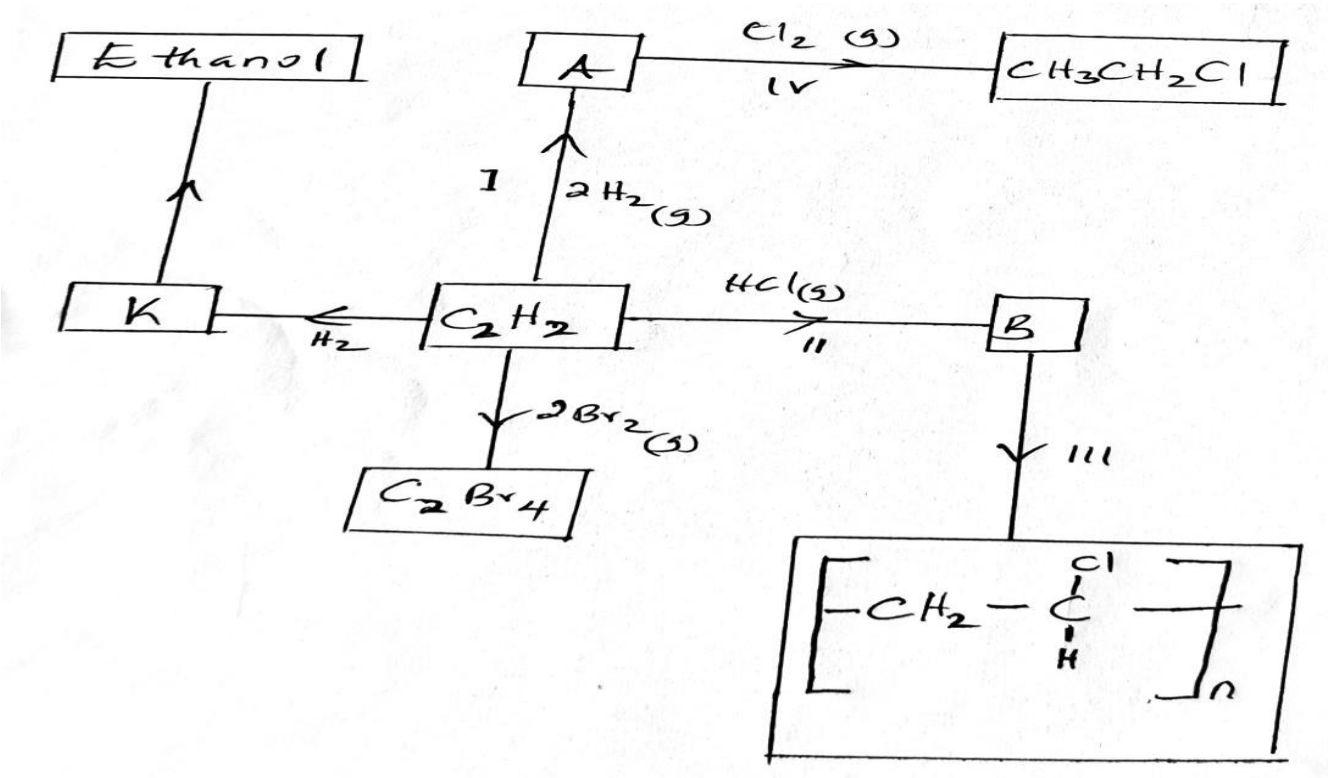
(e) Sketch a simple energy diagram for the reaction of ethanol in air. **(3 mks)**

4. Name the following compounds using the LUPAC system.

(a) (i) $CH_3CH_2COOCH_2CH_3$ **(1 mk)**

(ii) $CH_3CH_2CHC{=}CH$ **(1 mk)**

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



(i) Identify the catalyst used in step I. **(1 mk)**

(ii) Name the compounds A and B. **(1 mk)**

A

B

(iii) Give one disadvantage of compound formed in step III. **(1 mk)**

(iv) Name the reactions taking place at steps. **(2 mks)**

III

IV

(c) Compound A and B have the same molecular formula $C_3H_6O_2$. Compound A liberates Carbon (iv) oxide on addition of aqueous Sodium carbonate while compound B does not. Compound B has a sweet smell. Draw the possible structures of:

(i) Compound A **(1 mk)**

(ii) Compound B. **(1 mk)**

(d) A student mixed equal volumes of ethanol and butanoic acid. He added a few drops of concentrated Sulphuric (vi) acid and warmed the mixture.

(i) Name and write the formula of the main products. **(2 mks)**

(ii) Which homologous series does the product named in (i) above belong**?** **(1 mk)**

5. Use the standard electrode potentials given below to answer the questions that follow.

Element	**Volts(V)**
$Ag^{+}_{(aq)} + e^- \longrightarrow Ag(s)$	+ 0.80
$Cu^{2+}_{(aq)} + 2e^- \longrightarrow Cu(s)$	+ 0.34
$Pb^{2+}_{(aq)} + 2e \longrightarrow Pb(s)$	- 0.13
$Zn^{2+}_{(s)} + 2e^- \longrightarrow Zn(s)$	- 0.76

(a) Select two half-cells which when combined give the lowest workable cell (lowest e.m.f). **(1 mk)**

(b) Calculate the e.m.f of the cell formed by combining the two half-cells in (a) above**.(1 mk)**

(c) (i) Select the strongest oxidizing agent. **(½ mk)**

(ii) Strongest reducing agent **(½ mk)**

(d) A cell was set up using lead and zinc electrodes as shown below.

(i) Write down the half equation for the half-cell in which oxidation occurs. **(1 mk)**

(ii) Write down the overall cell equation. **(1 mk)**

(iii) What is the role of the salt bridge **(2 mks)**

(e) An iron cup was electroplated using chromium. The chromium electrode and the iron cup was thoroughly cleaned and weighed before being dipped into the electrolyte.

(i) Why was it necessary to clean the metals before dipping them into the electrolyte? **(1 mk)**

(ii) A current of 0.75A was passed through the solution for one hour and four minutes. The mass of chromium deposited on the cup was 0.52g (1 Faraday = 96500C, Cr = 52)

I. Calculate the quantity of electricity. **(1 mk)**

II. How many moles of chromium were deposited? **(1 mk)**

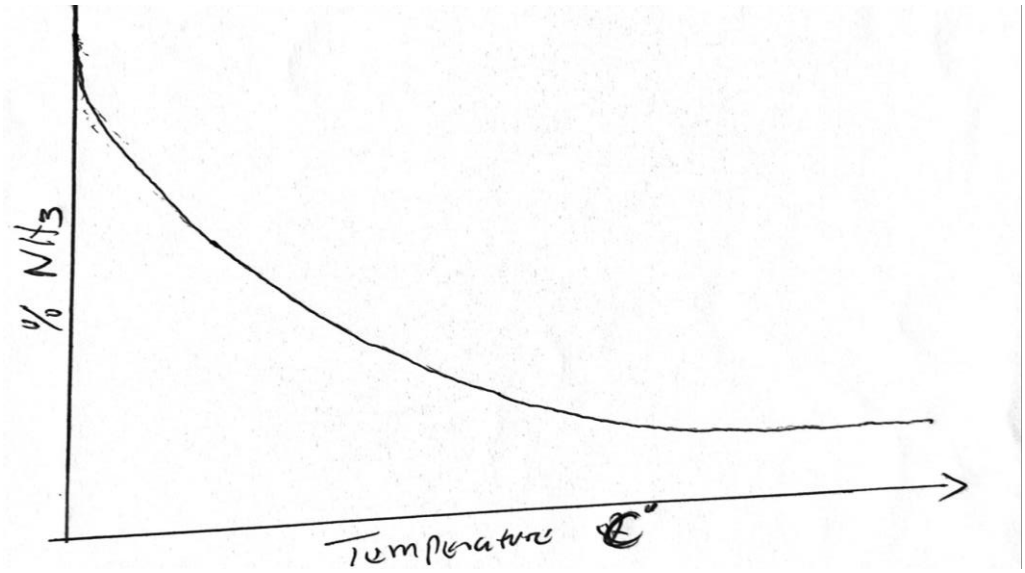
III Calculate the quantity of electricity to deposit one mole of chromium**.** **(2 mks)**

IV. Calculate the number of Faradays required to deposit one mole of chromium and hence deduce the change of ion. **(2 mks)**

6. Nitrogen and hydrogen react to form ammonia gas as shown in the following equation.

$$N_{2(g)} + 3H_{2(g)} \longrightarrow 2NH_{3(g)} \quad \Delta H = -97 \text{ Kj/mol}$$

The figure below shows how the percentage of ammonia gas in the equilibrium mixture changes with temperature.

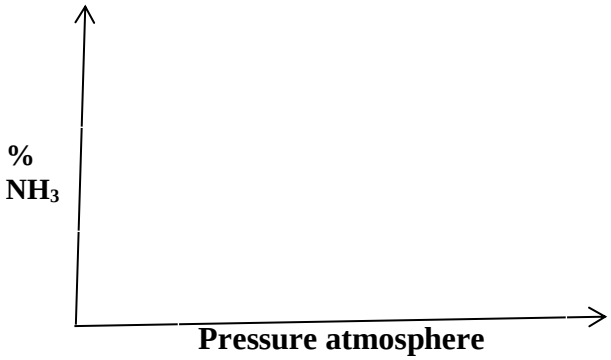


(a) Explain why the percentage of ammonia gas changes as shown in the figure above. **(2 mks)**

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……

(b) On the following axis, sketch a graph showing how the percentage of ammonia gas in the equilibrium mixture changes with pressure. **(1 mk)**



(c) Bismuth chloride ($BICl_3$) reacts with water according to the equation given below.

$$BiCl_{3(g)} + H2O_{(l)} \longrightarrow BiOCl_{(s)} + 2HCl_{(aq)}$$

(i) State what would happen when a few drops of dilute hydrochloric acid are added to the mixture at equilibrium. **(1 mk)**

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

……

……

(d) (I) In that harbor process, the industrial manufacture of ammonia is given by the following equation:

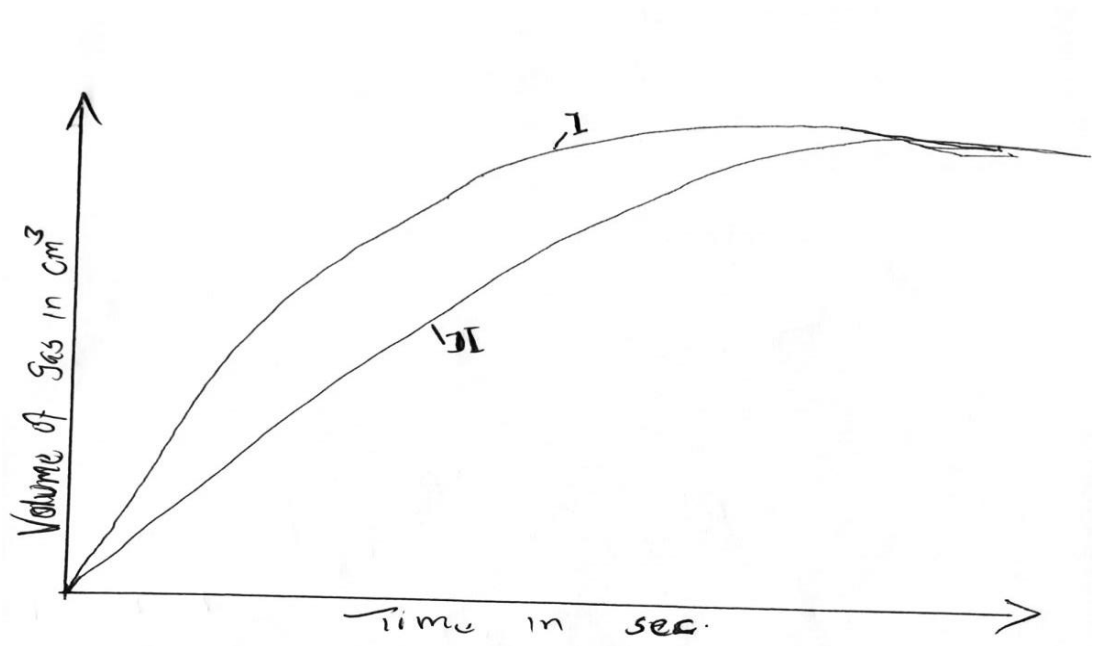
$N_{2(g)} + 3H_2 \longrightarrow 2NH_{3(g)}$ $\Delta H = -97jh/mol$

(i) Name one source of hydrogen used in the process. **(1 mk)**

(ii) Name the catalyst used in the above reaction. **(1 mk)**

(iii) What is the effect of increasing temperature on yield of ammonia. Explain. **(2 mks)**

(II) The curves below were obtained when equal volumes of 2M HCl were reacted with 3.0g of marble chips ($CaCO_3$). In one of the reactions, the acid was warmed before adding this marble chips.



(i) Write down the equation for the reaction. **(2 mks)**

(ii) Identify the curve representing the reaction where the acid was warmed. **(1 mk)**

KCSE 2023 PREMOCK EXAMS

SERIES 1

CHEMISTRY

PAPER 3

CONFIDENTIAL

In addition to the apparatus and fittings found in a Chemistry Laboratory, each candidate will require the following:

1. *About 75cm^3 of solution M*
2. *About 100cm^3 of solution N*
3. *A burette*
4. *A pipette*
5. *Two conical flasks*
6. *About 1.5g of metal P*
7. *About 1.6g of metal Q*
8. *About 40cm^3 of solution S*
9. *About 40cm^3 of solution*
10. *A thermometer (0 - 110^{o}C)*
11. *2 plastic beakers 100ml*
12. *A measuring cylinder 50ml*
13. *About 10cm^3 of solution U*
14. *About 0.5g of solid J*

ACCESS TO:

1. *2M Sodium hydroxide*
2. *2M Ammonium hydroxide*
3. *1M Lead II Nitrate* } *Supplied with a dropper*
4. *0.5M Barium Nitrate*
5. *0.5M Hydrochloric acid*

NOTES:

1. Solution M is prepared by dissolving 3.2g of $KMnO_4$ in 400cm^3 of Sulphuric acid and diluting to one litre of solution using distilled water.

2. Solution N is prepared by dissolving 16.7g of $FeSO_4.7H_2O$ in 400cm^3 of $1MH_2SO_4$ and diluting to one litre of solution using distilled water. The solid should be dissolved in the Sulphuric acid immediately after weighing.

3. *Metal T is magnesium powder.*

4. *Metal Q is Iron powder*

5. *Solution S is 0.5M $FeSO_4$*

6. *Solution U is 0.5M $AlCl_3$*

7. *Solid J is maleic acid*

KCSE 2023 PREMOCK EXAMS

SERIES 1

CHEMISTRY

PAPER 3

TIME: 2 HOURS

NAME……

SCHOOL…… SIGN……

INDEX NO…… ADM NO……

INSTRUCTIONS:

1. (a) - You are provided with solutions M and N.
   - Solution M is acidified potassium manganite VII containing 3.16g/litre of solute.
   - Solution N was prepared by dissolving 4.17g of solid N.
   - $FeSO_4.XH_2O$ is distilled water to make $250cm^3$ of solution.

   You are required to determine the value of X in formula $FeSO_4.XH_2O$

Procedure

Place solution M in a burette. Pipette $25cm^3$ of solution N into a $250cm^3$ conical flask. Titrate solution N with solution M until a permanent pink colour just appears. Record your results in the table below.

Repeat the above procedure two more times.

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

(4 mks)

(b) Calculate the average volume of solution M used. **(1 mk)**

(c) Determine the:

(i) Concentration of potassium manganite VII in moles per litre.

(K = 39, Mn = 55, O = `16) **(2 mks)**

(ii) The number of moles of potassium (VII) used. **(2 mks)**

(d) Calculate the concentration of solution N in grams per litre. **(2 mks)**

(e) Given the ionic equation for the above equation reaction is:

$MnO^-_{4(aq)} + 5Fe^{2+}_{(aq)} + 8H^+_{(aq)} \longrightarrow Mn^{2+}_{(aq)} + 5Fe^{3+}_{(aq)} + 4H_2O_{(l)}$

Determine the number of moles of $FeSO_4.XH_2O$ in:

(i) $25cm^3$ of solution N. **(1 mk)**

(ii) $100cm^3$ of solution N. **(1 mk)**

(f) Using the values, calculate in (d) and (e) (ii) above, determine:

(i) The Relative formula mass of $FeSO_4.XH_2O$ **(2 mks)**

(ii) The value of X in the formula $FeSO_4.XH_2O$ given (Fe = 56, S = 32, O = 16, H = 1)

(2 mks)

2. You are provided with:

- About 1.5gd of metal P – Magnesium powder
- About 1.6g of metal Q – Zinc powder
- Exactly 0.5M $FeSO_4$, solution
- Exactly 0.5 $CUSO_4$, solution T

You are required to determine the molar enthalpy of displacement of Copper II ions using metal P.

PROCEDURE I

Place exactly $25cm^3$ of solution in 100ml plastic beaker. Measure the initial temperature of the solution and record it in table II below. Add all of the metal P at once. Stir the mixture carefully with the thermometer. Record the highest temperature reading in the table below.

(a) **(1 mk)**

Final temperature ^oC	
Initial temperature ^oC	

(b) Determine the change in temperature, ΔT_1. **(1 mk)**

(c) Calculate the:

(i) Heat change for the above reaction.

(Assume the specific heat capacity of the solution is 4.2j/g/k, and density of solution is 1g/cm^3) **(2 mks)**

(ii) The molar enthalpy of displacement of Fe^{2+} with P; ΔH_1. **(1 mk)**

(d) Write thermochemical equation for this reaction. **(1 mk)**

Procedure II

Place exactly 25cm^3 of solution T in 100mly plastic beaker. Measure the initial temperature of the solution and record it in the table III below. Add all of the metal Q at one. Stir the mixture carefully with the thermometer and record the highest temperature reached in the table III below.

(a)

Final temperature ^oC	
Initial temperature ^oC	

(b) Determine the change in temperature, ΔT_2. **(1 mk)**

(c) Calculate the:

(i) Heat change for the above reaction.

(Assume the specific heat capacity of solution is 4**.2j/g/k, density is (g/cm^3)** **(1 mk)**

(ii) Molar heat of displacement of Cu^{2+} with metal Q (ΔH_2) **(2 mks)**

(d) Write the thermochemical equation for this reaction. **(1 mk)**

(e) Using the two thermochemical equations above, determine the heat change for the determine the heat change for the reaction. **(2 mks)**

$Mg_{(s)} + Cu^{2+}_{(aq)} \longrightarrow Mg^{2+}_{(aq)} + Cu_{(s)}$ ΔH =

3. You are provided with solution U, carry out tests below. Write your observations and inferences in the spaces provided.

Divided the solution into five portions.

(a) To the first portion add aqueous Sodium hydroxide dropwise until in excess.

Observations	**Inferences**
(1mk)	**(1mk)**

(b) To the 3rd portion add aqueous ammonium hydroxide dropwise until in excess.

Observations	**Inferences**
(½ mk	**(½ mk)**

(c) To the 3rd portion add 2.3 drops of 1M HCl

Observations	Inferences
(½ mk	**(½ mk**

(d) To the 4th portion, add 2 – 3 drops of Barium Nitrate.

Observations	Inferences
(1 mk)	**(1 mk)**

(e) To the 5th portion, add 2 – 3 drops of Lead II Nitrate solution then warm the mixture.

Observations	Inferences
(½ mk	**(½ mk)**

You are provided with solid S. Carry out the tests below. Record your observations and inferences in the tables below.
Place all solid S into a boiling tube. Add about 5cm3 of distilled water and shake well. Divide it into three portions.

(a) To the first portion, add 2 – 3 drops of bromine water.

Observations	Inferences
(½ mk)	**(½ mk)**

(b) To the second portion, add 2 – 3 drops of acidified potassium dichromate VI solution and shake well.

Observations	Inferences
(½ mk)	(½ mk)

(c) To the third portion, add a small amount of solid Sodium hydrogen carbonate.

Observations	Inferences
(½ mk)	**(½ mk)**

KCSE 2023 PREMOCK EXAMS

SERIES 1

ENGLISH

PAPER 1

TIME: 2 HOURS

NAME……

SCHOOL…… SIGN……

INDEX NO…… ADM NO……

FUNCTIONAL WRITING 20 MARKS.

Imagine your friend from the U.S has sent you an email saying that he will be coming over for Christmas Holiday. Reply the email and copy a recipe of a dish you would prepare him once he comes.

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CLOZE TEST (10 MARKS)

Fill in the blank spaces in the following passage with the most suitable word.

Every tree tells _____story, but some are beyond eloquent, holding memories, embodying belief, marking sorrow. _____ hold trees in our imagination, where they grow in strange, wonderful ways _____ Forests inhabiated by fantasy and also _____ Our fears. In fable_____ well as in legend, a forest shelters spirits, witches, and_____ Upon a time, a big bad wolf. We incorporate the rich metaphors_____ trees provide: We turn_____ a new leaf and branch out; ideas blossom_____ Bear fruit. Though our momentum is sapped, our resolve remains deep-rooted, and yet_____ are times when we cant see the forest for the trees.

Adapted from National Geographic March 2017

ORAL SKILLS(30MARKS)

Read the following Acoli song and then answer the questions that follow

If death were not there,
Where would the inheritor get things?
The cattle have been left for the inheritor;
Ee, how would the inheritor get things?
The iron-roofed house has been left for the inheritor;
Ee, if death were not there,
How would the inheritor get rich?
The bicycle has been left for the inheritor;
The inheritor is most lucky;
Ee, brother, tell me,
If death were not there,
Ugly one, whose daughter would have married you?
A wife has been left for the inheritor;
Ee, inheritor, how would you have lived?
The house has been left for the inheritor,
If death were not there,
How would the inheritor get things?

QUESTIONS.

i. Identify and illustrate any two sound patterns used in the song **(2mks)**

……

……

……

ii. Explain their effectiveness. **(2mks)**

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……

……

iii. If you were to perform the song, which words would you stress in line 1 and why? **(2mks)**

……

……

……

iv. Underline the silent letter in the following words **(4mks)**

a) Greenwich

b) Porcelain

c) Isthmus

d) poignant

B . ***Imagine a friend of yours is addressing an audience. Barely before he has gone halfway through his speech, everyone appears restless and some people begin to walk out.***

a. Tell him why the audience was not paying attention **(2mks)**

……

……

……

b. What should your friend do to avoid a similar situation when giving speeches? **(2mks)**

……

……

c. What advise would you give the audience to make them good listeners? **(3mks)**

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……

C. ***Describe the intonation patterns you would use in the following sentences***. **(3mks)**

a. The children repeated their song.

b. I will not leave my child here, I will take her with me.

c. What is the importance of syllabus in songs?

D. ***If you were to participate in a debate contest, explain how you would ensure you win over the audience*** **(5mks)**

i. Give one tongue-twister in your tongue and then translate into English **(1mk)**

……

……

ii. Give two sound images that are likely to be found in your tongue-twister **(2mks)**

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iii. What role do tongue-twisters play in oral communication? **(2mks**

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KCSE 2023 PREMOCK EXAMS

SERIES 1

ENGLISH

PAPER 2

TIME: 2 HOURS

NAME……

SCHOOL…… SIGN……

INDEX NO…… ADM NO……

1.*Read the following passage and answer the questions that follow*. (20mks)

The world has a weight problem. Within the past decade, obesity rates have shot up by 50 percent, rising from 200 million people in 1995 to 300 million in 2003.Even places more familiar with famine than fat are starting to worry about their waistlines. Africa now has weight loss clinics. In a recent survey in India-home to half the worlds undernourished population-55 percent of women between 20 and 69 were found to be found to be overweight .Twenty percent of Chinese adults are overweight. Brazil's childhood-obesity rate has jumped to 239 percent in a generation- four times the growth rate for youth in the United States. In March 2003,the International Obesity task force revealed that 1.7 billion of the planets 6 billion people were overweight or obese. How did we all get so fat? The problem stems from the collision of a number of modern trends; rising affluence and urbanization; the proliferation of conveniences like cars, computers, fast food and television; and the 21st century work culture, with its desk jobs and long hours. In rich countries, the familiar mantra of low-fat diet and exercise is routinely ignored. In the developing world, where health education is frequently non-existent, people are particularly vulnerable to the glamour of American burgers and the comforts of the couch. Rural migrants to cities are suddenly confronted with market-stall snacks and McDonald's. In newly industrialized countries packaged foods and fast food chains are promoted as an index of **affluence.**

The consumption of foods high in fat, sugar and salt-combined with increasingly **sedentary** lifestyles- is worrying health experts. And it is killing us. Diet-linked diseases-chiefly heart disease, cancer, diabetes and hypertension, now account for more than half of all deaths in Arab countries. In Barbados, more than 60 percent of hospital and drug-service budgets go toward coping with obesity-related illnesses. In Chinese hospitals, the number of patients suffering from weight-related

diseases has increased by 30 percent. The problem is so persuasive that the World health Organization has declared obesity a global epidemic.

In many places ,obesity and related illnesses such as diabetes are growing fastest among children and teenagers. These may be because those groups are more vulnerable to the excesses of their new found liberation. teenagers from rich homes have cars and can go to restaurants with their friends, and consume high-fat fast food. Nutritionists also blame food marketing and the proliferation of supermarkets for the rise in childhood obesity. Ultimately, diabetes is incurable. Although changes in lifestyles and diet can help stem the progression of the disease, it never disappears. Most patients are on insulin a decade after diagnosis. The best long-term hope for reversing the trend is for society to get its weight problems under control.

QUESTIONS

(a) What is this passage about? **(1mark)**

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(b) What is achieved by the use of figures in paragraph one? **(2marks)**

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(c)From the information given in paragraph two, how can society get the weight problem under control? **(3marks)**

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(d)According to the passage, what are the indications of the increasing danger of obesity?

(3marks)

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(e)In about 50 words summarize what the passage says about obesity in children and teenagers.

(6marks)

Rough copy

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Fair copy

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(f)In what way is the modern lifestyle a curse rather than a blessing? **(3 marks)**

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(g)Explain the meaning of the following words as used in the passage. **(2 marks)**

(i)Affluence

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(ii)Sedentary

……

QUESTION TWO: SEEN TEXT COMPREHENSION(25MARKS)

Read the extract below and answer the questions that follow.

Helmer: Yes, but you must. Tell me something reasonable that you would particularly like to have.
Nora: No, I really can't think of anything-unless, Torvald-
Helmer :Well?
Nora: (*playing with his coat buttons, and without raising her eyes to his*)If you really want to give something, you might-you might-
Helmer: Well, out with it!
Nora: (*speaking quickly*)You might give me money, Torvald. Only just as much as you can afford; and then one of these days I will buy something with it.
Helmer :But, Nora-
Nora: Oh, do! dear Torvald ; please ,please do! Then I will wrap it up in beautiful gilt paper and hang it on the Christmas tree. Wouldn't that be fun?
Helmer :What are little people called that are always wasting money.
Nora :Spendthrifts- I know. Let us do as you suggest, Torvald, and then I shall have time to think what I am most in want of. That is a very sensible plan, isn't it?
Helmer: (*smiling*)Indeed it is-that is to say, if you were really to save out of the money I give you, and then really buy something for yourself. But if you spend it all on the housekeeping and then really buy something for yourself. But if you spend it all on the housekeeping and any number of unnecessary things, then I merely have to pay up again.
Nora :Oh but, Torvald-
Helmer: You cant deny it, my dear little Nora.(*puts his arm round her waist*).its a sweet little spendthrift, but she uses up a deal of money. One would hardly believe how expensive such little persons are!
Nora: it's a shame to say that. I do really save all I can.
Helmer: (*laughing*) that's very true,- all you can. But you can't save anything!
Nora:(*smiling quietly and happily*)You haven't any idea how many expenses we skylarks and squirrels have, Torvald.
Helmer: You are an odd little soul. Very like your father. You always find some new way of wheedling money out of me, and, as soon as you have got it, it seems to melt in your hands. You never know where it has gone. Still, one must take you as you are. It is in the blood; for indeed it is true that you inherit these things, Nora.
Nora: Ah, I wish I had inherited many of papa's qualities.
Helmer: And I would not wish you to be anything but just what you are, my sweet little skylark. but, do you know, it strikes me that you are looking rather-what shall I say-rather uneasy today.
Nora: Do I?
Helmer: You do, really. Look straight at me.
Nora: (*looks at him*)well?

QUESTIONS

(a) Explain what happens just before this excerpt. **(4marks)**

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(b)In the light of what happens later in the play, why do you think Nora is hesitant to say what she would like? **(4 marks)**

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(c)What shows that Nora's first answer: "Oh, I am sure I don't want anything": was not honest? **(3 marks)**

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(d) Describe Helmer's attitude towards Norah. **(3 marks)**

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(e) Identify the use of imagery in the excerpt. **(3 marks)**

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(f) What is the full import of Nora's statement: 'You haven't any idea how many expenses we skylarks and squirrels have?' **(3 marks)**

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(g) "You are an odd little fool."(Add a question tag). **(1 mark)**

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(h) What is Helmer's attitude towards Nora's father. **(2 marks)**

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(i) Helmer says that Nora looks uneasy. Is this an accurate observation? Explain**.** **(2 marks)**

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3.*Read the following narrative and answer the questions that follow.(20 marks)*

A man had two daughters from two different wives. One of his daughters was motherless, her mother died when she was still a baby. The mother of the other daughter did not like the motherless girl. She did not like her because her daughter loved the step sister more than she loved her. The woman therefore thought out some ways of eliminating her.

One day the woman made an arrangement with a hyena. The hyena was to go and wait for the two girls somewhere in the bush. To the motherless girl she would tie a band like a bangle on the left arm and to her daughter she would tie one on the right arm. After the hyena had gone to wit, she called the two girls, tied the bands accordingly and sent both of them to go and visit one of their aunts. She directed them to follow the path where she asked the hyena to wait for them. On the way the woman's daughter suggested that they should exchange the bangles.

''Why should my mother tie your bangle on the left arm, when everybody else wears theirs on the right arm?'' he complained and took her bangle and put it on her step sisters right arm and took the

one she was wearing and put it on her left arm. They went on with their journey. They had gone half-way through the journey when the hyena came and caught the woman's own daughter and ate her up. The motherless child was terrified and grew hysterical. She cried endlessly. Her grief was so great that she refused to go away from the scene of her sisters tragic death. She wished to die too; to be eaten up by the hyena which had eaten her dear friend and sister. She cried, wailed, wept and grieved for her dear sister, so much that if sorrow expresses by the living would bring back the dead, Awino's sister Nyawino would have returned to life. After the kill, the hyena had gone away but Awino would not leave, She stayed on the spot wailing.

"Aai, what are you doing here alone in the bush?"Some travelers asked her."We were two, and we were going to visit our aunt but my sister has been eaten up by a hyena ,"she cried. The travelers saw her futile determination. They could not leave her there and in any case they were convinced that the parents should know. "No, you go home and take the news of the death of your sister home." The people advised her more persuasively until she accepted to go home.
She arrived home, tired and wet with tears and sweat. She explained to her father what had happened. He became furious and called his wife to explain. but she was so full of grief that she could not talk. The elders were then called. It was agreed unanimously that the woman must be banished from the village because of her jealousy and wickedness. She left the village with regret and shame.

QUESTIONS

(a)Identify and illustrate **four** oral features in this narrative. **(4 marks)**

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(b)Explain **two** aspects of the culture of the community from which this narrative is drawn.

(4 marks)

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(c)What do we learn about the character of Nyawino from this narrative. **(4 marks)**

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(d) Describe the mood of this narrative. **(3 marks)**

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(e) Explain the role of the travelers in the narrative. **(2 marks)**

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(f) "She left the village crying with regret and shame." **(1 mark)**

(Rewrite beginning; Crying……..)

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(g) What moral lesson do we learn from the narrative in relation to Awino's conduct? Illustrate your answer. **(2 marks)**

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4.(a)*Rewrite the following sentences according to the instructions given after each.Do not change the meaning*. **(4 marks)**

(i) All the farmers got a good harvest this year.(rewrite beginning:Not)

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(ii) The old ways are changing .This should be clear to everybody.

(Rewrite as one sentence beginning:That……)

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(iii) Mrs. Mambo said that wall was very badly painted.

(Rewrite in direct speech)

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(iv) When I finished eating,I went to bed.

(Rewrite using the word 'having')

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(b)Complete each of the sentences correctly using the verb in brackets. **(3 marks)**

(i)I…….if I had known.(go)

(ii)She ……..law for six years now.(study)

(iii)If people…….more reasonable,there would be no wars.(be)

(c)Explain the two different meanings in the following sentence.(2 marks)

Kamaru hates visiting relatives.

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(d)Fill in each blank space with the correct alternative from the given choices. (3 marks)

(i) Can you change this…….powder form now?(in,into)

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(ii) My reason for going is ……..I am needed there.(because,that)

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(iii) "…… now seven O'clock",she said.(its,it's)

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(e)*Use the correct form of the word in brackets to fill in the blank space in each of the sentences below.(3 marks)*

(i)This man……..(hero)saved the boy from drowning.

(ii)Her……..(reveal)shocked everyone.

(iii)They were annoyed by the……(warrant)search of the houses.

KCSE 2023 PREMOCK EXAMS

SERIES 1

ENGLISH

PAPER 3

TIME: 2½ HOURS

NAME……

SCHOOL…… SIGN……

INDEX NO…… ADM NO……

INSTRUCTIONS TO CANDIDATES

1. *Answer **three questions only** on the answer sheets provided*
2. *Question **one** and **two** are compulsory*
3. *In question **three,** choose only **one** of the optional texts which you have prepared on.*
4. *Each of your essays **must not** exceed 450 words (2 pages)*
5. *Your answers must be written in English*
6. *Where the candidate presents work on more than one optional texts, only the first one will be considered*

1. IMAGINATIVE COMPOSITION (COMPULSORY) (20 MARKS)

a) Write a composition to include the following items:

- A backpack
- The police
- Bank

OR

b) Write a story to illustrate the proverb:

Two wrongs do not make a right.

2. COMPULSORY SET TEXT (*Blossoms of the Savannah***) (20 MARKS)**.

Our greatest enemies are those close to us; support this statement with illustrations from the text.

3. OPTIONAL SET TEXTS (20 MARKS)

EITHER

a) The short story: ***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) The Novel: ***Artist o the Floating World by Kazuo***

‘*'Sometimes intentions become part of self-delusion*" With close reference from the Novel **Artist of the Floating world**, show the truth of this statement.

KCSE 2023 PREMOCK EXAMS

SERIES 1

KISWAHILI

PAPER 1

TIME: 1¾ HOURS

NAME……

SCHOOL…… SIGN……

INDEX NO…… ADM NO……

MAAGIZO KWA MTAHINIWA:

1) *Andika jina lako, nambari ya mtihani na tarehe katika karatasi ya majibu.*
2) *Karatasi hii ina maswali manne.*
3) *Jibu maswali mawili pekee. Kila swali lina alama ishirini.*
4) *Swali la kwanza ni la lazima.*
5) *Chagua swali jingine lolote kutoka kwa matatu yaliyosalia.*
6) *Majibu yote yaandikwe katika karatasi ya majibu uliyopewa.*
7) *Majibu yote yaandikwe katika lugha ya Kiswahili.*

Sehemu hii imehifadhiwa kwa matumizi ya mtahini pekee.

SWALI	1	2	3	4
UPEO	20	20	20	20
ALAMA				

UPEO	40
ALAMA ZA MTAHINIWA	

MASWALI

1. **SWALI LA LAZIMA.**

   Gari unalosafiria limehusika katika ajali mbaya barabarani. Japo kuna walioaga dunia, wewe hujadhurika kwa njia yoyote.

   Andika mahojiano kati yako na mwandishi wa gazeti la Mwangaza ambaye amekuja kukuhoji kuhusu ajali hiyo.

2. Pendekeza njia mbalimbali zinazoweza kutumiwa ili kuleta utangamano wa kitaifa.

3. Sitapiki nyongo harudi haramba.

4. Malizia kwa maneno haya**…** hapo ndipo nilipogundua umuhimu wa uhifadhi wa mazingira.

KCSE 2023 PREMOCK EXAMS

SERIES 1

KISWAHILI

PAPER 2

TIME: 2½ HOURS

NAME……

SCHOOL…… SIGN……

INDEX NO…… ADM NO……

MAAGIZO.

- ***a.*** *Andika jina lako na nambari yako katika nafasi ulizoachiwa hapo juu.*
- ***b.*** *Jibu maswali yote kwa nafasi wazi ulizoachiwa.*
- ***c.*** *Watahiniwa wanaweza wakaadhibiwa iwapo hawatazingatia maagizo.*
- ***d.*** *Majibu yaandikwe kwa lugha ya Kiswahili*

KWA MTAHINI PEKEE.

SWALI	UPEO	ALAMA
1.		
2.		
3.		
4.		

1. UFAHAMU

Soma taarifa ifuatayo kisha ujibu maswali.

Ilikuwa jumamosi. Nilifika nyumbani kwangu saa moja jioni. Tangu nistaafu miaka miwili awali sikupenda kuchelewa Taarifa ya habari.

Mwezi mmoja ukawa umepita tangu nipewe pesa za kiinua mgongo. Mwezi mmoja mzima nilikuwa katika shughuli za kulipa deni hapa na kulipa karo huku. Kuwekeza kwenye mradi ule na kununua hili. Sasa shilingi lake mbili tu zilikuwa zimesalia katika benki. Watu wengi walinishawishi nijaribu kilimo cha mahindi. Bei ilikuwa imeanza kuimarika. Katika taarifa ya habari jioni hiyo, Waziri wa Kilimo alitangaza bei mpya. Shilingi 1,500 kwa kila gunia. name nilikuwa naanza kuumakimikia mradi huu.

Baada ya tarifa, nilikoga, nikala na nikaenda kulala. Kwa sababu ya uchovu, usingizi ulinichulua mara moha. Usingizi niliota. Katika ndoto niliutekeleza mradi wangu. Msimu huo wa kilimo nilitenga ekari kumu za shamba langu. Wataalamu walinishauri kuwa wakati mzuri wa kulima ni wa kiangazi. Mwezi wa Januari ulipoanza tu nilitafuta trekta na kulima. Malipo yalikuwa shilingi 1,200 kila ekari. Katikati ya mwezi wa Machi, nilitafuta trekta la kutifua shamba tena kwa gharama ya shilingi 15,000 ekari zote kumi. Kufuatia ushauri wa manyakanga wa kilimo, nilipa shilling elfu kumi na tatu kupiga shamba lote haro.

Mwishoni mwa mwezi huo, nilienda mjini kutafuta pembejeo. Kwanza, nililipa shilling 20,500 kwa magunia 15 ya mbolea. Kisha nilinunu amagunia manne ya mbegu ya mahindi yenye uzani wa kilo 25 kwa shilling 3,300 kila gunia. Mwzi wa Aprili ulipotimia tu, niliamua kupanda. Ili nipate mazao bora, nilipanda kwa tandazi. Gharama ilikuwa shilling 1,000 kila ekari. Mvua ilinesha vizuri na baada ya siku saba mahindi yalianza kuota. Ilifurahisha kuhesabu mistari ya kijani iliyonyooka. Hali hii iliwezekana tu baada ya kuajiri vijana wa kuwafukuza korongo na vidiri ili wasifukue mebgu mchangani.

Baada ya mwezi mmoja, hatua ya kupalilia ilifika. Nilitafuta vibarua wa kupalilia. Malipo yalikuwa shilingi 700 kila ekari. Kumbe kupalilal kulichochea mtifuko wa mahindi. Punde yakawa yananifikia magotini. Hii ikawa ishara kuwa yanahitaji kumwagiwa mbolea ya kunawirisha iitwayo ‘amonia’. Gharama yake ikawa shilling 1,300 kila gunia. Hivyo, nikalipa shilingi 19,500 kwa magunia kumi na matano.

Mahindi yalibadilika kimiujiza. Ghafla tu yalirefuka na kunenepa maisha. Yalibadilika rangi yakapiga weusi. Shamba liligeuka likawa kama msitu wa rangi ya kijani iliyokolea. Wapita njia waliajabia mimea na juhudi zangu. Shamba langu sasa likawa kielelezo. Maafisa wa kilimo wakawa kila siwanawaleta wakulima wengine kujifunza siri ya ufanzi wanfu. Hapo nikaanza kuhesabu mavuno nitakayopata kukadiria faida. Nilipuuza kabisa ushauri wa wahenga kuwa ‘Usikate majani, mnyama hajauawa.’

Bila taarifa wala tahadhari mvua ikatoweka. Hayakupita majuma mawili mahinda yakaanza kubadilika. Juma moja baadaye mahindi yalinyauka. Badala ya mahind, shamba ilkageuka la vitunguu vilivyochomwa na jua. Makasio yangu ya faida yaliyeyuka jinsi yfanyavyo moshi.

Lakini 'Muumba ndiye Muumbua'. Siku moja mawingu yalitanda na mvua ikanyesha.Muda si muda mahind yalianaza kunawiri. Kumbe tukio lililonivunja moyo lilikuwa laja. Siku moja mvua kubwa ilinyesha. Asubuhi nilipotoka nje nilipigwa na butwaa. Barafu ilitapakaa pote. Shamba lilikuwa limetapakaa barafu huku majani ya mahindi yamechanika kama nyuzi. Niliugua. Baada ya wiki moja, nilipata nafuu. Nilipotazama upande wa shamba nikaona dalili za majani mapya ya mahindi yakianza kuchomoza. Maumbile ni kitu cha ajabu kweli. Muda sio mferu mahindi yalirudi hali yake tena, kisha yakakomaa. Haraka za kutafuta watu wa kuyakata na kuyakusanya zilianza. Gharama ya shughuli kii ikawa shilingi 5,000. Kuvuna, kusafirisha kutoka shamba na kukoboa kwa mashine magunia 200 yakachukua shilingi 20,500. Kufikia hapo nilikuwa nimetumia takribani shilingi 192,700. Gharama nyingine zilikuwa za usafiri, gharama ya dharura na usimamizi, usumbufu wangu binafsi, gharama ya magunia na kadhalika. Mahindi yalipokuwa tayari kwenye magunia nilifunga safari kwenda mjini kutafuta soko. Niliposhuka tu niliona gazeti. habari motomoto siku hiyo ilikuwa: "MAHIND GUNIA 900/-" Niligutuka usingizini.

MASWALI

(a) Andika kichwa mwafaka kwa kifungu hiki cha habari. **(al 1)**

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(b) Msimulizi alikuwa na kiasi gani cha pesa katika benki baada ya mradi kukamilika? **(al 1)**

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(c) Taja matatizo matatu yaliyotisha mradi wa msimulizi wa kukuza mahindi. **(al 3)**

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(d) Eleza maana ya methali zifuatazo: **(al 4)**

(i) Usikate majani, mnyama hajauawa

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(ii) Muumba ndiye muumbua

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(e) Eleza mambo mawili yaliyosababisha msimulizi asipate faida alivyotarajia. **(al 2)**

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(f) Kwa nini msimulizi alisem maumbile ni kitu cha ajabu? **(al 2)**

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(g) Eleza maana ya: **(al 2)**

(i) kiinua mgongo

……..

(ii) manyakanga wa kilimo

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2 UFUPISHO (alama 15)

Jamii ya leo inatawaliwa na kuendeshwa na kanuni ya maarifa. Inawezekana kusema kuwauchumi wa jamii za leo na zijazo utategemea maarifa zaidi kuliko utakavyotegemea uwezo wowote mwingine. Utambuzi wa uwezo mkubwa wa maarifa katika maisha ya binadamu ndio msingi wa watu kusema 'maarifa ni nguvu.'

Maarifa huelezwa kwa tamathali hii kutokana na uwezo wa: kuyadhibiti,kuyaendesha, kuyatawalana kuyaongoza maisha ya binadamu popote pale walipo. Mtu ameyakosa maarifa fulani huwa ameikosa nguvu hiyo muhimu na maisha yake huathirika pakubwa. Kwa msingi huu, maarifa yanawezakuangaliwa kama utajiri mkubwa ambao binadamu anaweza kuutumia kwa faida yake au kwa faida ya wanajamii wenzake. Ukweli huu ndio unaoelezwa na methali ya Kiswahili: 'Elimu ni mali.' Elimu ni chimbuko la maarifa muhimu maishani.

Msingi wa utajiri na maendeleo ya binadamu popote alipo basi ni maarifa. Je, maarifa kwa upande wake yana sifa gani? Maarifa yenyewe hayana upinzani. Maarifa uliyo nayo huweza kuwa na watu wengine pasiwe na upinzani baina yenu kwa kuwa kila mmoja ana maarifa sawa. Kila mmoja ana uhuru wa kuyatumia maarifa hayo kama chanzo cha kuyazalisha mengine. Utumiaji wa maarifa yenyewe hauyamalizi maarifa hayo. Maarifa hayawezi kugusika ingawa mtu anaweza kuyanyumbua maarifa yenyewe kwa kuyatumia kwa namna tofauti.

Maarifa huingiliana na maarifa mengine. Maarifa aliyo nayo mtu huweza kuhusishwa na maarifa aliyo nayo mtu mwingine ili kuvyaza au kuzuka na maarifa tofauti. Maarifa yanaweza kuchukuliwa kutoka sehemu moja hadi nyingine kwa namna ambavyo mtu huweza kufanya bidhaa nyingine ile. Kwa mfano, ni muhali mtu kulalamika kuwa hawezi kutembea kutoka sehemu moja hadi nyingine kwa sababu ana mzigo wa maarifa kichwani.

Sifa nyingine muhimu ya maarifa ni kuwa yanaweza kuwasilishwa kwa njia au mitindo mingine ya kidhahania. Ikiwa unataka kukihamisha chombo fulani kutoka sehemu moja hadi nyingine, lazima uwazie ukubwa wake, uzito wake na labda hata umbali wa panapohusika. Maarifa huweza kubadilishwa au kugeuzwa na kuwa ishara ambazo huyafanya kuwasilishswa kwa njia nyepesi kuliko kwa mfano ikiwa mtu atayawasilisha katika muundo wa, kwa mfano,kitabu.

Maarifa yana sifa ya uhusianaji. Kipengele fulani cha maarifa huwa na maana kinapowekwa sambabmba au kugotanishwa na kipengele kingine cha maarifa. Huo huwa muktadha mzuri wa kueleweka au kuwa na maana kwa mfano, neno ‘mwerevu’ huweza kuwa na maana kwa kuwekwa katika muktadha wa ‘mjinga’, ‘ mjanja’, ‘hodari’ na kadhalika.

Maarifa huweza kunifadhiwa katika nafasi ndogo sana. Suala hili linaeleweka kwa njia nyepesi tunapoangalia maarifa katika muktadha wa teknolojia. Data zinazowahusu mamilioni ya watu,ambazo zingehitaji maelfu ya maktaba na lukuki ya vitabu, huweza kuhifadhiwa kwenye kifaa kidogo kinachoweza kutiwa mfukoni.

Maarifa hayawezi kuthibitiwa au kuzuiliwa mahali fulani yasisambae. Maarifa huenea haraka sana. Maarifa ni kitu kinachoepuka pingu za watu wanaopenda kuwadhibiti binadamu wenzao. Hata pale ambapomfumo wa kijamii au wa kisiasa unafanya juu chini kuwadhibiti raia au watu wenyewe,ni muhali kuyadhibiti maarifa yenyewe. Inawezekana kuzidhibiti njia fulani za uenezaji wa maarifa lakini maarifa hayo yatapata upenyu wa kusambaa. Ni kweli kuwa maarifa ni nguvu inayozishinda nguvu zote.

(a) Fupisha aya ya pili na tatu **(maneno 55-60)(alama 5, 1 ya utiririko)**

Matayarisho

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Nakala safi

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(b) Eleza sifa kuu za maarifa kama zinavyojitokeza kuanzia aya ya nne hadi aya ya nane.

(maneno 100-110) (alama 10, 2 za utiririko)

Matayarisho

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MATUMIZI YA LUGHA (ALAMA 40)

a. Taja na utofautishe irabu za mbele. **(alama 2)**

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b. Tunga sentensi Moja kubainisha maana mbili za neno kikosi. **(alama 2)**

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c. Andika katika wingi. **(alama 1)**

Jino langu bovu linaloniuma linanitatiza.

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d. Tumia kielezi cha wakati badala ya kielezi kilichotumika katika sentensi ifuatayo. **(alama 2)**

Watalii walitutembelea mjini Nakuru.

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e. Geuza sentensi zifuatazo kulingana na maagizo. **(alama 2)**

i. Maimuna anapika wali. (wakati uliopo hali isiyodhihirika)

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ii. Wao walisoma riwaya hiyo. (wakati ujao hali timilifu)

……

f. Unda neno lenye muundo ufuatao. **(alama 2)**

i. Nafsi ya kwanza umoja.

ii. Hali timilifu

iii. Mtendewa

iv. Mzizi

v. Kauli ya kutendea

vi. Kauli ya kutenda/ kiishio

g. Tumia nomino zifuatazo za kawaida kuunda nomino za jamii. **(alama 2)**

i. Nzige

ii. Zabibu

h. Tunga sentensi kuonyesha matumizi yafuatayo ya neno KAMA. **(alama 2)**

i. Kihusishi

ii. Kitenzi

i. Eleza matumizi ya neno wale katika sentensi hii. **(alama 3)**

Wale walioiba ni mabanati wale ambao waliambiwa wale kabla ya kitendo hicho.

j. Changanua kwa mstari. **(alama 4)**

Yohana na Otieno hucheza kandanda.

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k. Andika sifa tatu zinazobainisha sentensi changamano. **(alama 3)**

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l. Onyesha matumizi ya viwakifishi vifuatavyo katika sentensi. **(alama 2)**

i. Kibainshi

ii. Parandesi

m. Tumia neno –baya kama: **(alama 3)**

i. Kiwakilishi

ii. Kivumishi

iii. Kielezi katika sentensi

n. Onyesha miundo miwili ya nomino za ngeli ya A- WA. **(alama 2)**

o. Bainisha maana mbili ya sentensi hii. **(alama 2)**

Umu alimwandisha mkewe.

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p. Unda nomino nne kutokana na kitenzi. **(alama 4)**

<u>Fa</u>

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q. Geuza katika usemi halisi. **(alama 2)**

Askari jela alimuuliza Kendi kama alidhnani hapo ni kwao. Alimwamuru aende kwake mara moja.

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4. **ISIMU JAMII** **(alama 10)**

(Mdundo wa muziki) kina mama mpo…..! Kina siste nanyi… are you there? Kampuni ya platinium imewaletea mafuta mpya ya silk. Mafuta hayo yana vitamin C, Sunscreen na yana marashi ya kupendeza. Ukiyatumia kwa wiki moja tu, ngozi yako itakua laini na nyororo kama ya kitoto kichanga. Nayo macho ya wote, Waaa! Yatakuwa kwako 24/7. Jinunulie! Jinunulie! Mafuta ya silk. Mafuta ya wanawake wa kisasa.

a. Taja sajili iliyotumiwa hapa. **(alama 1)**

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b. Taja sifa nne za sajili hii. **(alama 4)**

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c. Kwa nini Wakenya wengi hupenda kuchanganya na kubadili msimbo? **(alama 5)**

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KCSE 2023 PREMOCK EXAMS

SERIES 1

KISWAHILI

PAPER 3

TIME: 2½ HOURS

NAME……

SCHOOL…… SIGN……

INDEX NO…… ADM NO……

MASWALI

1. *Jibu naswali manne katika karatasi hii*

2. *Swali la kwanza ni la lazima*

3. *Maswali mengine matatu yachaguliwe kutoka sehemu zilizobaki*

NB: *Usijibu maswali mawili kutoka kitabu kimoja/ sehemu moja*

SEHEMU YA A

USHAIRI

1. Soma shairi lifuatalo kisha uyajibu maswali

Mungu naomba subira, subira nayo imani
Imani iliyo bora, bora hapa duniani
Duniani mwa kombora, kombora nayo hiani
Hiani pamwe ukora wenye kuhini.

Kuhini kwenye kiburi, kiburi na ufidhulu
Ufidhuli wa kudhuri, kudhuri wangu muwili
Muwili hata kidari, kidari kuwa thakili
Thakili kisinawiri, kisinawiri misuli.

Misuli kuwa hafifu, hafifu kama muwele
Muwele wa hitilafu, hitilafi ya nduwele
Nduwele kutakilifu, kutakilifu milele
Milele kutoniafu, kutoniafu na vishale.

Vishale vinitomele, vitomele vikwato
Vikwato pia maole, maole kufanya mito
Mito ya matozi tele, tele mithili kitoto
Kitoto kilo vipele, vipele vyenye fiakuto.

Fukuto lanipa neno, neno hili kutamka
Kutamka wazi vino, vino subira kutaka
Kutaka imani mno, mno n'sipate wahaka
Wahaka wa matukano, matukano na mashaka.

Mashaka haya ya leo, leo yawe yarnepita
Yaniepita na vilio, vilia vipishe nyota
Nyota njema ingarao, ing'arao kunikita
Kunikita salamani, salamani nikadata.

a) Kwa nini nafsi neni anaomba subira na amani. **(al.2)**

b) Shairi hili ni la Bahari gani kwa kuzingatia;

i) Mpangilio wa maneno**.** **(Al. 4)**

iii) Mpangilio wa vina.

b) Kwa kutolea mifano eleza mbinu mbili za lugha zilizotumika katika shairi**.** **(al.4)**

c) Andika ubeti wa tatu kwa lugha ya nathari**.** **(al.4)**

d) Kwa kutolea mifano, elezea jinsi uhuru wa kishairi ulivyotumiwa kutekeleza arudhi. **(Al.6)**

SEHEMU YA B RIWAYA (Jibu swali la 2 au 3)

CHOZI LA HERI (Assumpta k. Matei)

2. "……Unatumia mantiki gani kusema kuwa sisi si watoto wa miaka hamsini?"

a) Eleza muktadha wa dondoo hili. **(al. 4)**

b) Taja mbinu ya lugha inayojiotokeza katika dondoo hili**.** **(al.1)**

c) Kwa kutumia hoja nane, thibitisha wazungumziwa walikuwa watoto wa miaka Hamsini. **(al.8)**

d) Eleza wasifu wa msemaji wa maneno haya**.** **(al.4)**

e) Eleza umuhimu wa msemewa wa maneno haya. **(al.3)**

3. Fafanua changamoto zinazoikabili jinsia ya kike katika riwaya ya chozi la heri**.** **(al.20)**

SEHEMU YA C: TAMTHILIA

BEMBEA YA MAISHA *(TIMOTHY AREGE) – Jibu swali la 4 au la 5.*

4. Eleza mambo yanayorudisha bara la Afrika nyuma kulingana na tamthilia ya **Bembea ya Maisha** **(alama20)**

5. "***Ninavaa vizuri na kujivisha tabasamu ila ndani viraka na huzuni tele"***

a) Eleza muktadha wa dondoo hili **(alama4)**

b) Tambua kipengele cha mtindo katika dondo hili **(alama2)**

c) Tambua sifa za msemewa inayojitokeza katika dondoo hili **(alama2)**

d) Eleza mambo yanayomjaza msemaji viraka na huzuni **(alama12)**

SEHEMU YA D: HADITHI FUPI.

MAPAMBAZUKO YA MACHWEO NA HADITHI NYINGINE – Jibu swali la 6 au la 7

6. Jadili Matumizi Ya Pombe Haramu Na Athari Zake Katika Hadithi Kila Mchezea Wembe **Alama 20**

7. Fafanua wa ufaafu wa anwani ***Fadhila za Punda*** **(alama 20)**

SEHEMU YA E: FASIHI SIMULIZI

8. a) Taja aina mbili kuu za fasihi. **(al.2)**

b) Fafanua tofauti baina ya fasihi ulizotaja hapo juu. **(al.4)**

c) Tambua istilahi zifuatazo za fasili. **(al.8)**

i) Fanani

ii) Jagina

iii) Maleba

iv) Miviga

d) i) Eleza maana ya vitanza ndimi. **(al.2)**

ii) Fafanua sifa za vitanza ndimi. **(al.4)**

KCSE 2023 PREMOCK EXAMS

SERIES 1

BUSINESS STUDIES

PAPER 1

TIME: 2 HOURS

NAME……

SCHOOL…… SIGN……

INDEX NO…… ADM NO……

INSTRUCTIONS TO CANDIDATES

1) *Write your name and adm. no in the spaces provided above.*
2) *Sign and write the date of examination in the spaces provided above.*
3) *Answer ALL the questions.*
4) *All answers should be written in the spaces provided in this booklet.*
5) *Candidates should answer all the questions in English*

FOR EXAMINER'S USE ONLY

Question	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Candidate's score														

Question	15	16	17	18	19	20	21	22	23	24	25
Candidate's score											

TOTAL MARKS

QUESTIONS

1. State four elements that may comprise external environment to a business. **(4mks)**

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2. Outline four differences between goods and services. **(4mks)**

GOODS	**SERVICES**
i)	**i)**
ii)	**ii)**
iii)	**iii)**
iv)	**iv)**

3. Highlight four responsibilities of an effective a business accountant **(4marks)**

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4. State four reasons why consumers have to make a choice between competing needs**. (4mks)**

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5. The following are some policies issued under marine insurance, fleet policy, composite policy, voyage policy and time policy. Identify the policy that suits the description listed below. **(4mks)**

DESCRIPTION	**MARINE POLICY**
a) Covers a ship within a specified period of time	----------
b) Covers a ship on a particular journey	----------
c) Different insurers covers a ship for the same risks.	----------
d) Covers many vessels against losses under one policy.	----------

6. Highlight four reasons why the government requires businesses to obtain licences. **(4mks)**

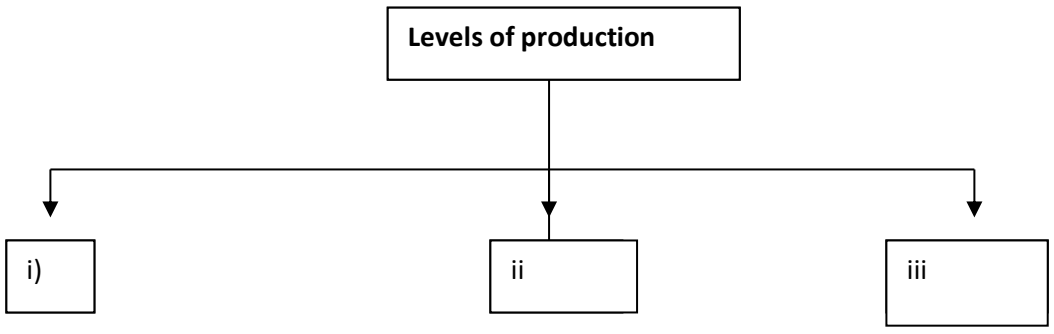
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7. Fill the levels of production in the diagram below. **(3mks)**



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8. Give four disadvantages of government involvement in business activities. **(4mks)**

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9. Give four measures that a government may take to reduce the mortality rate in a country.**(4mks)**

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10. Highlight four services that a wholesaler may offer to a manufacturer. **(4mks)**

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11. The following information was extracted from the books of Jupiter traders.

Rate of turnover 3 times

Mark-up 20%

Opening stock sh. 160,000

Closing stock sh. 200,000

REQUIRED

I) Gross **Profit** **(2mks)**

ii) Sales **(2mks)**

12. The conditions given below are for a monopoly firm or a firm operating under perfect competition. Write the correct market structure against each of the conditions in the spaces provided. **(4mks)**

CONDITIONS	**MARKET STRUCTURE**
a) Market structure determines price for the product.	
a) There is free entry and exit	
c) Product involved is homogeneous	
d) Market structure regulates supply of the product	

13. Outline four reasons that can lead to dissolution of a sole proprietorship**.** **(4mks)**

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14. Bahari enterprises had capital balance of sh 525,000 on 1st July 2006 and sh. 80,000 on 30th June 2007. Drawings and net profit in the year ending 30th June 2007 were sh 225,000 and sh. 175,000 respectively. Determine the additional capital during the year. **(4mks)**

15. Highlight four functions of a proforma invoice. **(4mks)**

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16. Identify the books of original entry used in recording each of the following transactions of Turkwel Traders. **(4mks)**

TRANSACTIONS	BOOKS OF ORIGINAL ENTRY
a) Sold goods on credit to Atieno for sh. 30,000	
b) Bought goods on credit from Chantal Traders for sh. 40,000	
c) Zuma returned goods worth. 8,000	
d) Turkwel returned goods worth sh 11,000 to Simba traders	

17. Highlight four benefits that would accrue to a firm located near other existing firms. (4mks)

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18. Give four factors that limit the use of containers as a method of transporting goods in developing country.

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19. Give four reasons why a business person may wish to keep money in a fixed deposit account instead of a savings account**.** **(4mks)**

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20. The following information was obtained from the records of Jakayo traders as at 1st July 2010

FURNITURE SH 20,000

Stock sh, 8,000

Creditor sh 7,000

Cash at Bank sh 12,000

Long term loan sh. 10,000

Prepare Jakoyo is Balance sheet as at 1st July 2010

21. Highlight four obstacles that could be ineffective communication between the principal and the students during an assembly**.** **(4mks)**

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22. Give four factors that influence the level of National income. **(4mks)**

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23. Give four benefits of expanding a businesses**.** **(4mks)**

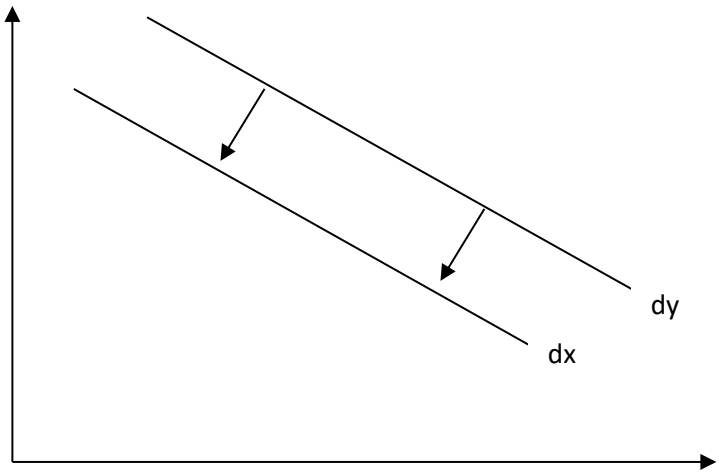
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24. The diagram belows a shift in demand for a certain commodity.



Highlight four factors that may have caused the shift from dy to dx

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25. From the following information, prepare a three column cash book duly balanced. (5mks) 2014

May 1 : Balances brought forward; Bank sh. 2,000(Cr) Cash sh. 1,000

May 5: Received sh. 7,800 cash from Olive Traders after deduction of 2 ½% cash discount.

May 14 Deposited sh. 8, 800 from the cash till to the bank.

May 24: Paid wages for sh 800 by cheque.

KCSE 2023 PREMOCK EXAMS

SERIES 1

BUSINESS STUDIES

PAPER 2

TIME: 2½ HOURS

NAME……

SCHOOL…… SIGN……

INDEX NO…… ADM NO……

INSTRUCTIONS:Answer any five questions

1. a) Explain **five** benefits of direct production. **(10marks)**

b) Explain **five** differences between private limited company and partnership forms of Business units. **(10marks)**

2. a) Discuss **five** factors that Nakuru county government may consider before spending county Funds**.** **(10marks)**

b) The following information relates to Maralal Traders for the month of May 2014.

May 1: Balance brought forward:
Cash Shs. 180,000
Bank Shs. 450,000 (Cr)

3: Received a cheque of 1,500,000 from Mpasha, a debtor

7: Cash sales Shs. 280,000

11: Jolloimat, a creditor of Shs.600, 000 was paid by cheque of sh 400,000 and the balance by cash.

14: Received commission in cash sh. 150,000

17: A debtor, Leteipa, paid his account of 185,000 by cheque less 2% cash discount.

19: Paid the following expenses by cheque:
Rent Shs. 75,000
Electricity Shs. 32,000
Water Shs. 25,000

21: Withdrew Shs. 100,000 from bank for personal use

24: Paid cash Shs 133,280 to Kinai after deducting a cash discount of 2%

25: Received a cheque of sh. 200,000 from Kiyapi, a debtor

28: Paid Salaries Shs. 120,000 by cheque.

31: Banked all cash except sh. 50,000.

REQUIRED:

Record the above transactions in a three column cash book. **(10mark**

3. a) Describe **five** types of unemployment**.** **(10marks)**

(b) Explain **five** internal factors that may encourage the achievement of business goals. **(10 marks)**

4 a) The following information was extracted from the books of Umeme Traders as at 31st December 2009.

Item	Shs.
Bank loan	567,000
Bank loan interest	1,440
Capital	1,680,000
Closing stock	87,000
Creditors	272,400
Debtors	140,280
Discount allowed	170,400
Electricity	30,240
Furniture	489,804
Furniture repairs	86,436
Gross profit	624,720
Maintenance on premise	72,000
Motor vehicle	1,080,000
Motor vehicle maintenance	360,000
Premise	648,000
Rent received	144,000
Sundry expenses	122,520

Prepare;

(i) **Profit and loss account** for the year ended 31st December 2009

(ii) **Balance sheet** as at 31st December 2009. **(10 marks)**

(b) Explain any **five** challenges that an under populated country may experience. **(10 marks)**

5. (a) Explain **five** reasons why the government imposes taxes in the economy. **(10 marks)**

(b) Explain **five** ways in which the central bank controls the money supply in the country. **(10 marks)**

6. (a) Explain **five** measures that a wholesaler would take to ensure the smooth running of his warehouse. **(10marks)**

(b) Explain any **five** circumstances under which an increase in National income may not lead to improved standards of living. *(10 marks)*

KCSE 2023 PREMOCK EXAMS

SERIES 1

AGRICULTURE

PAPER 1

TIME: 2 HOURS

NAME……

SCHOOL…… SIGN……

INDEX NO…… ADM NO……

INSTRUCTIONS: the paper has 3 sections. Answer all questions in section A and B and any 2 questions in section C.

SECTION A: (30MKS)

1. State four advantages of using farm yard manure. **(2mks)**

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2. State four merits of minimum tillage in crop production. **(2mks)**

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3. Mention four practices carried out to maintain grass pastures. **(2mks)**

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4. State four disadvantages of nomadic pastoralism. **(2mks)**

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5. Mention four cultural methods of used control in crop production. **(2mks)**

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6. State four ways of overcoming extremes of temperature in crop production. **(2mks)**

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7. List five precautions observed in harvesting tea to ensure high quality produce. **(2 ½ mks)**

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8. List three ways in which primary cultivation can be achieved. **(1 ½ mks)**

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9. An agriculture student was advised to apply complete fertilizer 40:30:10 in a (20x10) M plot and at the rate of 40kg per hectare.

(i) Calculate the percentage of P_2O_5 in the complete fertilizer. **(2mks)**

(ii) Calculate the amount of fertilizer the student would require for the plot. **(2mks)**

10. State four divisions of livestock farming. **(2mks)**

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11. List four methods commonly used for applying nitrogenous fertilizers. **(2mks)**

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12. Name four factors influencing soil formation. **(2mks)**

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13. A farmer owns one hectare on which he can grow maize whose yield is 15 bags/hectare but has chosen to grow sorghum whose yield is 20 bags/hectare. If maize is sold at shs 1200 per bag while sorghum is sold at shs 700 per bag. Calculate the opportunity cost. **(2mks)**

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14. State four characteristics of plants used for preparation of green manure. **(2mks)**

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SECTION B (20MKS)

15. Students in an agriculture class set out to investigate the constituents of soil sample from school. They carried out a series of tests on various portions of the sample. They then prepared a table a shows below:

Description	Quantity
Mass of an empty evaporating disk	10g
Fresh soil on evaporating disk	35g
Mass of dried soil at 105oC on evaporating disk	28g
Vol. of water in the tin	250cm^3
Vol. of water and soil after stirring	410cm^3
Mass of empty silica disk	15g
Mass of silica disk and soil after ignition	45g
Mass of silica disk and dried soil before ignition	65g
Volume of water and soil before stirring	500cm^3

a) Calculate the percentage of soil water in the sample. **(1mk)**

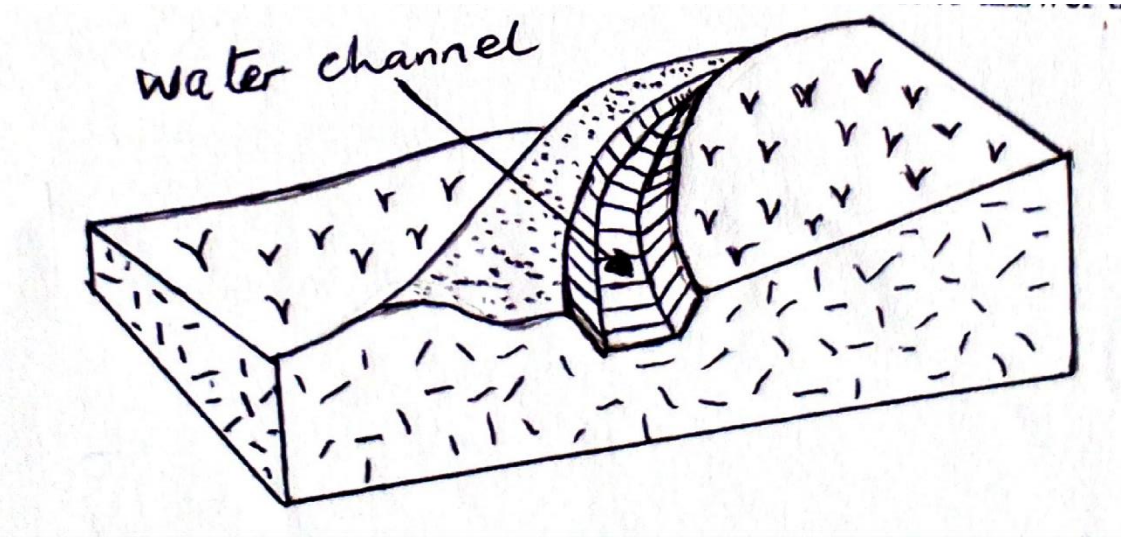
b) Why was soil heated at 105^{o}C? **(1mk)**

c) Calculate the percentage of soil air in the sample? **(1mk)**

d) Calculate the percentage of soil organic matter in the sample. **(1mk)**

e) Name one other soil constituent not tested above. **(1mk)**

16. The diagram below shows a construction on farm. Use it to answer the questions that follow.



a) Identify the above structure. **(1mk)**

b) State four areas where water in the channel is directed to: **(4mks)**

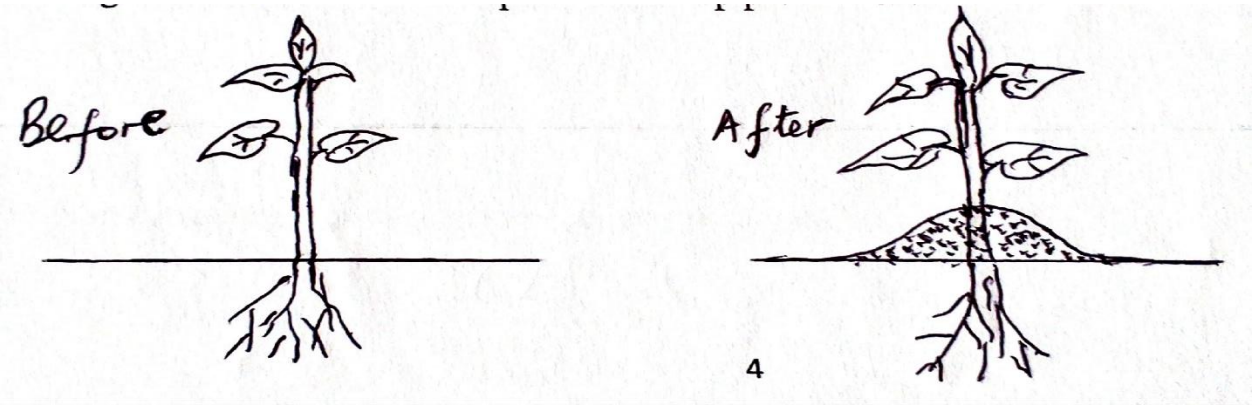
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17. The diagram below shows a field practice in crop production.



a) Identify the practice. **(1mk)**

b) State two advantages of the practice named in (a) above to Irish potatoes**.** **(2mks)**

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c) Name two other crops that require the above practice. **(2mks)**

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18. Use the diagram below to answer the questions.



the sorghum variety shown above

(a) Identify the sorghum variety shown above. **(1mk)**

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(b) State two bird pests that commonly attack the crop. **(2mks)**

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(c) Name two other varieties commonly grown by farmers. **(2mks)**

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SECTION C (40MKS)

19. (a) Outline the procedure for soil sampling. **(8mks)**

(b) Give five reasons for ridging sweet potatoes. **(5mks)**

© Outline seven properties of nitrogenous fertilizers. **(7mks)**

20. (a) Discuss five benefits of weeds to the farmer. **(10mks)**

(b) Discuss five importance of draining a waterlogged area. **(10mks)**

21. (a) Discuss five factors influencing crop rotation. **(10mks)**

(b) Discuss five government policies that regulate production, marketing and distribution of agricultural products. **(10mks)**

KCSE 2023 PREMOCK EXAMS

SERIES 1

AGRICULTURE

PAPER 2

TIME: 2 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 and B.
(c) Answer any two questions in section C.
(d) Answers should be written in the spaces provided.

SECTION A: (30 MARKS)

1. Name two exotic breeds of dairy goats. **(1 mk)**

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2. State four advantages of natural method of rearing calves. **(2 mks)**

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3. (a) Name livestock commonly attacked by keds. **½ mk)**

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(b) Give three signs of attack by keds on livestock named in 3(a) above. **1½ mk**

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4. State four disadvantages of a hedge in a farm. **(2 mks)**

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5. (a) Name a tool used in carrying out each of the following practices:

(i) Cutting galvanized iron sheet - **½ mk)**

(ii) Cutting wood along the grains - **½ mk)**

(iii) Marking lines parallel to the edge of stock - **½ mk)**

(iv) Placing mortar between construction stones - **½ mk)**

6. State four maintenance practices carried out on a jack plane. **(2 mks)**

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7. State four signs of parturition in a cow. **(2 mks)**

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8. Explain how the following methods help in controlling livestock diseases:

(i) Mass slaughter **½ mk)**

(ii) Proper feeding - **½ mk)**

(iii) Quarantine - **½ mk)**

(iv) Vaccination - **½ mk)**

9. Give two uses of litter in a brooder. **(1 mk)**

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10. State two reasons for dehorning in cattle. **(2 mks)**

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11. Give four essentials of clean milk production in a herd. **(2 mks)**

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12. Give four predisposing factor of pneumonia in cattle. **(2 mks)**

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13. State four factors that determine digestibility of a feed. **(2 mks)**

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14. Give four methods of preserving fish. **(2 mks)**

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15. Give four disadvantages of using thatch in construction of farm buildings. **(2 mks)**

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16. State four reasons for swarming in bees. **(2 mks)**

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SECTION B: (20 MARKS)

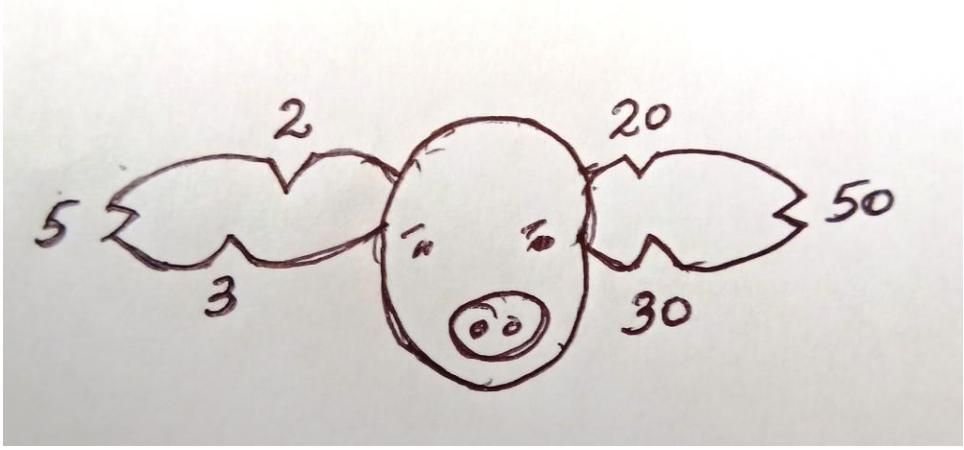
17. (a) A farmer was advised to prepare 180kg of calf ration containing 20% DCP. Using pearsons square method, calculate the amount of maize containing 10% DCP and sunflower containing 40% DCP the farmer needs to use. Show your working. **(4 mks)**

(b) State two factors considered when formulating a livestock ration. **(2 mks)**

……

……

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



(a) Name the type of identification illustrated above. **(1 mk)**

(b) Give the identification number of the pig illustrated above. **(1 mk)**

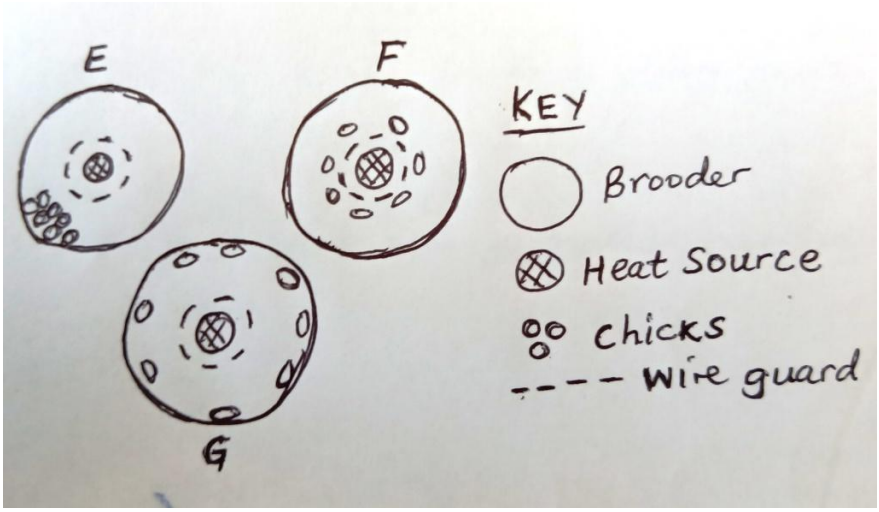
(c) Using a diagram, illustrate how animal number 83 can be identified using the above method. **(2 mks)**

(d) What is the use of metal rails in a farrowing pen. **(1 mk)**

……

……

19. The diagrams below shows the behaviour of chicks in a brooder in response to heat.



(a) Explain the behaviour of chicks in brooder;

E – **(1 mk)**

F – **(1 mk)**

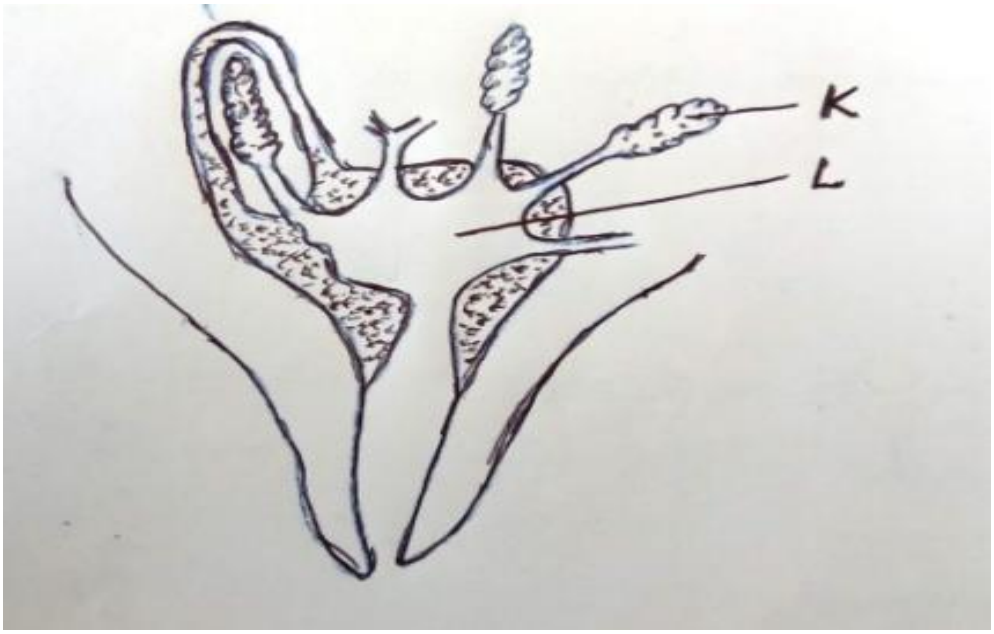
G – **(1 mk)**

(b) Explain why the brooder is rounded. **(1 mk**)

……

……

20. The diagram below shows the structure of the udder of a cow. Study it then answer the questions that follow.



(a) Identify parts labeled K and L. **(2 mks)**

K –

L –

(b) Name two hormones that control milk let-down in a dairy cow. **(2 mks)**

(i)

(ii)

(c) Name one disease that attacks part labeled L. **(1 mk)**

SECTION C: (40 MARKS)

21. (a) Describe the physical characteristics of a good dairy cow for breeding. **(10 mks)**

(**b**) **(i)** State five functions of water in the body of livestock. **(5 mks)**

(**ii**) Explain the advantages of a four stroke cycle engine. **(5 mks)**

22. (a) Explain five factors that affect milk composition in dairy cattle. **(5 mks)**

(b) Describe five factors that may lead to failure of a cow to conceive after service. **(5 mks)**

(c) Explain the factors that a farmer should consider when selecting materials to construct a zero grazing unit. **(10 mks)**

23. (a) Describe milk fever under the following sub-headings:

(i) Animal affected. **(1 mk)**

(ii) Cause of disease. **(1 mk)**

(iii) Symptoms. **(5 mks)**

(iv) Control measures. **(3 mks)**

(b) Outline the advantages of artificial insemination in cattle. **(10 mks)**

KCSE 2023 PREMOCK EXAMS

SERIES 1

CHRISTIAN RELIGIOUS EDUCATION

PAPER 1

TIME: 2½ HOURS

NAME……

SCHOOL…… SIGN……

INDEX NO…… ADM NO……

Answer any five questions

1. a) Give the differences in two accounts of creation in Genesis 1 and 2 **(8mks)**
b) State seven effects of sin on Adam and Eve in Genesis 3 **(7mks)**
c) Outline five causes of evil in Kenya today **(5mks)**

2. a) Describe the call of Abraham Genesis 12:1-9 **(7mks)**
b) Give seven similarities between the Jewish and Traditional African practice of circumcision **(7mks)**
c) Identify six lessons that Christians learn about God from the call of Abraham **(6mks)**

3. a) State the failures of king Solomon **(6mks)**
b) Explain the importance of the temple in Jerusalem to the Israelites **(8mks)**
c) Give six reasons why Kenyans are attracted to church **(6mks)**
4. a) Identify eight characteristics of True prophets of Yahweh **(8mks)**
b) State the differences between traditional African prophets and Old Testament prophets **(6mks)**
c) Outline the qualities of an Evangelist in Kenya today **(6mks)**

5. a) Outline the problems that Nehemiah encountered in the rebuilding of the wall of Jerusalem **(8mks)**
b) In what ways did Nehemiah demonstrate the qualities of a good leader during his time **(7mks)**
c) Identify the problems Christians face in their work today **(5mks)**

6. a) Identify six places in which sacrifices are carried out in T.A.C **(6mks)**
b) Give seven reasons why sacrifices are made in traditional communities **(7mks)**
c) State seven roles of elders in traditional African communities **(7mks)**

KCSE 2023 PREMOCK EXAMS

SERIES 1

CHRISTIAN RELIGIOUS EDUCATION

PAPER 2

TIME: 2½ HOURS

NAME……

SCHOOL…… SIGN……

INDEX NO…… ADM NO……

Answer any five questions

1. a) Outline Nathan's prophecy concerning the coming of the messiah. **(6mks)**
b) Describe the birth of John the Baptist according to Luke 1:57-79. **(7mks)**
c) Give **seven** reasons why Christians sing in church today. **(7mks)**

2. a) Outline **seven** teachings of Jesus from the sermon on the plain on true discipleship. **(7mks)**
b) Using examples give four reasons why Jesus faced opposition from the Jewish, religious leaders in Galilee**.** **(8mks)**
c) Outline **five** ways in which the church leaders are preparing in the society for the second coming of Jesus**.** **(5mks)**

3. a) Narrate the parable of the great feast**.** **(7mks)**
b) Identify **seven** teachings of Jesus on eschatology according to Luke 21:5-38. **(7mks)**
c) State **six** reasons why Christians celebrate the last supper today. **(6mks)**
4. a) Give **seven** instructions Paul gave to the church in Corinth on how to use Spiritual gifts.**(7mk)**
b) Explain how the unity of believers is expressed in the image of the bride Rev.2:1-22 cor11:2**(6m**
c) Outline the importance of the Holy Spirit to Christians today. **(7mks)**

5. a) Outline **seven** moral duties of employers to employees. **(7mks)**
b) Mention **seven** factors that determine a just wage. **(7mks)**
c) Show how retrenchment of workers affect their families**.** **(6mks)**

6. a) Identify **seven** sources of wealth in traditional African society. **(7 marks)**
b) State the reasons why there is need for cooperation between the government and the church in Kenya today. **(7 marks)**
c) What role should Christians play in trying to control pollution of the environment? **(6 marks)**

KCSE 2023 PREMOCK EXAMS

SERIES 1

GEOGRAPHY

PAPER 1

TIME: 2¾ HOURS

NAME……

SCHOOL…… SIGN……

INDEX NO…… ADM NO……

INSTRUCTIONS TO CANDIDATES

1) *This paper has **two** sections: **A** and **B***
2) *Answer **ALL** the questions in **section A.***
3) *In section **B,** answer **questions 6** and any other **TWO** questions.*
4) *All the answers must be written on the foolscaps provided after page 4.*
5) *Candidates must answer the questions **in English**.*

FOR EXAMINER'S USE ONLY

Section	Questions	Maximum Score	Candidate's Score
A	1 – 5	25	
B	6	25	
		25	
		25	
		Total Score	

SECTION A

Answer ALL questions in this section.

1. (a) What is a weather station? **(2 marks)**

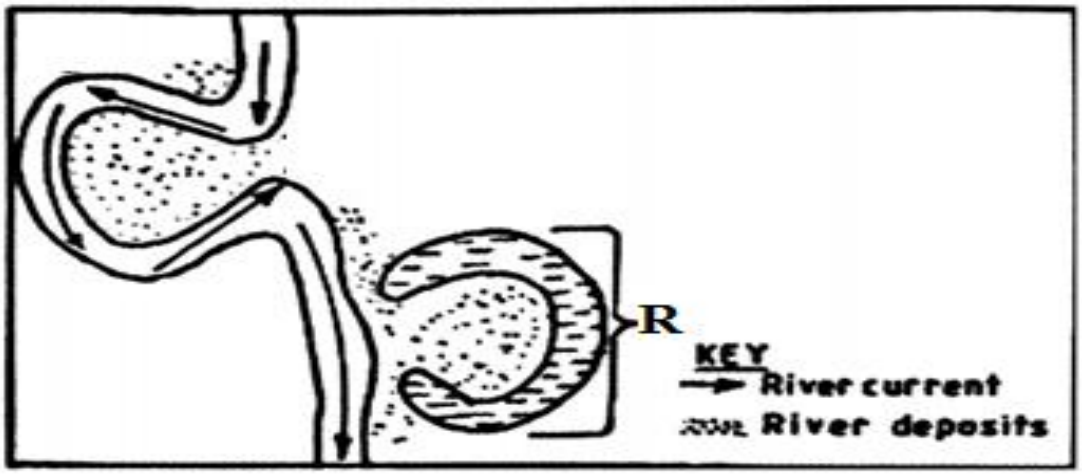
(b) Give **three** factors that influence wind direction. **(3 marks)**

2. (a) Name **two** types of tectonic plate boundaries. **(2 marks)**

(b) Give **three** effects of the movement of tectonic plates. **(3 marks)**

3. State **four** causes of the decline of the areas under forests in Kenya. **(4 marks)**

4. The diagram below shows a section of a river. Use it to answer the questions that follow.



(a) Identify the stage of development of the section of the river. **(1 mark)**

(b) A part from feature marked **R**, give **two** other features formed at this stage**. (2 marks)**

(c) State **three** conditions necessary for the formation of the feature marked **R**. **(3 marks)**

5. (a) Differentiate between an aquifer and a water table. **(2 marks)**

(b) Give **three** problems associated with artesian wells. **(3 marks)**

SECTION B

Answer question 6 and any other two questions from this section

6. Study the map of Nyeri 1:50,000 (sheet 120/4) provided and answer the following questions.

(a) (i) Give the longitudinal extent of the area covered by the map. **(2 marks)**

(ii) Give the six figure grid reference of the trigonometric station at Nyeri Hill forest**.(2 marks)**

(iii) Calculate the area of Nyeri forest. Give your answer in square kilometres. **(2 marks)**

(b) (i) What is the bearing of The Ark Lodge from the trigonometric station **120 UT 16. (2 marks)**

(ii) Identify **three** man-made features in grid square **7263.** **(3 marks)**

(iii) Give **three** drainage features found in the area covered by the map. **(3 marks)**

(c) Describe the relief of the area covered by the map. **(5 marks)**

(d) Citing evidence from the map, identify **three** social services offered in Nyeri Township. **(6 marks)**

7. (a) (i) What is a mineral? **(2 marks)**

(ii) Describe the following characteristics of minerals:

- Lustre **(2 marks)**
- Colour **(2 marks)**
- Cleavage **(2 marks)**

(b) Describe **three** ways in which igneous rocks are formed. **(9 marks)**

(c) Explain **four** significance of rocks to the economy of Kenya. **(8 marks)**

8. (a) (i) State **three** causes of faulting. **(3 marks)**

(ii) Differentiate between a normal fault and a reverse fault. **(4 marks)**

(b) (i) A part from rift valley, give **three** other relief features formed due to faulting. **(3 marks)**

(ii) With the aid of diagrams, describe how compressional forces can lead to formation of a rift valley. **(8 marks)**

(c) Students from your class are planning to carry out a field study on an area affected by faulting.

(i) State **four** reasons why it is important to have a pre-visit to the area. **(4 marks)**

(ii) Give **three** reasons why it would be inappropriate to use observation to collect data during the field study. **(3 marks)**

9. (a) (i) What are ocean tides? **(2 marks)**

(ii) Name **two** ocean currents along the western coast of Africa. **(2 marks)**

(b) State **three** factors that determine the rate of coastal erosion. **(3 marks)**

(c) With the aid of labeled diagrams, describe the formation of the following coastal features:

(i) Fringing reef **(5 marks)**

(ii) Spit **(5 marks)**

(d) Explain the significance of oceans to human activities. **(8 marks)**

10. (a) Name three components of soil. **(3 marks)**

(b) Explain how the following factors influence the formation of soil:

(i) Climate **(4 marks)**

(ii) Topography **(4 marks)**

(c) Describe how laterization occurs. **(6 marks)**

(d) Explain four ways in which human activities contribute to soil erosion. **(8 marks)**

KCSE 2023 PREMOCK EXAMS

SERIES 1

GEOGRAPHY

PAPER 2

TIME: 2¾ HOURS

NAME……

SCHOOL…… SIGN……

INDEX NO…… ADM NO……

INSTRUCTIONS TO CANDIDATES

1) *This paper has **two** sections: **A** and **B***
2) *Answer **ALL** the questions in **section A.***
3) *In section **B,** answer **questions 6** and any other **TWO** questions.*
4) *All the answers must be written on the foolscaps provided after page 4.*
5) *Candidates must answer the questions **in English**.*

FOR EXAMINER'S USE ONLY

Section	Questions	Maximum Score	Candidate's Score
A	1 - 5	25	
B	6	25	
		25	
		25	
		Total Score	

SECTION A

1. **(a)** What is management of forests? **(2 marks)**

(b)State three reasons why agroforestry is encouraged in Kenya. **(3 marks)**

2. **(a)** Name **two** categories of agricultural processing industries in Kenya. **(2 marks)**

(b) State **three** similarities between the cottage industry of India and the Jua Kali industry in Kenya. **(3 marks)**

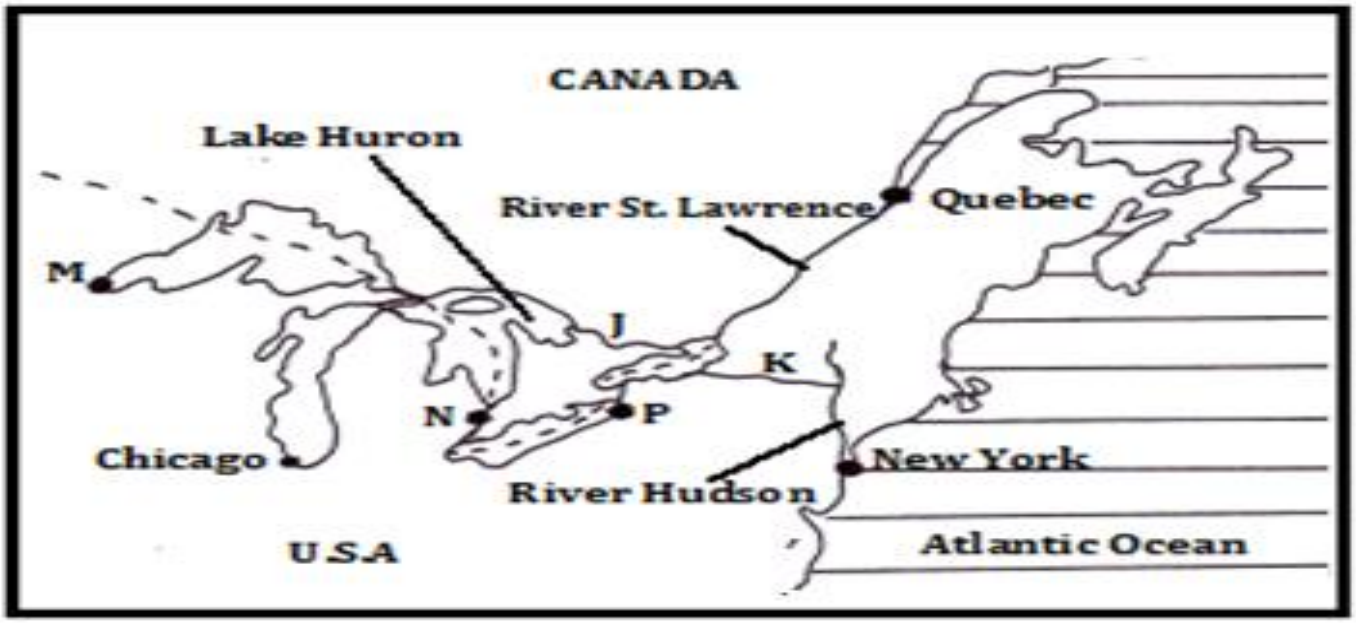
3. (a)Differentiate between settlement and urbanization. **(2 marks)**

(b)State **four** characteristics of central business district of a town. **(4 marks)**

4. (a)Name **two** types of environment. **(2 marks)**

(b)State **three** consequences of water pollution. **(3 marks)**

5. The map below shows the Great Lakes and St. Lawrence Seaway. Use it to answer question (a) and (b).



(a) Name the canals marked **J** and **K**. **(2 rks)**

(b) Name the towns marked **M** and **N**. **(2 mks)**

SECTION B

6. Study the table below and use it to answer questions (a) and (b)

Value of leading imports to Kenya from 2015 to 2019 (Ksh million)

MPORT	2016	2017	2018	2019
Industrial machinery	**253,500**	**238,400**	**252,400**	**257,600**
Petroleum products	**183,800**	**234,900**	**295,100**	**307,500**
Iron and Steel	**75,500**	**83,600**	**97,700**	**104,100**

(a) **(i)**What is the difference between the value of petroleum products imports between year 2018 and year 2016? **(2 marks)**

(ii) Calculate the percentage increase between the value of industrial machinery imported between year 2017 and the year 2019. **(2 marks)**

(b) **(i)**Apart from comparative bar graphs, give **three** other statistical methods that can be used to present the data in the table. **(3 marks)**

(ii)Using a vertical scale of 1cm to represent Ksh 30 Billion, draw a comparative bar graph to present the data in the table. Use the graph paper provided. **(9 marks)**

(c) State **three** advantages of using comparative bar graphs to present statistical data. **(3 marks)**

(d) Explain **three** reasons for low volume of trade between the countries in Africa. **(6 marks)**

7.(a) **(i)**Define the term mining? **(2 marks)**

(ii)Give four methods of underground mining. **(4 marks)**

(b) Explain how the following factors influence mining:

(i) Level of technology **(4 marks)**

(ii) Quality of the ore **(2 marks)**

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

(d) State **five** negative effects of mining on the environment. **(5 marks)**

8. (a) (i) State **three** physical factors that favour tea growing in Kericho County. **(3 marks**

(ii) Describe the stages involved in tea processing at the factory. **(7 marks)**

(b) Outline **three** ways in which tea is marketed in Kenya. **(3 marks)**

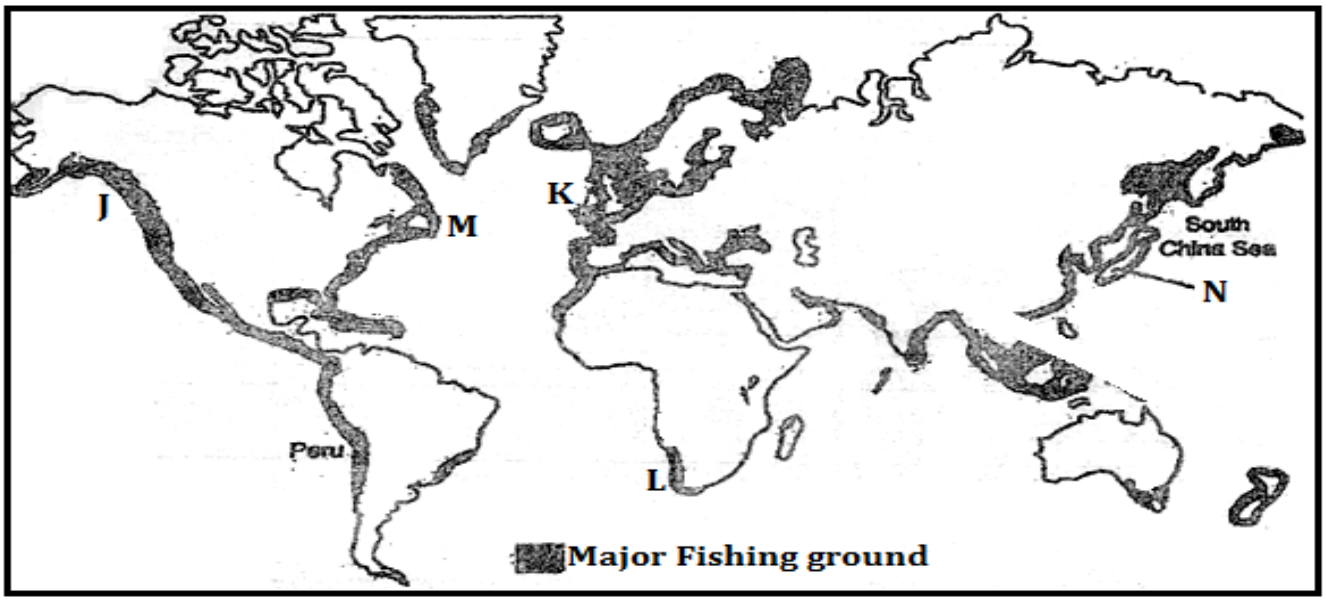
(c) Explain **thre**e physical problems facing small scale tea farmers in Kenya. **(6 marks)**

(d) Your Geography class carried out a field study on a tea plantation.

(i) Give **three** reasons why it is important to prepare a route map of the area. **(3 marks)**

(ii) tate **three** methods that the class would have used to present data. **(3 marks)**

9. The map below shows the major fishing grounds of the world. Use it to answer question (a) (i), (ii) and (iii)



(a) **(i)** Name the fishing ground marked J,K,L and **M** **(4 marks)**

(ii) Name **the two** ocean currents that converge at region **M** **(2 marks)**

(iii) Explain **three** physical factors that have favoured fishing in country N. **(6 marks)**

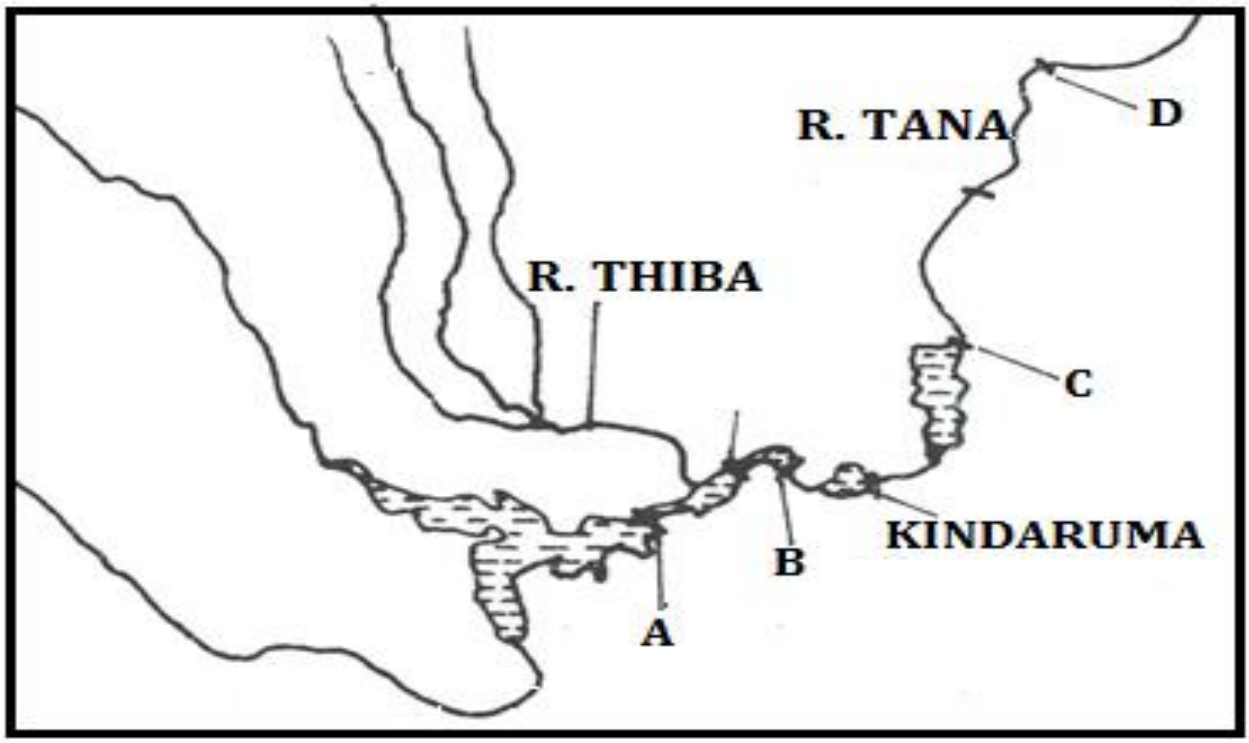
(b) (i) Describe how trawling as a method of fishing is carried out. **(5 marks)**

(ii) Explain **four** measures being undertaken in Kenya to reduce overfishing of the natural water fisheries **(8 marks)**

10. (a) (i) Name **three** non-renewable sources of energy. **(3 marks)**

(ii) State **four** advantages of solar energy. **(4 marks)**

(b) The diagram below shows the Kenya's hydroelectric power stations along River Tana.



(i) Name the H.E.P stations marked **A, B** and **C**. **(3 marks)**

(ii) The proposed H.E.P dam site marked **D**. **(1 mark)**

(iii) Explain **four** challenges hindering hydroelectric power generation in Kenya **(8 marks)**

(d) **(i)** What is an energy crisis. **(2 marks)**

(ii) Explain the effects of an energy crisis in the following sectors.

- Agriculture **(2 marks)**
- Industries **(2 marks)**

KCSE 2023 PREMOCK EXAMS

SERIES 1

HISTORY AND GOVERNMENT

PAPER 1

TIME: 2½ HOURS

NAME……

SCHOOL…… SIGN……

INDEX NO…… ADM NO……

SECTION A (25 MARKS)

Answer all questions in this section

1. Give the branch of History that deals with peoples culture **(1mk)**
2. Identify **two** social practices introduced to the Bantu by the cushites **(2mks)**
3. Mention the basic social unit among the Luo in pre-colonial Kenya **(1mk)**
4. Identify **two** main items of trade from the interior of Kenya during the long distance trade? **(2mks)**
5. Give the reason why Ludwig Krapf was unable to establish a misson station in Kitui **(1mk)**
6. Mention **two** communities in Kenya whose ancestors settled in Mt. Elgon area before migration to the present homeland **(2mks)**
7. Other than public bill name the other type of bill debated in the national assembly **(1mk)**
8. Name **two** levels of government in Kenya today **(2mks)**
9. State the chief executive officer incharge of the county **(1mk)**
10. Name the First African in Kenya to serve in the Legislative council in colonial Kenya **(1mk)**
11. Give importance of the Mace in parliament **(1mk)**
12. Mention the constitutional commission that conducts and supervises elections in Kenya **(1mk)**
13. Name **two** political activists assassinated in Kenya up to 1978 **(2mks)**
14. Give **two** changes introduced by the Mackay Commission in education sector in Kenya **(2mks)**
15. State **two** pillars of Nyayoism **(2mks)**
16. Identify two principles of devolved government. **(2mks)**
17. Define public revenue. **(1mk)**

SECTION B (45MARKS)

Answer any three questions in this section

18. State **five** economic activities of the Borana during the pre-colonial period **(5mks)**

(b) Describe the social organization of the Maasai **(10mks)**

19 (a) **State three** reasons for the coming of the Portuguese to the Kenyan coast in the 15th Century **(3mks)**

(b) Explain **six** factors that led to the development of plantation agriculture along East African Coast. (**12mks)**

20. Identify **three** methods used by the British to establish their rule in Kenya **(3mks)**

(b) Explain **six** results of the Nandi resistance **(12mks)**

21 (a) State five reasons why the government of Kenya adopted the sessional paper No. 10 of 1965 **(5mks)**

(b) Discuss **five** ways in which the Harambee philosphy has promoted development of education in Kenya since independence **(10mks)**

SECTION C (30 Marks)

Answer Any Two Questions in this Section

22 (a) Give **three** internal factors that led to introduction of multi-party democracy in Kenya in the early 1990's **(3 mks)**

(b) Describe **six** achievements of Multi-party democracy in Kenya **(12mks)**

23. (a) Give **three** superior courts in Kenya **(3 mks)**

(b) Explain **six** measures taken by the government to improve the correctional services in Kenya **(12mks)**

24. (a) Mention **three** national security organs **(3mks)**

(b) Explain **six** functions of the attorney general in Kenya **(12mks)**

KCSE 2023 PREMOCK EXAMS

SERIES 1

HISTORY AND GOVERNMENT

PAPER 2

TIME: 2½ HOURS

NAME……

SCHOOL…… SIGN……
INDEX NO…… ADM NO……

SECTION A (25 Marks)

Answer all the questions in this section.

1. State one limitation of using electronics as a source of information of History and Government. **(1mark)**

2. Identify two classes of monarchial government. **(2marks)**

3. Identify two ways in which early man used tools. **(2marks)**

4. Identify two uses of copper in Africa during the 19th century. **(2marks)**

5. State one type of trade. **(1mark)**

6. State two ways in which slaves were acquired during the Trans-Atlantic trade. **(2marks)**

7. Give two negative impacts of internet today. **(2marks)**

8. Give two factors that led to the decline of Kilwa town. **(2marks)**

9. Give two categories of chiefs in the Buganda Kingdom. **(2marks)**

10. Name the leader of the British South African Company (BSACO.) in the 19th century. **(1mark)**

11. Identify two methods of colonial administration used by the British in Africa. **(2marks)**

12. Name one treaty signed by Lobengula and the British during the process of colonization. **(1mk**

13. State one way through which the United Nations Organization contributed to the growth of African Nationalism. **(1mark)**

14. State the main cause of the Cold War. **(1mark)**

15. Give one factor that led to the failure of Ujamaa policy in Tanzania. **(1mark)**

16. State the main function of the International Court of Justice. **(1mark)**

17. State one way in which one can become a member of the House of Lords in Britain. **(1mark)**

SECTION B (45MKS)

Answer three questions from this section

18. a) Give five changes that led to Agrarian Revolution in Britain. **(5marks)**

b) Explain the effects of Agrarian Revolution in Britain. **(10marks)**

19. a) Give three factors that led to the development of urban centres in Africa during the pre-colonial period. **(3marks)**

b) Explain six consequences of urbanization in Europe during the 19th C. **(12marks)**

20. a) Give three social reasons that led to the scramble and petition of Africa in the 19thC by European powers. **(3marks)**

b) Explain six impacts of European partition of Africa. **(12marks)**

21. a) Give three reasons why the Ndebele were defeated by the British in 1893-1894. **(3marks)**

b) Briefly describe the results of the Anglo-Ndebele war of 1893-1894. **(12marks)**

SECTION C (30MKS)

Answer two questions from this section.

22. a) Outline five grievances of Africans against Apartheid in South Africa. **(5marks)**

b) Explain five challenges faced by African Nationalists in the struggle for majority rule in South Africa. **(10marks)**

23. a) Identify five achievements of Pan Africanism. **(5marks)**

b) Describe five factors undermining the activities of African Union (AU) since its formation in 2001 **(10marks)**

24. a) State three functions of political parties in the United States of America **(USA) (3marks)**

b) Explain six duties of the president of the United States of America (USA) **(12marks)**

KCSE 2023 PREMOCK EXAMS

SERIES 1

PHYSICS

PAPER 1

TIME: 2 HOURS

NAME……

SCHOOL…… SIGN……

INDEX NO…… ADM NO……

SECTION A: (25 MARKS)

Answer all questions in this section.

1. A partially inflated balloon at sea level becomes fully inflated at higher altitudes. Explain this observation **(2mks)**

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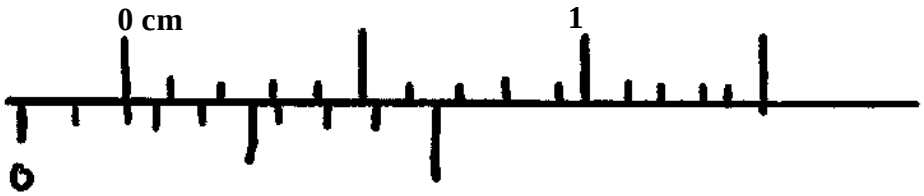
2. Xcm^3 of substance A of density 800kgm^{-3} is mixed with 100cm3 of water of density 1000kgm^{-3}. The Density of the mixture is 960kgm^{-3}. Determine the value of **x.** **(3mks)**

……

……

……

3.The figure below shows part of a vernier caliper when the jaws are closed without an object between the jaws



(a) What is the value of the zero error of the callipers? **(1mk)**

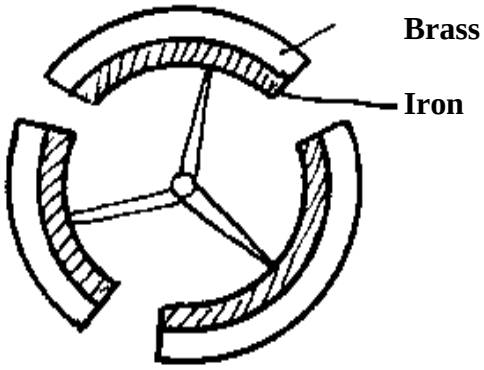
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(b) A student used the same vernier calipers in (a) above to measure the diameter of a test tube whose actual diameter is 2.15cm. what was the reading shown by the calipers. **(1mk)**

……

4.The figure below shows a bimetallic wheel whose diameter is not affected by changes in temperature. Briefly explain how the diameter of the wheel remain unchanged as the temperature increases **(3mks)**

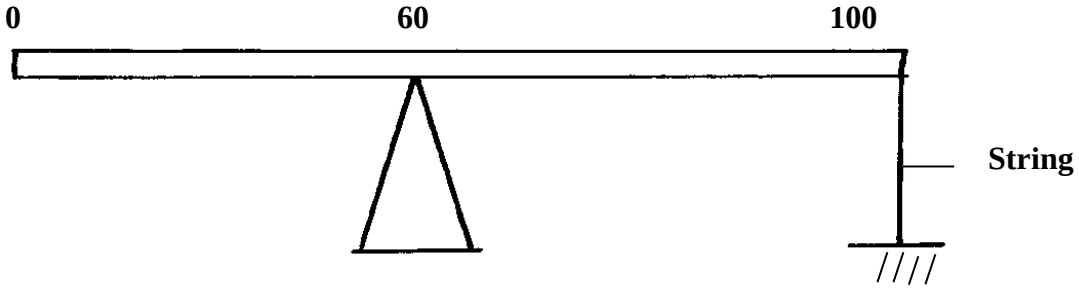


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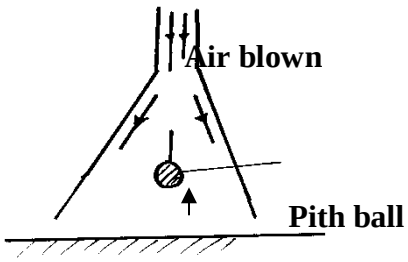
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5.A uniform meter rule of mass 40g is pivoted at the 60cm mark and held horizontally with a vertical String shown below. Determine the tension in the string. **(3mks)**



6.The figure below shows a pith ball being lifted into the funnel by blowing air into the funnel



Explain this observation **(2mks)**

……

……

……

7.Explain why a hole in a ship near the bottom is more dangerous than the one near the top**(1mk)**

……

……

8.A bullet of mass log travelling at a speed of 400ms-1 hits a tree trunk, it penetrates the tree trunk and stops inside the trunk after 4 cm.

(a) Calculate the average resistance force offered by the trunk to the bullet. **(3mks)**

……

……

……

……

(b) State the energy changes that takes place. **(1mk)**

……

……

9.State the effect on motion of smoke particles when the temperature inside the smoke cell is lowered. **(1mk)**

……

……

10.(a) Explain the washing effect of soap. **(1mk)**

……

……

(b)State one way of making surface tension of water stronger. **(1mk)**

……

……

SECTION B (55 MKS)

Answer all questions in this section

11.(a) A modern car has a strengthened passenger cage but with front and back regions which can collapse in a crash. Explain how this collapsible regions should reduce injury in a car crash. **(3mk)**

……

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……

……

(b) An object of mass 150kg moving at 20m/s collides with a stationery object of mass 90kg. They couple after collision. Determine;

(i) The total momentum before collision **(2mks)**

(ii) Total momentum after collision **(1mk)**

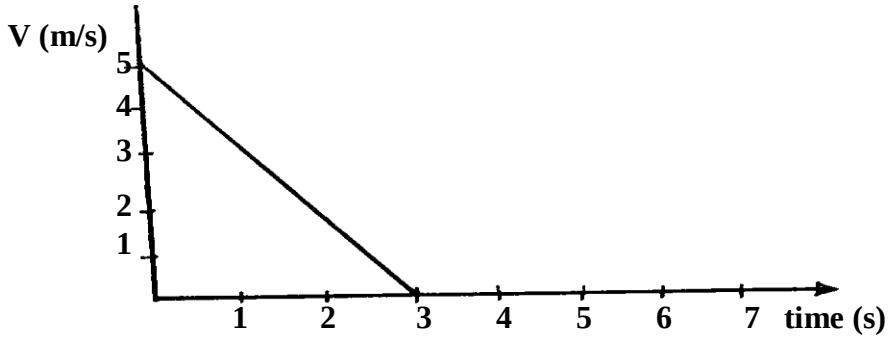
(iii) Their common velocity after collision **(2mks)**

12.(a) Distinguish between velocity and speed. **(1mk)**

……

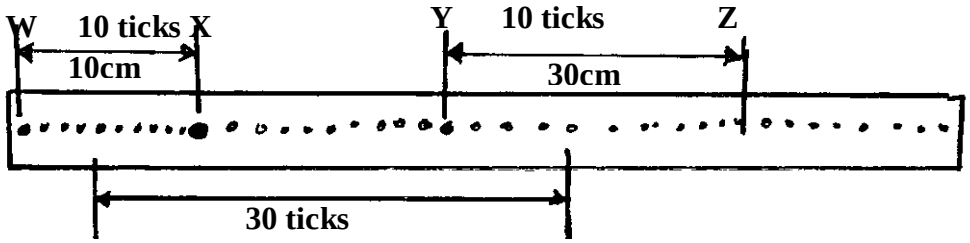
……

(b) The velocity time graph in the figure below illustrates the motion of a ball which has been projected vertically upwards from the surface of a planet. The weight of the ball on earth is 30N



Determine the weight of a ball on the planet **(3mks)**

c) The figure below shows a section of a tape from a ten tick timer whose frequency is 50 Hz.



Calculate;

(i) The average velocity of the trolley between points

1. WX **(2mks)**

2. YZ **(2mks)**

(ii) Find the acceleration of the trolley. **(2mks)**

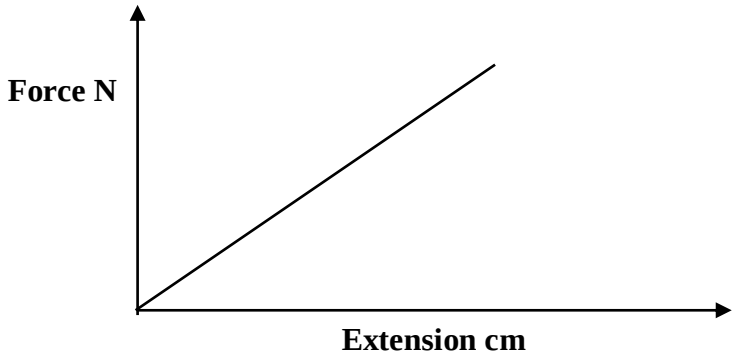
13. **(a)** State Hooke's Law. **(1mk)**

……

……

(b) The figure below shows the variation force with extension for a steel coil spring.

(i) On the same axes, sketch the variation of force with extension for a wire form which the spring is made. **(1mk)**



Explain the difference between the two lines drawn **(2mks)**

……

……

……

(c) A stone of mass 5g is released from a catapult. The catapult is stretched by 10cm. If the constant of elasticity is 100N/cm. **Calculate;**

(i) The horizontal velocity with which the stone is released **(3mks)**

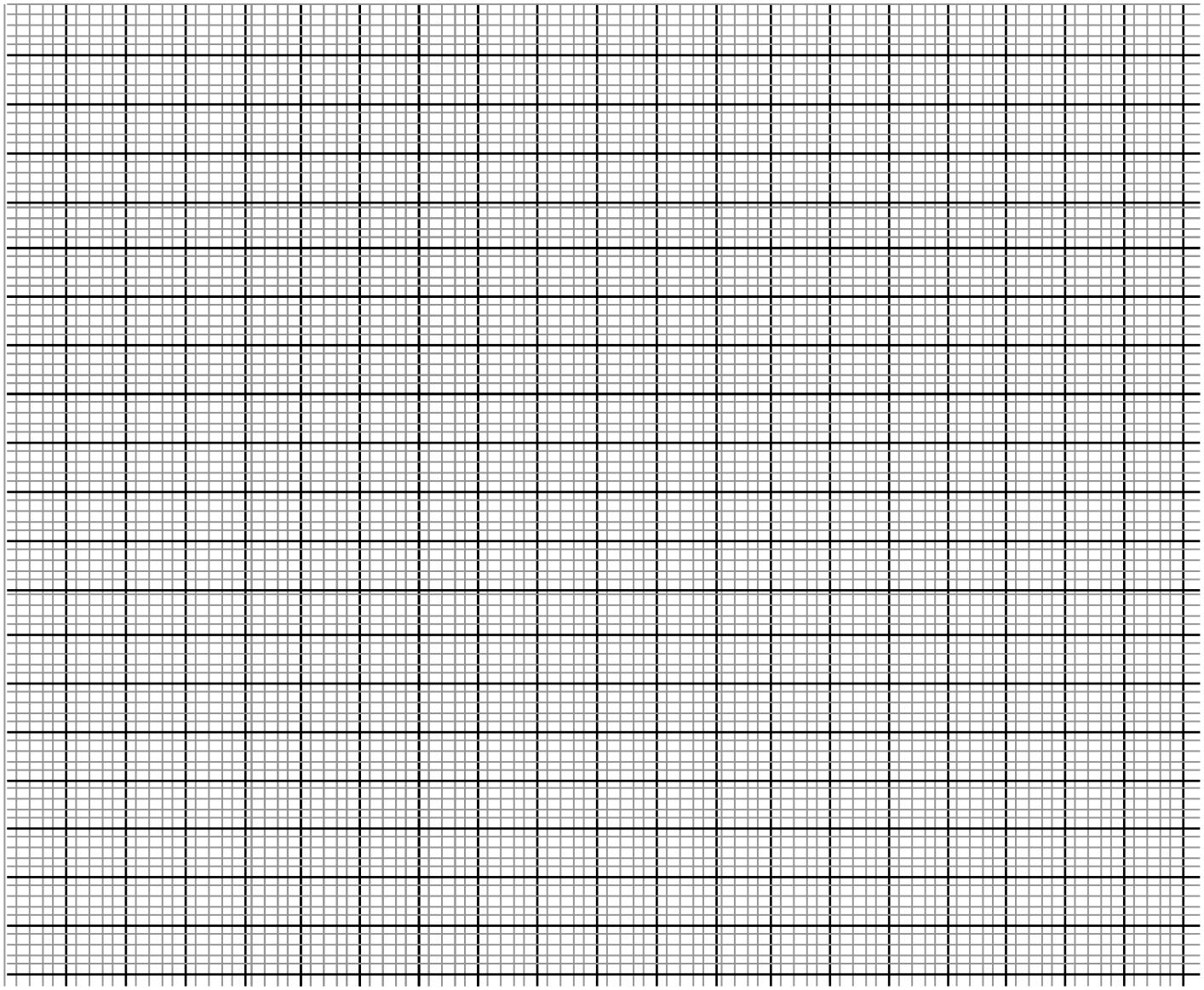
(ii) Sketch a graph of horizontal velocity against time from the time the stone is released to when it reaches the ground. **(1mk)**

(d) The following results were obtained in a experiment to verify Hooke's law when a spring was extended by hanging various loads on it.

Load (N)	0.00	1.00	2.00	3.00	4.00	5.00	6.00
Length of spring in cm	10.00	11.50	13.00	14.50	16.00	18.00	24.00
Extension	0.00						

(I) Complete the table for the extension e above. **(1mk)**

(II) Plot a graph of load (y-axis) against extension **(3mks)**



(III) From the graph determine the springs constant. **(2mks)**

(IV) Calculate the energy stored when the spring is stretched to 16 cm. **(3mks)**

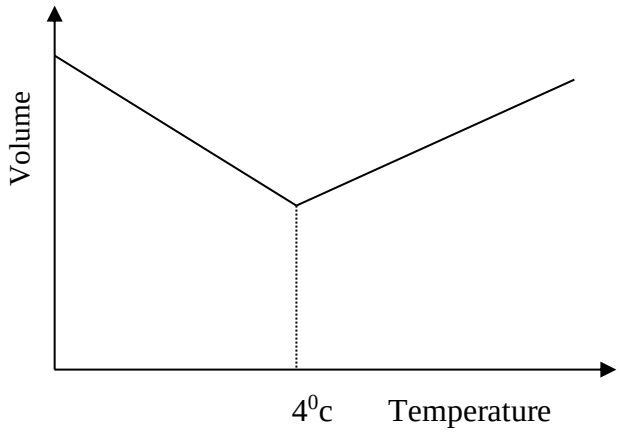
14. (a) State **two** advantages of mercury over alcohol as a thermometric liquid. **(2 mks)**

……

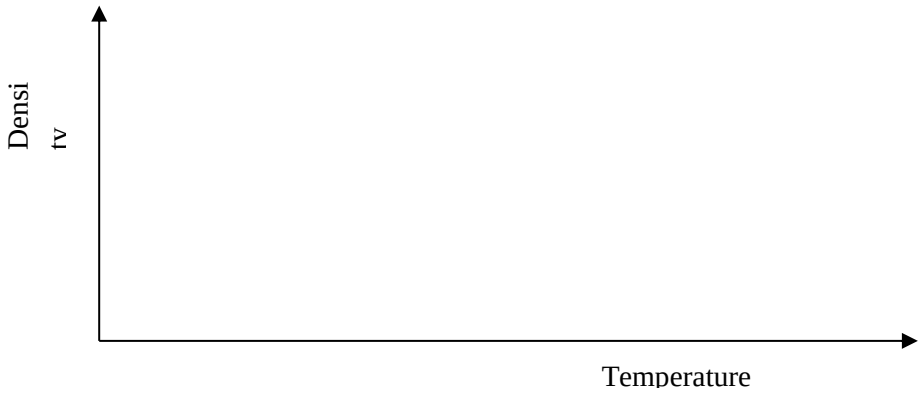
……

(b) When making the fixed points on a thermometer it is observed that at 0^0c the mercury thread is of length 2 cm and 8 cm at 100^0c. What temperature correspond to a length of 6 cm. **(3 mks)**

(c) (i) The figure below shows how volume of a given mass of water varies with temperature.



On the graph provided, sketch a graph of density against Temperature.

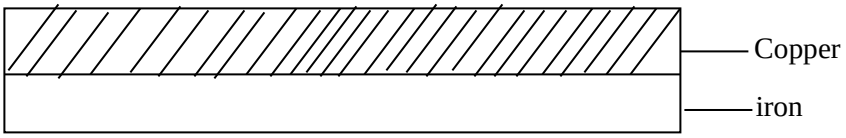


(ii) Sate and explain **one** effect of the anomalous expansion of water. **(2 mks)**

……

……

(d) The figure below shows a bimetallic strip made of copper and iron at room temperature.



If copper expands more than iron. Identify **A** and **B** if the bimetallic strip is placed in a refrigerator whose temperature is -70^0c. **(1 mk)**

A …….

B ……..

15. The figure below shows a system used to draw water from a well. An effort is applied on the handle which turns on a radius of 70 cm. As the handle turns a rope is wound on the drum of diameter 28 cm, thus raising a bucket of water from a well.

(a) If an effort of 10N is needed to lift a bucket full of water of mass 4 kg.

Calculate:

i) The energy gained by the water and bucket when the drum turns through one revolution.**(3 mks)**

ii) The work done by the effort during this one revolution. **(3 mks)**

(b) Calculate the **velocity ratio** of the system. **(1 mk)**

(c) Calculate the **efficiency** of the system. **(3 mks)**

KCSE 2023 PREMOCK EXAMS

SERIES 1

PHYSICS

PAPER 2

TIME: 2 HOURS

NAME……

SCHOOL…… SIGN……

INDEX NO…… ADM NO……

INSTRUCTIONS

1. This paper consists of **two** sections, Section **A** and **B.** Answer **ALL** the questions in both sections in the spaces provided in this paper.
2. **ALL** working must be clearly shown.
3. KNEC mathematical tables and non-programmable silent electronic calculators **may be** used.

   Note: Take acceleration due to gravity g = 10m/s^2

FOR EXAMINER'S USE:

SECTION	QUESTION	MAXIMUM SCORE	STUDENTS SCORE
A	1-12	25	
B	13	12	
	14	11	
	15	13	
	16	08	
	17	11	
	TOTAL	80	

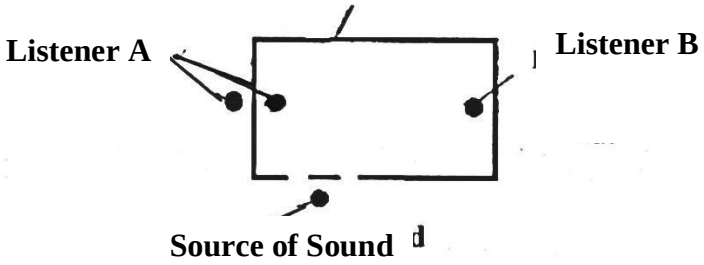
SECTION A (25 MARKS)

Answer ALL the questions in this section in the spaces provided.

1. State any **one** condition under which a pinhole camera may form an image on its screen which has the same size as the object. **(1 mark)**

……

2. The source of sound and two listeners are positioned close to a tall building as shown in the figure below.



i) State the property of sound by which Listener A is able to hear the sound produced**.(1 mark)**

……

ii) Listener **B** is moving directly towards Listener **A** and has a problem hearing the sound produced. Explain. **(2 marks)**

……

……

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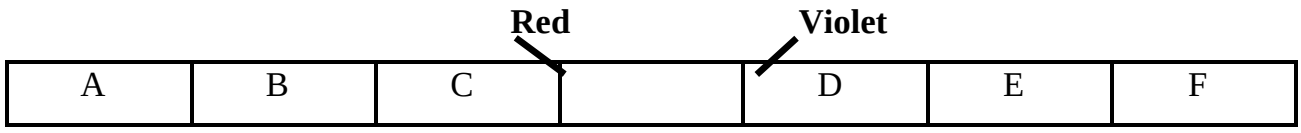
3. Give **two** differences between a transformer and induction coil. **(2 marks)**

……

……

……

4. The figure below shows some region of part of the electromagnetic spectrum.



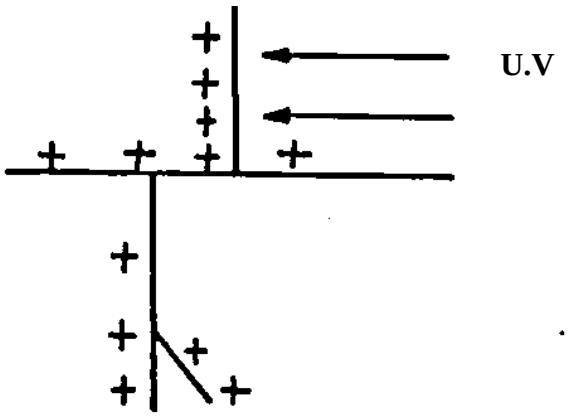
i) Name the region that is detected by a blackened bulb thermometer. **(1 mark)**

……

ii) State **one** use of the E-M wave in the region labelled **B.** **(1 mark)**

……

5. The figure below shows ultraviolet light striking a clean Zinc plate on a positively charged leaf electroscope.



Explain the following observations:

i) The leaf does not fall. **(1 mark)**

……

……

ii) When the same experiment is carried with a negatively charged electroscope, the leaf falls. **(1 mark)**

……

……

6. A girl observes her face in a concave mirror of a focal length 90cm. If the mirror is 70cm away, state **two** characteristics of the image observed. **(2 marks)**

……

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……

7. The ammeter in the circuit in figure 3 has negligible internal resistance. The cell has an internal resistance of 0.5Ω and an electromotive force of 3.0V.

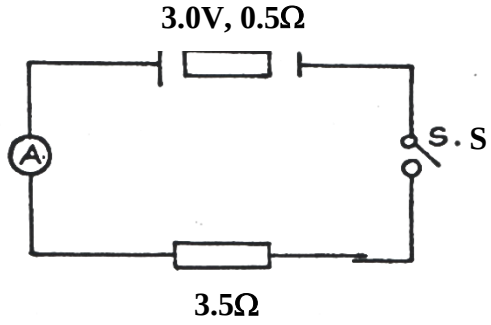


Figure 3

Determine the value of current the ammeter registers when switch S is closed. **(2 marks)**

……

……

……

8. An electric heater is rated 3 kW. Find the electrical energy in kWh(kilo watt- hours) consumed by the heater when used on a 240V supply for 180 minutes. **(2 marks)**

……

……

……

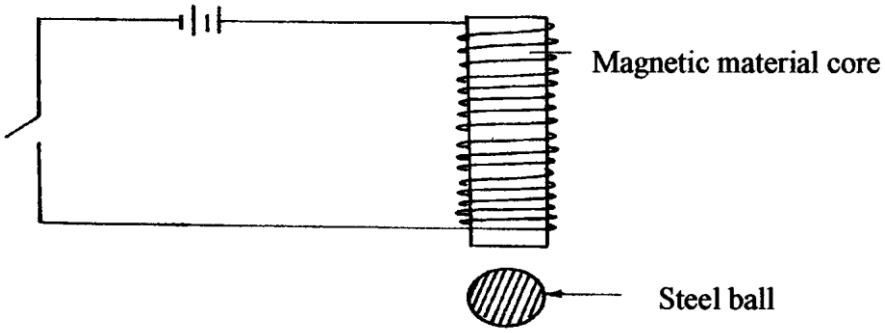
9. An echo sounder produces a pulse and an echo is received from the seabed after 0.4 seconds. If the speed of sound in water is 1500m/s. Calculate the depth of the sea bed**.** **(2 marks)**

……

……

……

10. The set up in figure 4 below can be used in a laboratory for lifting and releasing a steel ball.



i) State the material which is suitable for use in the core. **(1mark)**

……

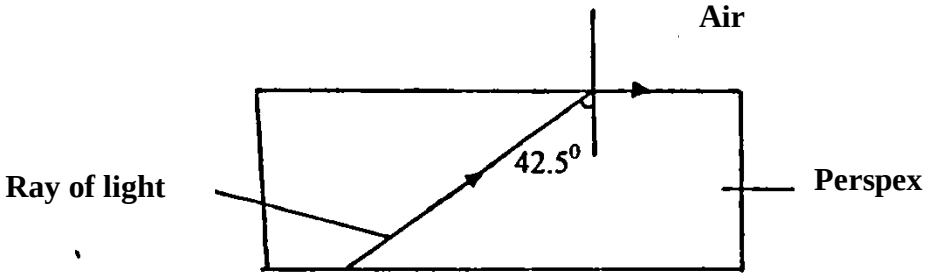
iii) If a slightly larger ball is to be lifted, it is necessary to make an electromagnet stronger. Name **two** ways of increasing the strength of the magnet. **(2 marks)**

……

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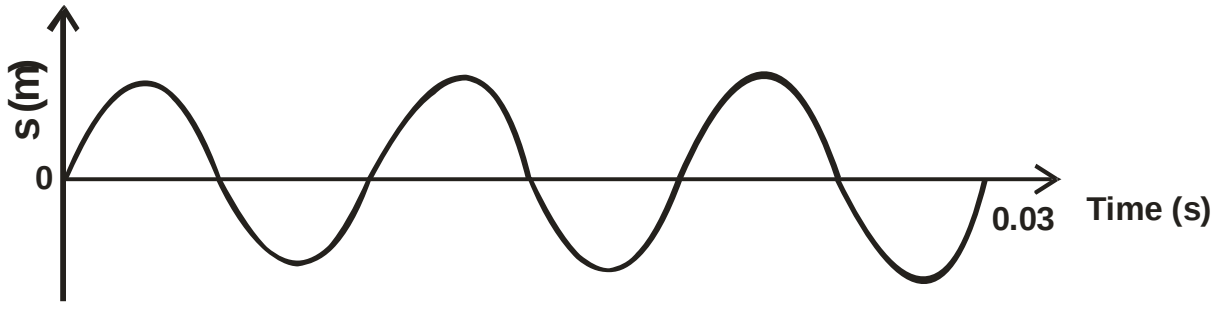
……

11. The figure 5 below shows the path of a ray of light passing through a rectangular block of Perspex placed in air.



Calculate the refractive index of Perspex. **(2 marks)**

12. The sketch shown below is a displacement-time graph of a wave traveling at $320ms^{-1}$



Find the wavelength of the wave. **(2 marks)**

SECTION B (55 MARKS)

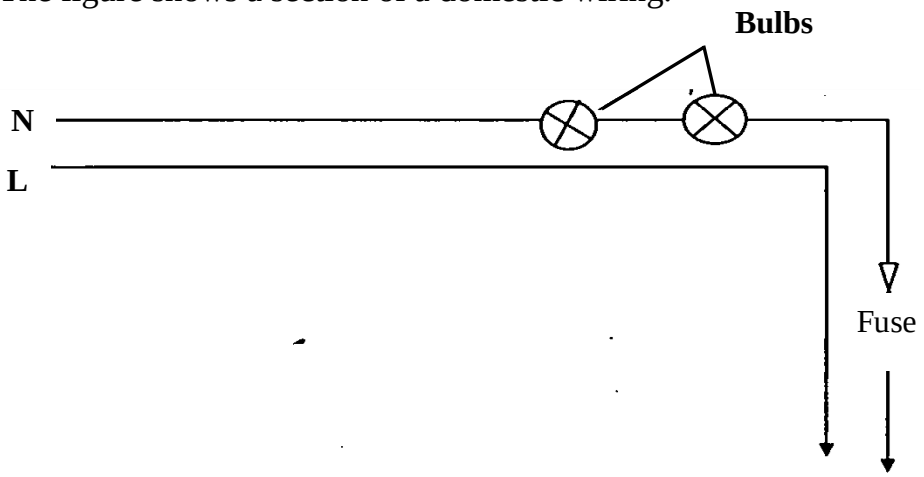
Answer ALL the questions

13. a) The mains electricity is transmitted through high tension voltage (H.T).

State **one** danger of this transmission. **(1 mark)**

……

b) The figure shows a section of a domestic wiring.



i) Identify **two** serious mistakes in the circuit. **(2 marks)**

……

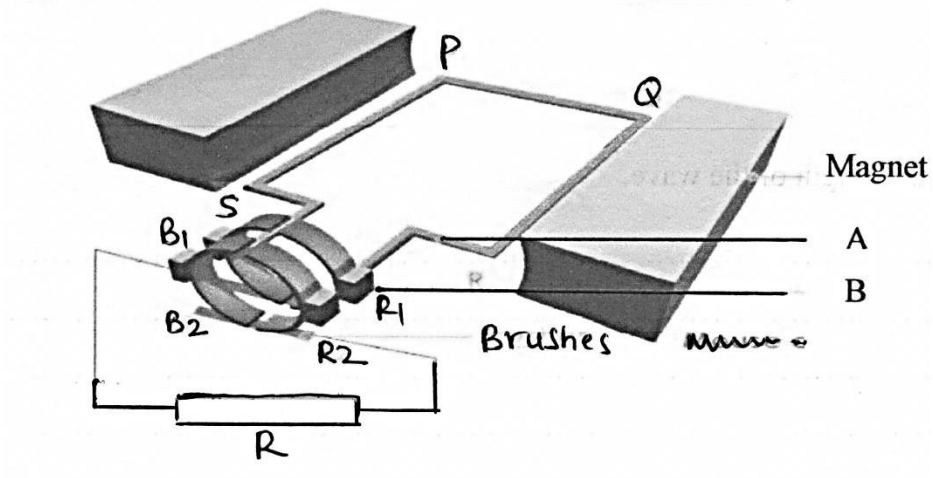
……

ii) Explain why the circuits in domestic wiring should be connected in parallel with the main supply. **(2 marks)**

……

……

c) Study the figure shown below



i) State the name of the machine shown in figure above. **(1 mark)**

……

ii) What are the names of the parts labelled A and B? **(2 marks)**

……

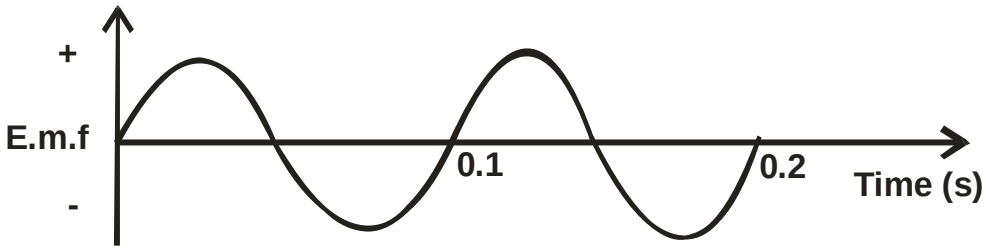
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What would be the effect of doubling the number of turns of the coil if the speed of rotation remained unchanged? **(1 mark)**

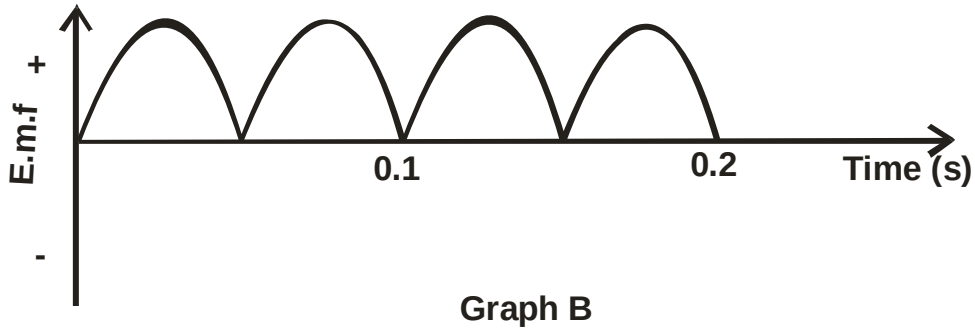
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……

d) The voltage-time signals obtained is as shown in the diagram below in graph A



Graph A



Graph B

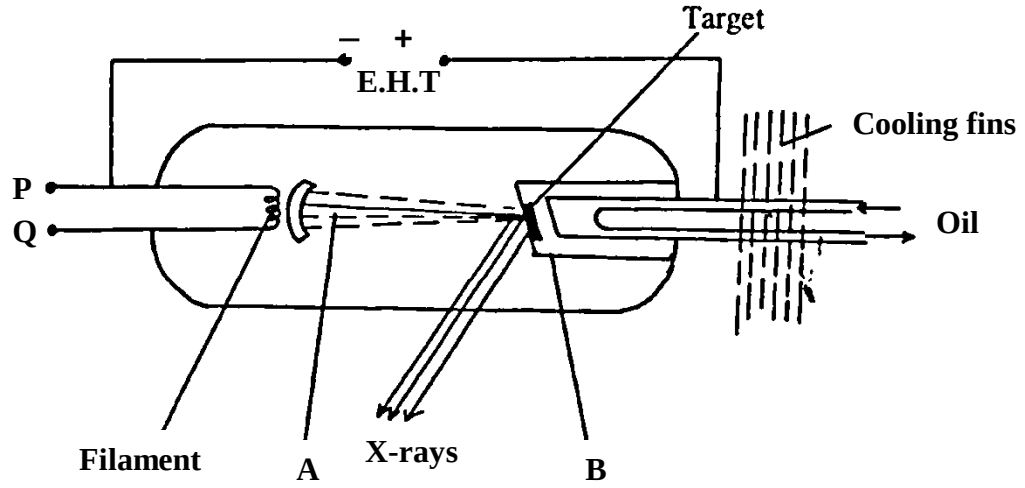
i) Find the frequency of the alternating E.m.f shown by graph A. **(2 marks)**

ii) What alterations have been made to the machine in c) above to produce the emf represented by graph B? **(1 mark)**

……

……

5. The figure below shows the features of an X- ray tube tube



6. a) Name the parts labelled A and B. **(1 mark)**

……

……

b) Explain how a change in the potential across PQ changes the intensity of the X-rays produced in the tube. **(2 marks)**

……

……

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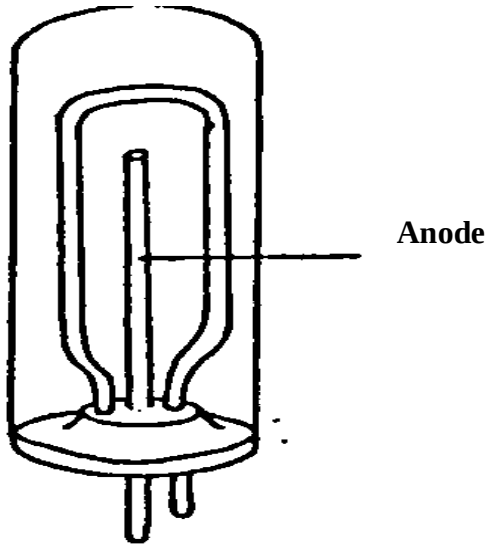
c) What property of lead makes it suitable for use as shielding material? **(1 mark)**

……

d) In an X-ray tube operating at 100kV,the tube current is 20mA. Determine the number of electrons hitting the target every second. **(2 marks)**

(Charge of an electron = 1.6×10^{-19}C)

e) The figure below shows a cell. Use it to answer questions that follow:



i) Name the type of cell. **(1 mark)**

……

ii) Label the cathode. **(1 mark)**

iii) The maximum kinetic energy of the photo-electrons emitted from a metal surface is 9.95×10^{-20}J. If the threshold frequency of light required to cause photo-electric emission with this metal is 5×10^{14} Hz. Calculate the frequency of the incident radiation.
(Plank's constant = 6.63×10^{-34} JS) **(3 marks)**

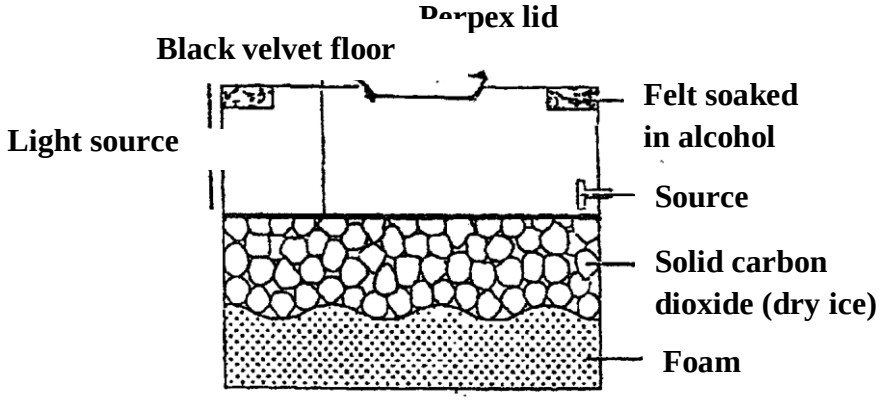
7. a) i) Explain why carbon -14 ($^{14}_{6}C$) is radioactive while carbon ($^{12}_{6}C$) is not**. (1 mark)**

……

……

ii) A radioactive isotope showed a count rate of 82 counts per second initially. After a time of 210 seconds, the count rate dropped by 19 counts per second. The average background count remained constant at 10 counts per second. What is the half-life of the material**?(2 mks)**

b) The figure below shows features of a diffusion cloud chamber used for detecting radiations from a radioactive source.



Explain how the chamber works when a radioactive particle is introduced at the source.(**2 marks)**

……

……

……

c) i) What is the purpose of solid carbon (IV) oxide. **(1 mark)**

……

……

ii) State **one** advantage of the cloud chamber over a G.M tube as a detector of radioactive radiations. **(1 mark)**

……

……

d) P-type and n-type semiconductors are made from a pure semiconductor by a process known as "doping".

i) State what is meant by doping. **(1 mark)**

……

……

ii) Explain how the doping produces an n-type semi-conductor. **(2 marks)**

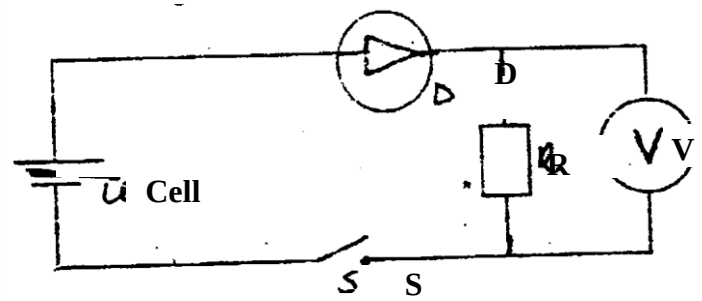
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e) In the circuit in the figure below, when the switch S is closed, the voltmeter shows a reading.



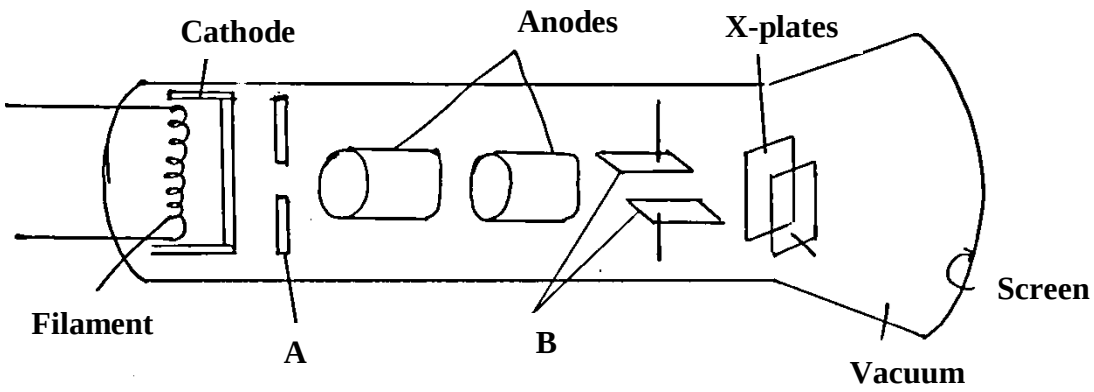
When the cell terminals are reversed and the switch is closed, the voltmeter reading is zero. Explain these observations. **(2 mrks)**

……

……

……

8. a) The figure below shows the features of a cathode ray oscilloscope;-



i) Name the parts A and B. State the role played by each of the parts A and B. **(2 marks)**

……

……

……

ii) Explain how electrons are produced. **(2 marks)**

……

……

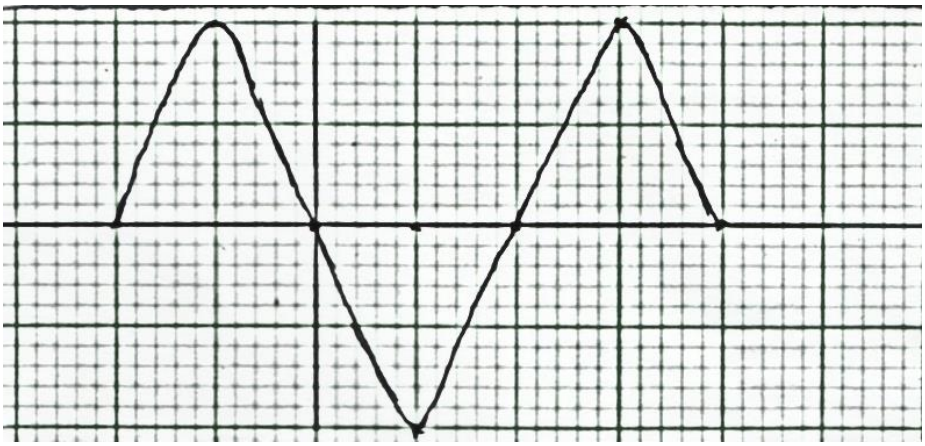
……

iii) State the factors considered when choosing the material for the cathode. **(1 mark)**

……

……

b) The figure below shows the trace on the screen of an a.c signal connected to the y-plates of a C.R.O with time base on. Given that the time base control is 100ms/div and the y-gain is at 120V/division.



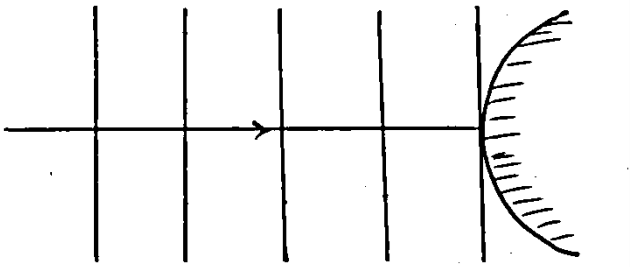
Determine:

i) The frequency of the a.c signal. **(2 marks)**

ii) The peak voltage of the input signal. **(2 marks)**

9. a) The figure below shows straight wavefronts incident on convex reflector.

Complete the diagram to show the reflected wavefronts. **(1 mark)**

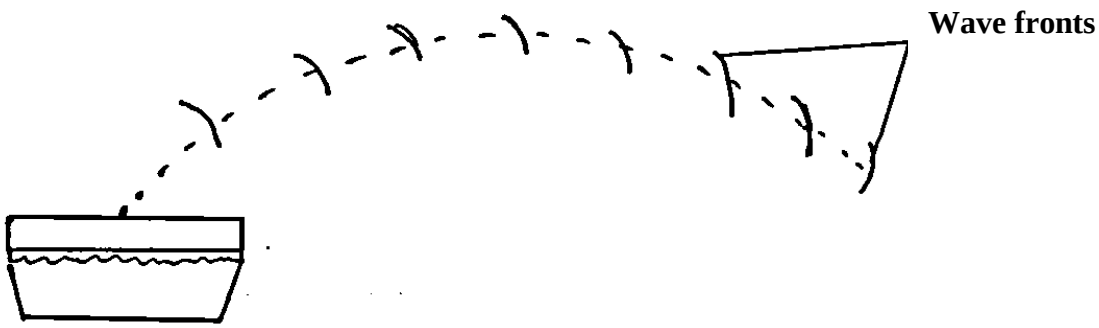


b)Narrow slits cannot be used to demonstrate interference of sound waves. Explain. **(1 mark)**

……

……

c) The figure below shows sound waves emitted by a drum struck.



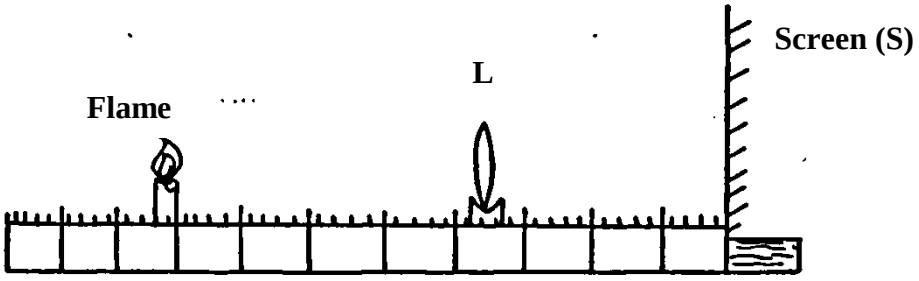
Explain why the wave fronts are directed to the ground. **(2 marks)**

……

……

……

d) Figure below shows an experimental set up consisting of a mounted lens, I, A screens, a metre rule and a candle



i)Describe how the set up may be used to determine the focal length f, of the lens. **(3 marks)**

……

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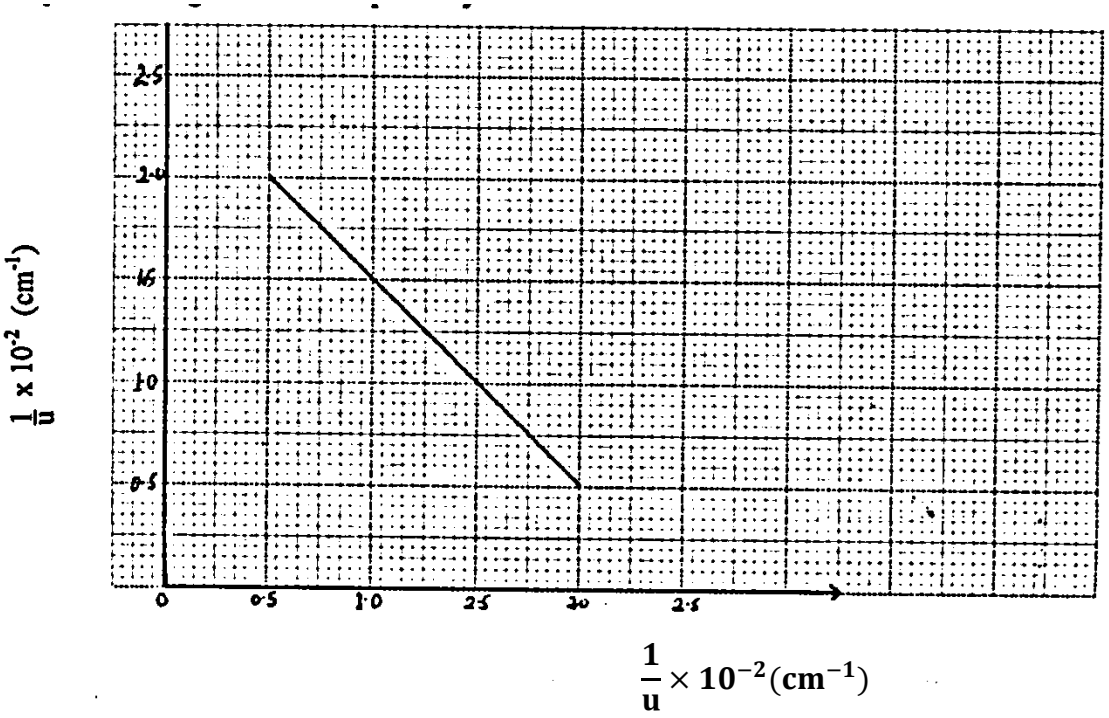
……

ii) State why the set up would not work if the lens were replaced with a diverging lens.**(1 mark)**

……

……

e) The graph figure below shows the relationship between $\frac{1}{u}$ and $\frac{1}{v}$ for a converging lens where u and v are the object and image distances respectively.



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

KCSE 2023 PREMOCK EXAMS

SERIES 1

PHYSICS

PAPER 3

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 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 here does not reach the candidates either directly or indirect.
2. The **physics teacher** should note that it is his / her responsibility to ensure that each apparatus acquired for this examination agrees with the specifications given.
3. The question paper will not be opened in advance.

Question 1

Each candidate will require:

- *A pendulum bob (50g mass)*
- *A stop watch*
- *Metre rule*
- *Two retort stands*
- *Two clamps*
- *Two bosses*
- *Inextensible thread 120cm long and 20 cm (in two pieces)*

Question 2

Each candidate will require:

- *A resistance wire/SWG 32-nichrome mounted on a millimeter scale labelled MN.*
- *A switch*
- *A voltmeter (O1A)*
- *An ammeter (O1A)*
- *Two dry cells size D (New)*
- *Six connecting wires at least 3 with crocodile clips*
- *White screen*
- *Candle*
- *Match box (to be shared)*
- *Convex lens (f=20cm)*
- *Lens holder.*

KCSE 2023 PREMOCK EXAMS

SERIES 1

PHYSICS

PAPER 3

TIME: 2 HOURS

NAME……

SCHOOL…… **SIGN**……

INDEX NO…… **ADM NO**……

1. You are provided with the following apparatus

- *A metre rule*
- *Two stands*
- *A pendulum bob*
- *Some plasticine*
- *Stop watch*
- *Two pieces of strings (long and short one)*

Proceed as follows:

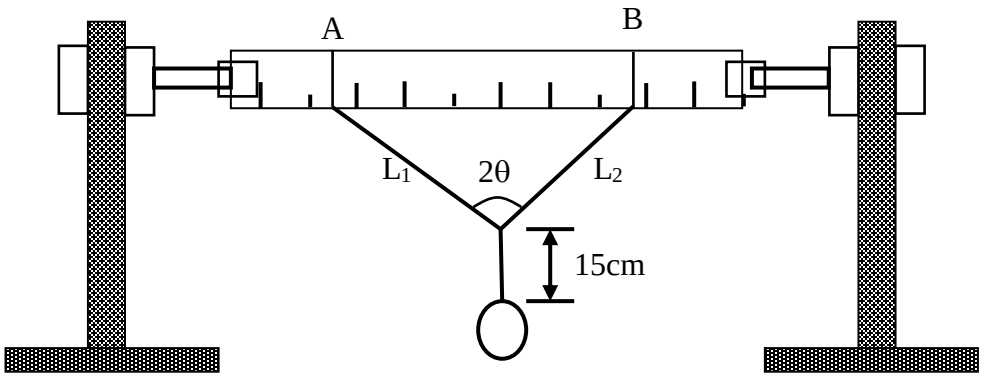
(a) Attach one end of the length of string to the metre rule at 10cm mark. Mark by use of a sliding loop of string round the meter rule.

(b) Fix the string at this point with the small bob of plasticine.

(c) Tie the string in a second loop at 90cm mark so that the string is stretched tight between the two marks.

(d) Fix this loop with a small plasticine. Attach the pendulum bob to the centre of the string so that the centre of gravity is 15cm below the point of suspension.

(e) If the attachments of the pendulum bob to the pieces does not produce a V-shape. Squeeze the string at the knot between the thumb and the fore finger.



i) Measure the angle 2θ **(1mk)**

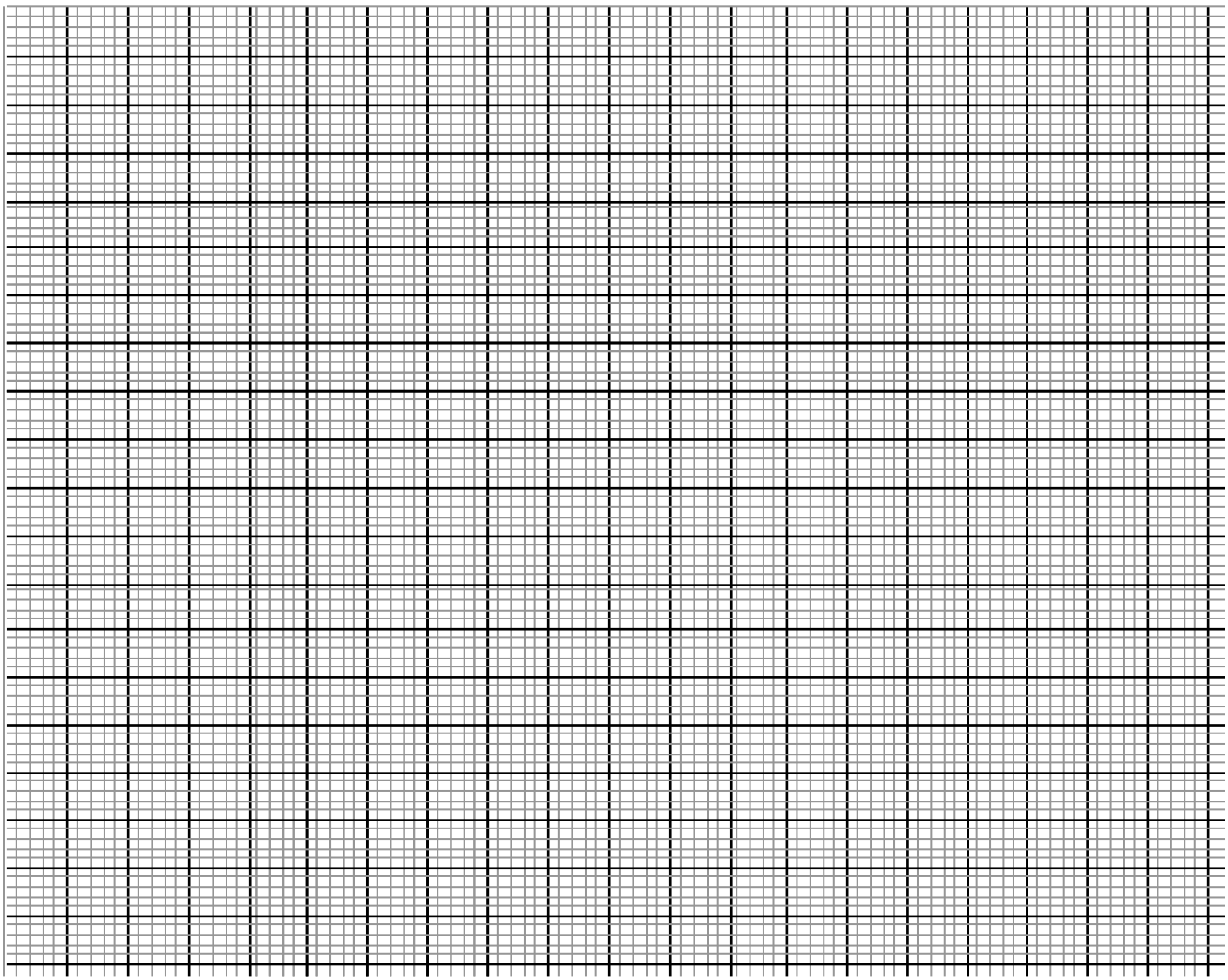
ii) Pull the pendulum bob towards you through a small distance, release it; measure the time (t) of the motion by timing 10 oscillations.

iii) Remove the plasticine at B and slide the loop towards A by 4cm and repeat (ii) above for other distances AB as shown in the table below.

Table (a) **(8marks)**

Length from A to B (cm)	80	76	72	68	64	60
Time for 10 oscillations (s)						
Period time T (s)						
$T^2(s^2)$						
2θ						
θ						
$\cos\theta$						

(f) Plot a graph of T^2 against $\cos\theta$ **(5 marks)**



(g) Find the slope "s" of the graph. **(3 marks)**

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(h) Given that $k = \frac{1.6\pi^2}{s}$ find k. **(2 marks)**

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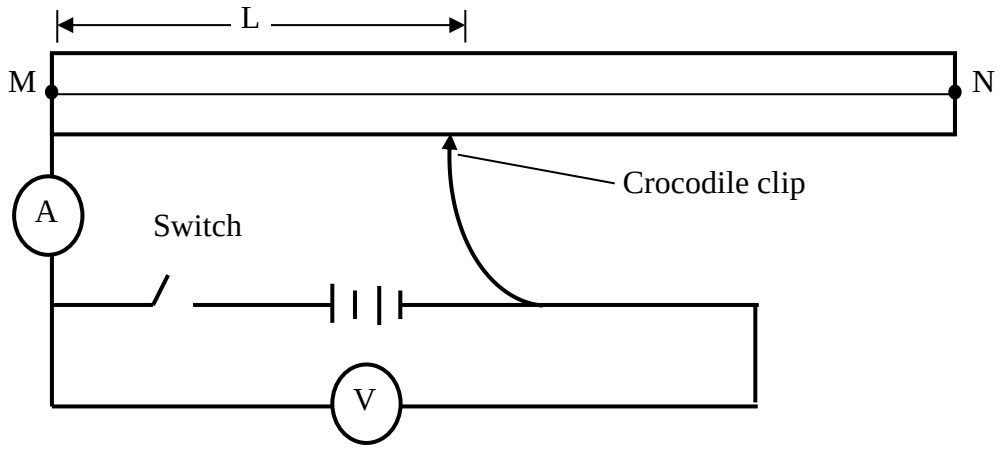
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2. (a) You are provided with the following apparatus:

- Resistance wire fitted on a scale labelled MN
- Switch
- Voltmeter
- Ammeter
- Two dry cells
- Six connecting wires

(i) Set up the apparatus as shown in the figure below;



(ii) Remove the crocodile clip to the resistance wire such that MN and close the switch. Record the voltmeter reading.

Y=……..V **(1mk)**

(iii) Attach the crocodile clip to the resistance wire such that L=10cm

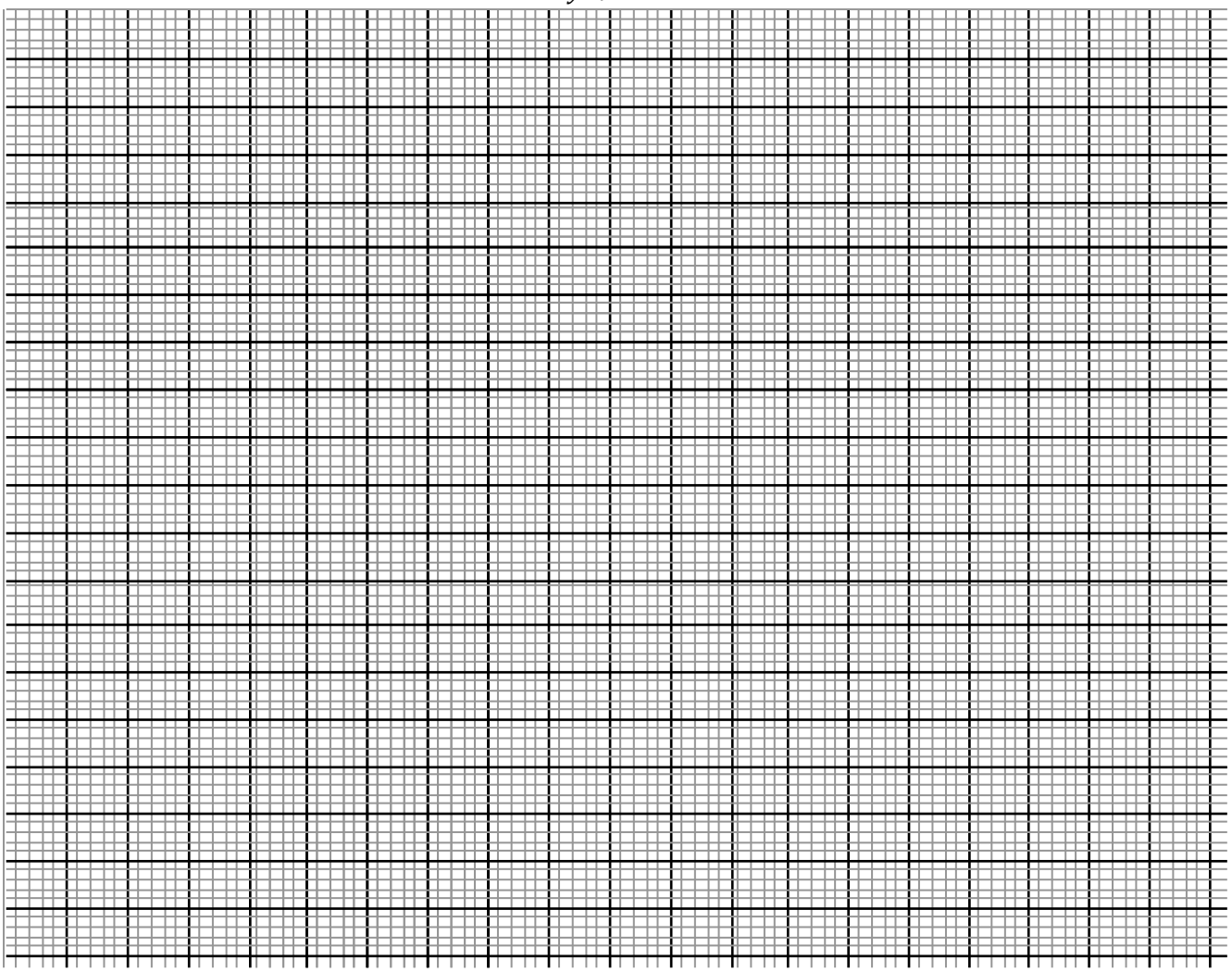
(iv) Record the voltmeter and ammeter readings in the table below.

(v) Repeat the procedure in (iii) and (iv) for L=20cm, 30cm, 50cm, and 80cm

(vi) Complete the table below; **(5 marks)**

Length L=cm	10	20	30	50	80
Current I (A)					
p.d $V_{(v)}$					
Y-V					
$\frac{V}{y-v}$					
R = $\frac{V}{I}$					

b) Plot a graph of R (vertical axis) against $\frac{v}{y-v}$ **(5 marks)**



c) Determine the slope m of the graph **(2marks)**

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d) The graph is given by the equation $R = \frac{5mv}{y-v} + d$ determine the value of m and d **(2 marks)**

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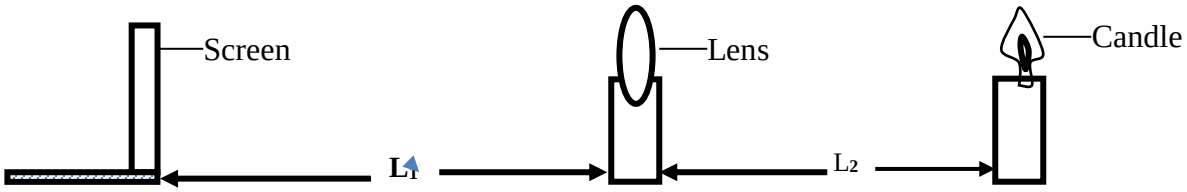
QUESTION 2 (B)

You are provided with the following set of apparatus

- A metre rule
- A white screen
- A candle
- Lens and lens holder

Procedure

i) Set up the apparatus as shown



ii) Starting with L_1=30cm, adjust the position of the candle in order to obtain a sharp image on the screen. Record the value of L_2…….

(1mk)

iii) Repeat the procedure for L_1=60cm

iv) Fill and complete for values of L_1/L_2 below. **(3 marks)**

L_1cm	L_2(cm)	$\frac{L_1}{L_2}$
30		
60		

v) Given the equation

$$F_1 = \frac{L_1}{m+1}$$

When m=magnification determine the value of focal length f, **(2 marks)**

……

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……

KCSE 2023 PREMOCK EXAMS

SERIES 1

MATHEMATICS

PAPER 1

TIME: 2½ HOURS

NAME……

SCHOOL…… SIGN……

INDEX NO…… ADM NO……

INSTRUCTIONS TO CANDIDATES

1. *Write your name and Index number in the spaces above.*
2. *Sign and write the date of the examination in the spaces provided above.*
3. *This paper contains two sections. Section I and II.*
4. *Answer all questions in section I and ONLY five in section II.*
5. *All answers and working must be written on the question paper in the spaces provided below each question.*
6. *Show all the steps in your calculations giving your answer at each stage in the spaces provided below each question.*
7. *Marks may be awarded for correct working even if the answer is wrong.*
8. *Non-programmable silent calculators may be used and KNEC Mathematical tables may be used, ex- cept where stated otherwise.*

EXAM INER' S USE ONL Y

Section I

Questi	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15		16	TOT
Marks																		

Section II

Questi	17	18	19	20	21	22	23		24	TOT
Marks										

GRAND TOTAL

(1.) Evaluate: **(3marks)**

$$\frac{(1\,{}^{3}/_{7} - {}^{5}/_{8}) \times {}^{2}/_{3}}{\frac{3}{4} + 1\,{}^{5}/_{7} \div {}^{4}/_{7} \text{ of } 2\,{}^{1}/_{3}}$$

(2.) A line passing through points P (4, a) and Q (3, 2) is perpendicular to the line $3y + x + 3 = 0$. Find the value of a and write down equation of line PQ. **(4 marks)**

(3.) Use reciprocal tables to find the value of $(0.325)^{-1}$ hence evaluate $\left(\frac{\sqrt[3]{0.0000125}}{0.325}\right)$, give answer to 4 s.f. **(3marks)**

(4.) Solve for x in the **equation** **(3marks)**

$$\frac{x-3}{4} - \frac{x+3}{6} = \frac{x}{3}$$

(5.) Using the three quadratic identities only factorize and simplify**:** **(4marks)**

$$\frac{(x-y)^2-(x+y)^2}{(x^2+y^2)^2-(x^2-y^2)^2}$$

(6.) In a regular polygon, the exterior angle is $^1/_3$ of its supplement. Find the number of sides of this polygon. **(3marks)**

(7.) Find the area of a segment of a circle whose arc subtends an angle of $22^{1}/_{2}$ on the circumference of a circle, radius 10cm. **(3marks)**

(8.) Mr. Onyangos piece of land is in a form of triangle whose dimensions are 1200m, 1800m and 1500m respectively. Find the area of this land in ha.(give your answer to the nearest whole number) **(3marks)**

(9.) Two men each working for 8hours a day can cultivate an acre of land in 4 days. How long would 6men, each working 4hours a day take to cultivate 4 acres? **(3marks)**

(10.) From a viewing tower 30metres above the ground, the angle of depression of an object on the ground is 30^0 and the angle of elevation of an aircraft vertically above the object is 42^0.Calculate the height of the aircraft above the ground. **(3marks)**

(11.) Solve the following inequality and show your solution on a number line. **(3marks)**

$4x - 3 \leq \frac{1}{2}(x + 8) < x + 5$

(12.) Using a ruler, a pair of compasses only and (proportional) a set square, construct on the upper side division of line **BC** is 6cm, a line **BD** such that $\angle$**DBC** = 37.5^o. Use the line **BD** to divide **BC** into 4 equal portions. **(3marks)**

(13). A Kenyan bank buys and sells foreign currency as shown below.

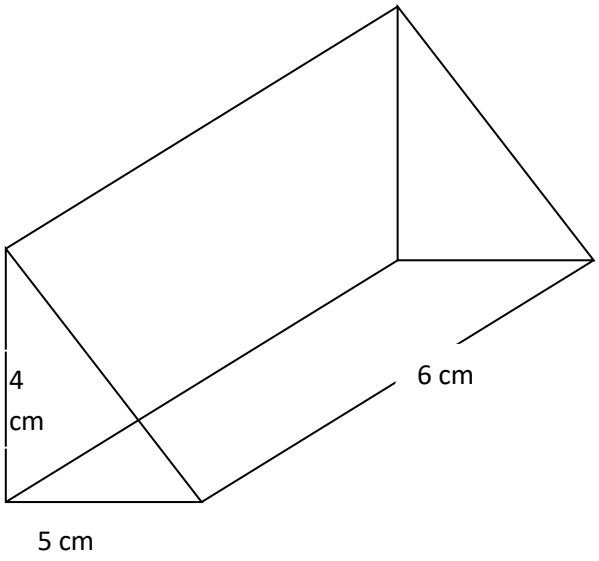
	Buying Ksh	Selling Ksh
1 US dollar ($)	103.00	106.20
1 UK pound (£)	145.00	149.95

A tourist arrived in Kenya with £9600 which he converted into Kshs at a commission of 5%. He later used ¾ of the money before changing the balance of dollars at no commission calculate; to the nearest dollar, the amount he received. **(3marks)**

(14.) A map is drawn to scale of 1:50,000. Find the area in cm^2 on the map of a field with an actual area of 60,000m^2. **(3marks).**

(15.) Two similar solids have surface areas of $48cm^2$ and $108cm^2$ respectively. Find the volume of the smaller solid if the bigger one has a volume of $162cm^3$. **(3marks).**

(16.) The diagram below represents a prism whose cross section is a right angled triangle. Draw a labeled sketch of the net of the prism. **(3marks).**



SECTION II. ANSWER ANY FIVE QUESTIONS.

17. Four schools: Lihanda, Kagito, Bar-Sari and Ndori are such that Lihanda is 6km from Kagilo on a bearing of 158°, Bar-Sauri is to the west of Kagilo and 20km away while Ndori is to the South of Bar-sauri on a bearing of 240° from Lihanda.

a) Using a scale of 1:400,000 draw a scale diagram showing the relative positions of the four schools **(5mark)**

b) Using your diagram determine the distance and bearing of Ndori from Kagilo**. (2 marks)**

c) A mast is to be erected so that it is equidistant from Kagilo and Bar-sauri and 20km from Ndori. On the same diagram show the position of the mast and find its distance from **Lihanda. (3marks)**

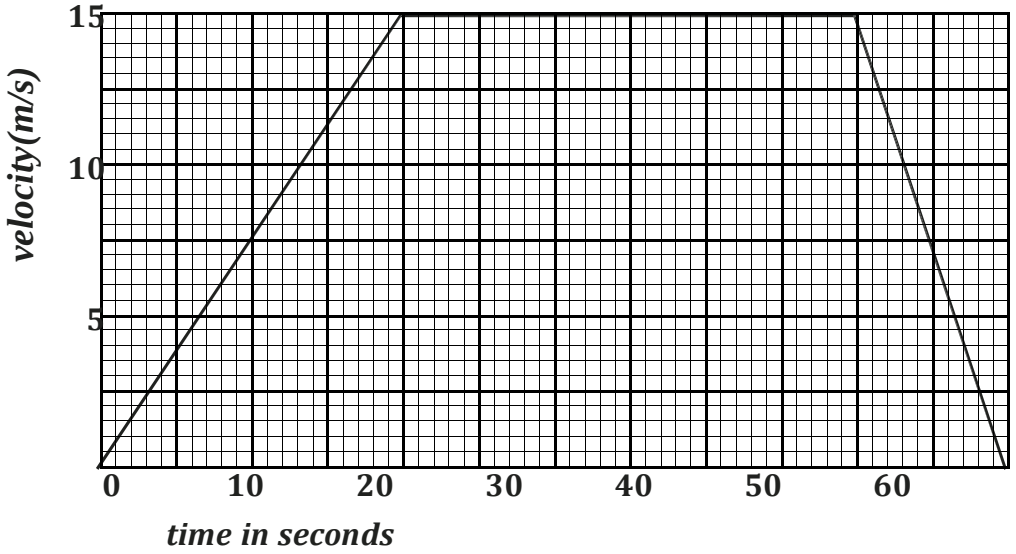
18. A commemorative stone is sculptured in a shape of a frustum of a cone with the diameters of the top and bottom faces being 28cm and 49cm respectively. If the vertical distance between the faces is 45cm, find:

i) Find the cones vertical height**.** **(2marks)**

(ii) Find the volume of the stone. **(3 marks)**

ii) Surface area of the stone. **(5 marks)**

19. The graph in figure below represents the journey made by a matatu between two bus stops.



a) What is the acceleration of the matatu? **(2 marks)**

b) Calculate the deceleration of the matatu? **(2 marks)**

c) What distance does the matatu cover while accelerating? **(2 marks)**

d) Calculate the distance covered by matatu while decelerating **(2marks)**

e) Calculate the distance between the two bus stops. **(2 marks**

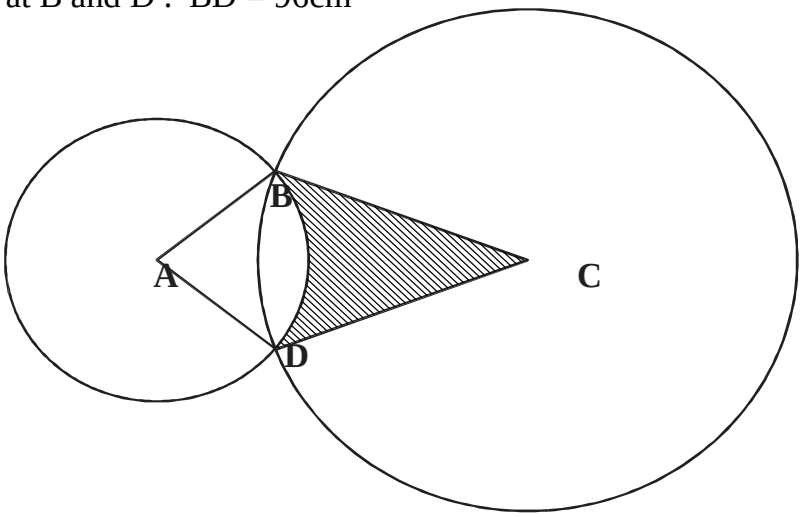
20. An amount of money was shared among five boys Ali, Juma, Musa, Khalid and Mustafa. Ali got $^{3}/_{8}$ of the total amount while Juma got $^{2}/_{5}$ of the remainder. The remaining amount was shared equally among Musa, Khalid and Mustafa, each of which received Kshs 600.

a) How much did Juma get? **(3 marks)**

b) How much was shared among the five boys. **(2 marks**

c) Ali, Juma and Mustafa invested their money and earned a profit of Kshs 1200. A third of the profit was left to maintain the business and the rest shared according to their investments. Calculate how much each got. **(5 marks)**

21. In the diagram below, two circles centres A and C have radii 70cm and 102cm respectively, intersects at B and D . BD = 96cm



a) Find the length **AC** **(3 marks)**

b) Calculate

i) Angle BAD **(2 marks)**

ii) Angle BCD **(2 marks)**

iii) The area of the shaded part. **(3 marks)**

22. An amount of money was shared among five boys Ali, Juma, Musa, Khalid and Mustafa. Ali got $^{3}/_{8}$ of the total amount while Juma got $^{2}/_{5}$ of the remainder. The remaining amount was shared equally among Musa, Khalid and Mustafa, each of which received Kshs 600.

a) How much did Juma get? **(3 marks)**

b) How much was shared among the five boys**.** **(2 marks)**

c) Ali, Juma and Mustafa invested their money and earned a profit of Kshs 1200. A third of the profit was left to maintain the business and the rest shared according to their investments. Calculate how much each got. **(5 marks)**

23. A particle P moves in a straight line such that t seconds after passing a fixed point Q. its velocity is given by the equation $2t^2 - 10t + 12$ find:

a) The values of t when p is instantaneously at rest**.** **(2 marks)**

b) An expression for the distance moved by P after t seconds**.** **(2 marks)**

c) The total distance traveled by P in the first 3 seconds after passing point O. **(3 marks)**

d) The maximum velocity attained by the body**.** **(3 marks)**

24. On the graph paper provided plot the points P(2,2) Q(2,5) and R(4,4)

a) Join them to form a triangle **PQR** **(1mk)**

b) Reflect the triangle PQR in the line x=0 and label the image s $P^1Q^1R^1$**.** **(2mks)**

c) Triangle PQR is given translation by vector T $\binom{2}{2}$ to $P^{11}Q^{11}R^{11}$.plot the triangle $P^{11}Q^{11}R^{11}$.**(3mks)**

d) Rotate triangle $P^{11}Q^{11}R^{11}$ about the origin through -90^0.state the coordinates of $P^{111}Q^{111}R^{111}$. **(3mks)**

e) Identify two pairs of triangle that are direct **congruence** **(1mk)**

KCSE 2023 PREMOCK EXAMS

SERIES 1

MATHEMATICS

PAPER 2

TIME: 2½ HOURS

NAME……

SCHOOL…… SIGN……

INDEX NO…… ADM NO……

INSTRUCTIONS TO CANDIDATES

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EXAM INER' S USE ONL Y

Section I

Questi	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15		16	TOT
Marks																		

Section II

Questi	17	18	19	20	21	22	23		24	TOT
Marks										

GRAND TOTAL

SECTION A (50 MARKS)

1. Use logarithm table to **evaluate** **(4mks)**

$$\sqrt[4]{\frac{(27 \times 0.0293)^2}{(825 - 94) \div 0.2861}}$$

2. Three sisters, Ann, Beatrice and Caroline together harvested Ksh 48,000 as capital & started as small business. If the share of profit is Kshs 2,300, Kshs 1,700 & Kshs 800 respectively, share proportionally.

Find the capital invested by each of them**;** **(3mks)**

3. Make t the subject of the formula **in** **(3mks)**

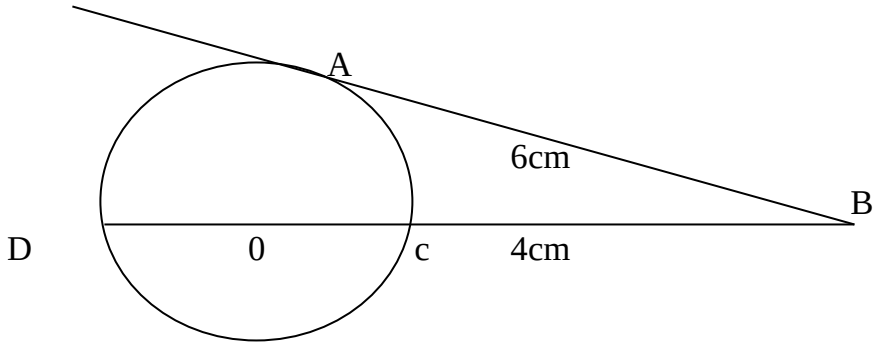
$$x \left[\frac{p + t}{t} \right] 1/3$$

4. Simplify the expression **(3mks)**

$$\frac{3x^2 - 4xy + y^2}{9x^2 - y^2}$$

5. A (-6, -2) and B (2, -4) are end points of a diameter of a circle. Find the co-ordinates of the center and the radius of the circle. **(3mks)**

6. In the figure below AB is a tangent to the circle and BCD is a straight line passing through the center of the circle. AB =6cm and BC= 4cm. Calculate the radius of the circle**.** **(3mks)**



7. Solve the equation below in the range $0^0 \leq x \leq 180^0$ **25 in (3x + 10) = -1.674** **(3mks)**

8. Expand and simplify $(3x - y)^4$ hence use the first three terms of the expansion to approximate the value of $(6 - 0.2)^4$ **(3mks)**

9. Find x without using table if **(3mks)**

$3 + \log {}^3{}_2 + \log_2 x = \log {}_2 5 + 2$

10. Without using mathematical table or calculator **simplify** **(3mks)**

$$\frac{3\sqrt{2} - \sqrt{3}}{2\sqrt{3} - \sqrt{2}}$$

11. Find the value of m for which the matrix transforms an object into a straight line **(3mks)**

$$\begin{pmatrix} M^2 & 1 \\ 2m-1 & 1 \end{pmatrix}$$

12. A right angled triangle has a base of 15.3cm and height 7.2cm, each measured to the nearest 3mm. Determine the percentage error in finding the area of the triangle giving your answer to 2 **dp** **(4ms)**

13. The point B(3,2) maps onto $\acute{B}$ (7,1) under a transformation T_1. Find T_1 **(2mks)**

14. Solve for x 8 y in the simultaneous equation using matrices method**.** **(4mks)**

$2x + 3y = 7$

$y - x = 2$

15. The sum of the first ten terms of an arithmetic progression in 400. If the sum of the first 6 terms of the same series is 120, find the 15^{th} term. **(3mks)**

16. Two grade of tea A & B, costing sh100 and 150 per kg respectively are mixed in the ratio 3.5 by mass. The mixture is then sold at sh 160 per kg. Find the percentage profit on the cost price. **(3mks)**

SECTION B

Attempt five questions in this section.

17. The frequency distribution table below represents the number of kilograms of meat sold in a butchery

Mass in kg	1-15	6-10	11-15	16-20	21-25	26-30	31-35
Frequency	2	3	6	8	3	2	1

Export graph

a) State the modal **frequency** **(1mk)**

b) Calculate the mean mass using assumed mean of 18kg **(5mks)**

c) Calculate the median **mass** **(4mks)**

18. A plane leaves an airport A(41.5^0 N, 36.4^0W) at 9.00AM and flies due north to Airport B on latitude 53.2^0. Taking $\prod$ as $\frac{22}{7}$ and the radius of the earth as 6370km.

a) Calculate the distance covered by the plane in **km** **(4mks)**

b) The plane stopped for 30minutes to refuel at b and flew east to C 2500km from B. Calculate

i. Position of C **(3mks)**

ii. The time the plane land at C if its speed is 500km/h

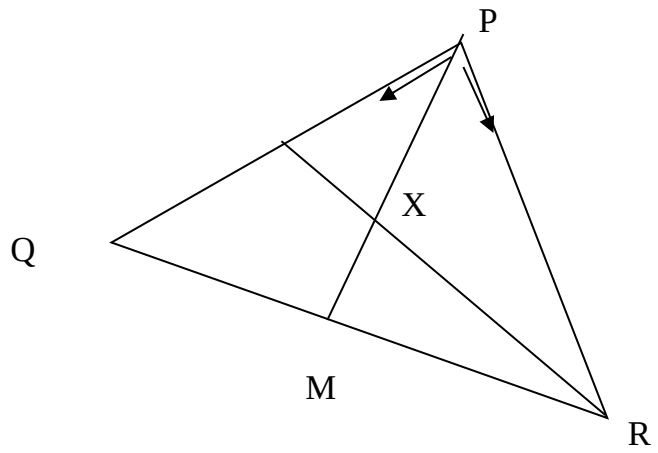
19. (a) Draw a rectangle ABCD of legth AB = 7.5cm and width 4.8cm and construct the locus of point P with the rectangle such that P is equidistant from BC & **CD** **(4mks)**

b) If the locus of P meets AB at N, measure AN **(1mk)**

c) Construct the locus of point Q with the rectangle and in the same side as D such that angle NQC $= 60^0$ **(3mks)**

d) Determine the area of the trapezium **(2mks)**

20. In the triangle PQR below L & M are points of PQ & QR respectively such that PL:LQ = 1:3 and QM :MR = 1:2. PM & PL intersect at X. Given that PQ = b and PR = c



a) Express the following vectors in terms of b & c

(i) QR **(1mk)**

(ii) PM **(1mk)**

(iii) RL **(1mk)**

b) By taking PX = KPM and RX = hRL where K and h are constants. Find two expressions for PX in terms of K, b, h and c. Hence determine the values of the constants k and h **(6mks)**

c) Determine the ratio LX:XR **(1mk)**

21. The curve given by the equation y = x^2 +1 is defined by the values in the table below.

a) Complete the table by filling in the missing values.

X	0	0.5	1.0	1.5	2.0	2.5	3.0	3.5	4.0	4.5	5.0	5.5	6.0
Y	1.0		2.0		5.0		10.0		17.0		26.0		37.0

b) Sketch the curve for y = x^2 + 1 for $0 \leq x \leq 6$

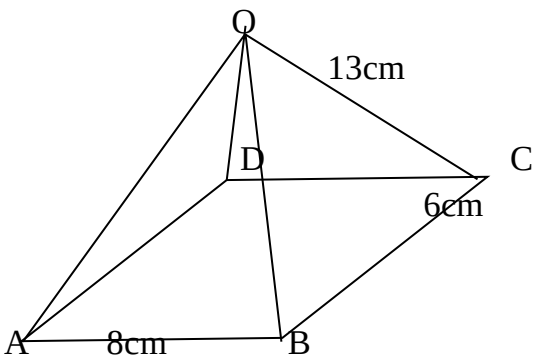
c) Use the mid-ordinate rule with 5 ordinates to find the area of the region bounded by the curve y = x^2 + 1, the axis the lines x = 0 and x = **6** **(2mk)**

d) Use method of integration to find the exact value of the area of the region in (C) above. **(2mk)**

e) Calculate the percentage eror involved in using the mid- ordinate rule to find the area. **(2mk)**

22. OABCD is a right pyramid on a rectangular base with AB = 8cm, BC = 6cm, OA = OB = OC = OD =13cm. Calculate:

a. The height of the pyramid



b. The inclination of OBC to the horizontal **(2mks)**

c. The angle between

i. OB & DC

ii. The planes OBC & OAD

23. A particle moves such that t seconds after passing a given point O, its distance 5 metres from O is given as $5 = t(t-2)(t-1)$

a. Find its velocity where t = 2 seconds **(3mks)**

b. Find its minimum **velocity** **(2mks)**

c. Find the time when the particle is momentarily at rest **(3mks)**

d. Find the acceleration when t = 3 seconds **(3mks)**

24. The ……..master wishes to hire two matatus for a trip. The operators have a Toyota which carries 10 passengers and a Kombi which carries 20 passengers. Altogether 120 people have to travel. The operators have only 20 litres of fuel and the Toyota consumes 4 litres on each round trip and the Kombi 1 litre on each round trip. If the Toyota makes x round trips and the Kombi y round trips:

a. Write down four inequalities in x & y which must be **satisfied** **(2mks)**

b. Represent the inequalities graphically on the grid **provided** **(3mks)**

c. The operators charge shs 100 for each round trip in the Toyota and shs 300 for round trip in the kombi

i. Determine the number of trips made by each vehicle so as to make total cost 9 minimum **(4mks)**

ii. Find the minimum **cost** **(1mk)**

KCSE 2023 PREMOCK EXAMS

SERIES 1

COMPUTER STUDIES

PAPER 1

TIME: 2½ HOURS

NAME……

SCHOOL…… SIGN……

INDEX NO…… ADM NO……

INSTRUCTIONS TO CANDIDATES

- *Write your name and Index No in the spaces provided above.*
- *Sign and Write the date of the examination in the spaces provided above.*
- *This paper consists of two sections: A and B*
- *Answer all the questions in section A*
- *Answer question 16 and any other three questions from section B*
- *All answers must be written in the spaces provided on the question paper.*

For Examiner's Use Only

SECTION	QUESTION	CANDIDATE'S SCORE
A	1 – 15	
B	16	
	17	
	18	
	19	
	20	
	Total Score	

1. Identify three advantages of using computers in banking **(3mks)**

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2. List three facilities that will ensure proper ventilation in a computer lab **(3mks)**

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3. Give two main functions of a computer input device. **(2mks)**

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4. What are turnaround documents? **(1mk)**

……

……

5. Using examples, distinguished between:

(i) Primary and secondary storage **(1mk)**

(ii) Fixed and removable disks **(1mk)**

6. Ann connected new multimedia speakers to her computer and tried to play her favorite music CD, but no sound came out. Suggest two problems that might have occurred **(2mks)**

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7. Explain the following considerations when purchasing software **(2mks)**

(i) Authenticity

(ii) Portability

8. Give three ways in which operating systems are classified into **(3mks)**

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9. Peter tried to retrieve a document file following all the steps correctly. The filename did not appear in file list box. State three causes for this. **(3mks)**

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10. State the use of the following objects in databases. **(3mks)**

i) Tables

ii) Forms

iii) Query

11. i. Explain the meaning of the following as used in computer programming. **(2mks)**

a. Syntax

b. Semantic

ii. List three ways in which data integrity can be compromised. **(3mks)**

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12. i. Mobile phones have become common ICT devices. Explain some of the powerful capabilities that come with some of the latest embedded operating systems **(3mks)**

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ii. List two disadvantages of fiber optic cable over twisted wires. **(2mks)**

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13. Describe any two types of data processing methods. **(2mks)**

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14. State two advantages of USB port over the parallel port **(2mks)**

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15. Differentiate between the terms signal Attenuation and Noise as used in data communication. **(2mks)**

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SECTION B

Answer question 16 and any other three questions in this section

16. a) State three advantages of low -level languages **(3mks)**

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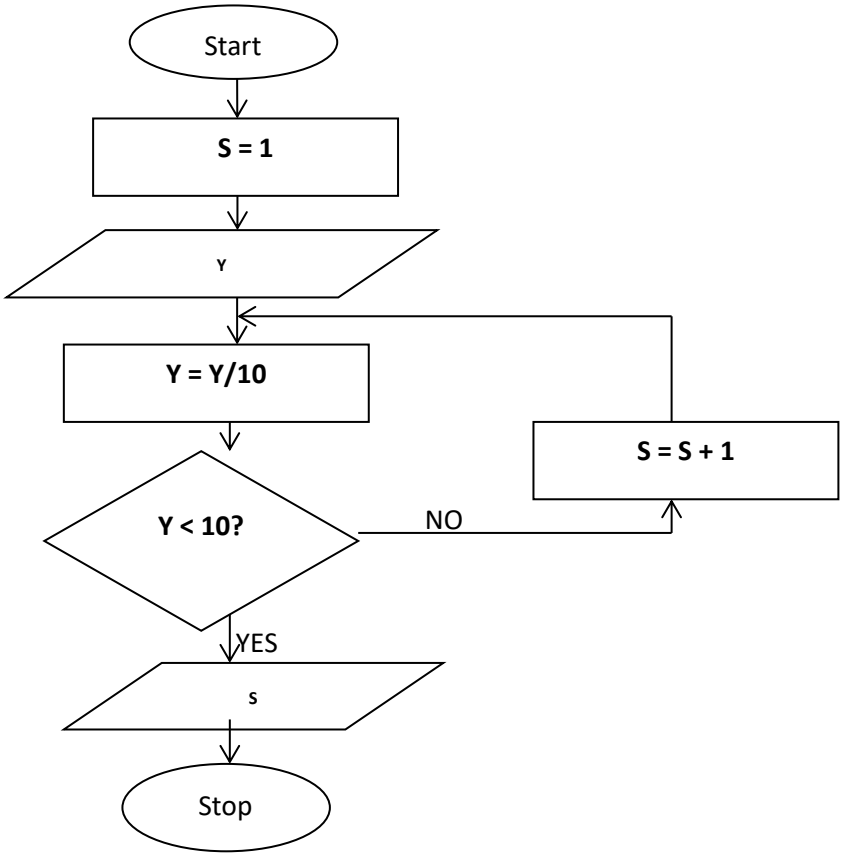
b) Give two differences between a compiler and an interpreter. **(2mks)**

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c) i) Study this flowchart and use it to answer the questions that follow.



I. Give the expected output from the flowchart when the value of Y is:

(i) 48 **(1 marks)**

(ii) 9170 **(2 marks)**

(iii) – 800 **(2 marks)**

II. Write the pseudo code that can be used to create a program represented by the above Flowchart.

17. a. Use two complement to perform the following arithmetic operations

i) $15_{10} - 12_{10}$ **(4mks)**

ii) $10111_2 - 1011_2$ **(3mks)**

b) 1011_2 is a ones complement binary representation of negative number using four bits work out the likely positive equivalent in base 10. **(4mks)**

c) Convert the decimal fraction 10.375_{10} into its binary equivalent **(3mks)**
Whole numbers

d) Assuming the existence of base five, list the numbers used in the number system **(1mk)**

18. a) State and explain two disadvantages that will come about if a network was to be installed in your school. **(4mks)**

b) Discuss two disadvantages of wireless networks. **(4mks)**

c) Write the following abbreviation in full. **(2mks)**

i) F.T.P

ii) H.T.T.P

d) With the aid of a diagram, discuss Hybrid topology. **(4mks)**

e) Discuss four advantages of network. **(2mks)**

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19. a) Explain why a computer is able to display the correct time and date when it has just been switched on. **(2mks)**

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b) Discuss two types of special memories found in a Computer System. **(4mks)**

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c) i) Define a Bus with reference to a computer system. **(1mk)**

ii) List two examples of buses. **(2mks)**

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d) Distinguish between a power cable and interface cable. **(2mks)**

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e) Differentiate between the different types of RAM. **(4mks)**

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20. a) i) Define a system. **(1mk)**

ii) Explain system entropy. **(2mks)**

b) State three circumstances that can lead to development of information **systems** **(3mks)**

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c) Distinguish parallel changes over from straight change over as used in system implementation. **(2mks)**

d) Discuss two fact finding methods. **(4mks)**

e) Differentiate an open system from a closed system. **(2mks)**

f) List two responsibilities of a system analyst. **(2mks)**

KCSE 2023 PREMOCK EXAMS

SERIES 1

COMPUTER STUDIES

PAPER 2

TIME: 2½ HOURS

NAME……

SCHOOL…… SIGN……

INDEX NO…… ADM NO……

Computer Studies

Paper 2

(PRACTICAL)

2½ hours

INSTRUCTIONS TO CANDIDATES

1. *Write your name and index number at the top right hand corner of each print out.*
2. *Write your name and index number on the diskette.*
3. *Write the name and the version of the software used for each question attempted in the answer sheet.*
4. *Answer **ALL** the questions.*
5. *All questions carry equal marks.*
6. *Passwords **should NOT be used** while saving in the diskette.*
7. *All answers **MUST BE** saved in your diskette.*
8. *Make a print out of the answers on the answer sheets provided.*
9. *Arrange your printouts and tie/staple them together and use the best fit i.e. landscape or portrait for your printouts.*
10. *Hand in a folder with your name.*

1.(a) Using a Word Processing package, type the congratulatory note below as it appears and save it as CONGRATS. (15mks)

MAGS Software Co. Ltd
P.O. Box 5678
Kericho
(Insert today's date)

<<First Name>><<Last Name>>
<<Address>>
Dear**<<First Name>>**

RE: CONGRATULATIONS

Due to your hard work and sacrifices you made this year, the company wishes to congratulate you for emerging the best in our internal interview that you applied for. Your new position will be **<<Position>>** and your new salary scale will be**<<Amount>>.**

Yours faithfully,

Gregory Bruce
PERSONNEL

(b) Create a data source with the following details and use it with the note you have just typed to generate personal notes to the company's named personnel. Save it as Details. (15mks)

George Kinoti	Wilberforce Kenya	Henry Odongo
P. O. BOX 5678	P. O. BOX 5678	P. O. BOX 5678
Kericho	Kisumu	Kilgoris
Software Developer	ICT Officer	Database Admin
Ksh.125000	Ksh.125000	Ksh.125000

Grace Akinyi	Beth Mugo	SharonWangoi
P.O. BOX 5678	P. O. BOX 5678	P. O. BOX 5678
Nakuru	Migori	Nandi-Hills
System Admin	Secretary	Accountant
Ksh.120000	Shs.30000	Shs.45000

(c) Insert data fields in main document and generate the notes for the employees.(14mks)

(d) Print the notes. (6mks)

2. **(a)** Create a database called **SCHOOL**. (2 Marks)

(b) Create three tables **EXAMINATION**, **DOS** and **BOARDING**with the fields as shown below. (10Marks)

(c). Create a relationship between the three tables and enforce integrity. (6Marks)

(d). Enter the data items in the given tables three tables. (15Marks)

EXAMINATIONS				
Admission Number	**Mathematics**	**English**	**Kiswahili**	**Biology**
1	45	67	90	23
10	45	89	90	20
2	45	70	80	45
3	89	90	90	20
4	78	9	90	50
5	67	89	60	90
6	67	90	7	80
7	34	78	70	90
8	23	50	38	90
9	23	15	67	20

DOS				
Admission Number	**SName**	**Other Names**	**KCPEMark**	**Year of KCPE**
1	PETER	BARASA	327	2007
10	JOHNSON	SUK	250	2001
2	ALEX	OJWANG’	340	1998
3	BELINDA	ESTHER	250	2008
4	BRAMWEL	RAYMOND	450	2007
5	ALEX	WAMWANA	410	2003
6	JANET	KILONZO	400	2000
7	MATHEW	KARIUKI	450	1999
8	NASIMIYU	CATHEEN	290	2003
9	KIMATHI	JOHN	3000	2001

BOARDING			
Admission Number	**UNIFORM**	**TOOL**	**TOOL NAME**
1	No	12	JEMBE
10	Yes	20	JEMBE
2	No	11	PANGA
3	Yes	1	SLASHER
4	Yes	111	JEMBE
5	No	15	RAKE
6	Yes	22	BASIN
7	Yes	11	BROOMS
8	Yes	90	RAKE
9	Yes	23	BUCKET

(e) Design a query that would display the following fields as shown below and write down the formulae for getting the total score and criteria for extracting the records below

(**10 Marks)**

ADMIN

Admission Number	**UNIFORM**	**SName**	**KCPEMark**	**Mathematics**	**English**	**Kiswahili**	**TOTAL SCORE**
1	Yes	BELINDA	250	89	90	90	269
10	Yes	BRAMWEL	450	78	9	90	177
2	Yes	JANET	400	67	90	7	164

(f) Design a report that would sort the following in ascending order in the order of the following fields, Total score, KCPE Score, SName the Admission Number and the report should display all the fields. Save the report as administration

(5Marks)

(g) Print, administration and admin **(2Marks)**

KCSE 2023 PREMOCK EXAMS

SERIES 1

HOME-SCIENCE

PAPER 1

TIME: 2½ HOURS

NAME……

SCHOOL…… SIGN……

INDEX NO…… ADM NO……

HOMESCIENCE PAPER 1 THEORY

2 ½ HOURS

SECTION A – (40 MARKS)

Answer all the questions in the spaces provided

1. Give four sources of vitamin C. **(2mks)**

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2. Mention two infectious diseases spread through sharing of bath towels. **(2mks)**

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3. List down three functions of gathers on a garment. **(3mks)**

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4. State three reasons for facing a garment. **(3mks)**

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5. Suggest any three suitable situations when one may be required to serve convenience foods. **(3mks)**

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6. List down four methods of disinfecting clothes other than chemical disinfectants. **(2mks)**

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7. Give three benefits achieved by a child playing with toys. **(3mks)**

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8. Suggest three ways of improving the efficiency of a detergent. **(3mks)**

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9. a) List down four suitable qualities for a cushion cover. **(2mks)**

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b) Give two activities at the antenatal clinic. **(2mks)**

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10. Giving a suitable example of a food explanation of following terms and their importance in cookery.

i) Basting:-

ii) Blending:-

iii) Simmering

11. Give two signs of a well groomed person. **(2mks)**

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12. Highlight three ways of identifying one's skin type**.** **(3mks)**

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13. Mention three points to ensure when improvising a tooth brush. **(3mks)**

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14. State two roles of salt when cleaning or laundering handkerchiefs. **(2mks)**

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15. State two causes of suffocation. **(1mk)**

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SECTION B (COMPULSORY) – (20 MARKS)

16. You have been away for a camp and have just arrived back home.

a) Describe how you will weekly-clean the hurricane lamp. **(6mks)**

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Cleaning a painted wall. **(8mks)**

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b) Cleaning a polished wooden stool. **(6mks)**

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SECTION C – (40 MARKS)

Answer any TWO questions only

17. a) Explain five factors to consider when renting a house. **(5mks)**

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b) Five points to bear in mind when choosing a broom include? **(5mks)**

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c) Point out five principles of food preservation. **(5mks)**

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d) Give five steps to follow when removing a mildew stain from a white cotton shirt. **(5mks)**

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18. a) Suggest five uses of carrots in cookery. **(5mks)**

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b) Explain four reasons why it would not be advisable to buy a refrigerator on hire purchase.
(8mks)

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c) State and explain on four qualities of a well made cuff. **(4mks)**

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d) State the function of each of the following bedding items. **(3mks)**

i) Waterproof sheet. **(1mk)**

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ii) Mosquito neeting **(1mk)**

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iii) Blankets **(1mk)**

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19. a) List down five dental rules. **(5mks)**

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b) Suggest five preventive measures of drowning. **(5mks)**

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c) By use of relevant diagrams explain how to prepare and attach a squared patch pocket.**(10mks)**

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KCSE 2023 PREMOCK EXAMS

SERIES 1

HOME-SCIENCE

PAPER 2

TIME: 2½ HOURS

NAME……

SCHOOL…… SIGN……

INDEX NO…… ADM NO……

A pattern of a child's dress bodice is provided. You are advised to study the sketches, instructions and layout before you begin the test.

iv) **MATERIAL PROVIDED**

Pattern pieces

A front bodice

B Back bodice

C Back yoke

D Collar

E Back neck facing

2. Light weight cotton fabric 50cm long by 91cm wide.

3. Sewing cotton thread to match.

4. One large envelop.

The test

Using the materials provided, cut out and make the right half of a child's dress bodice as shown in the sketch to show the following.

c) Working of a bust dart.

d) Gathering of the front bodice ready for attaching the yoke Do not remove gathering stitches

e) The attachment of the back yoke to the back bodice using overlaid/lapped seam.

Do not neaten

f) The working of a machine fell seam at the shoulder.

g) The working of an open seam at the side of the bodice.

h) The joining of the back and the front neck facings at the shoulder.

i) The preparation of the collar and attaching it to the bodice.

j) Under stitching the facing and the free edge.

k) The working of a button hole.

At the end of the exam, remove all pins and unnecessary tacking from your work. Sew on a label bearing your name and index number on a single fabric. Fold and place it in the envelop provided.

Do not put scraps of fabric in the envelop

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

CALL/TEXT/WHATSAPP

0746 222 000

0742 999 000

mwalimuconsultancy@gmail.com

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