KCSE 2023 PREDICTION

ALL SUBJECTS

SERIES 2

Second Series of Expected KCSE 2023 Questions likely to be tested in the upcoming Final Examinations.The prediction is a result of works of Experienced KNEC Examiners & professionals, accurately anchored on statistical information available from 2001-2022.

SUBJECTS COMPILED;

Mathematics, English, Kiswahili, Biology, Chemistry, Physics, CRE, Geography, Business Studies, Agriculture, IRE, History and Government, French, Computer Studies & Home-science.

CONFIDENTIAL

For Marking Schemes/Answers

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

PASSWORD TO SUCCESS

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KCSE 2023 PREDICTION EXAMS

SERIES 2 EXAMS

231/1

BIOLOGY

PAPER 1 (THEORY)

TIME: 2 HOURS

NAME…… ADM NO; ……

CLASS…… DATE……

SIGN: ……

Kenya Certificate of Secondary Education.

INSTRUCTIONS TO CANDIDATES

(a) *Write your name, index number and school in the spaces provided above*

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

(c) *Answer ALL the questions in the spaces provided on the question paper*

(d) *Candidates should answer the questions in English*

(e) **Wrong Spelling of Technical Terms shall be Penalized**

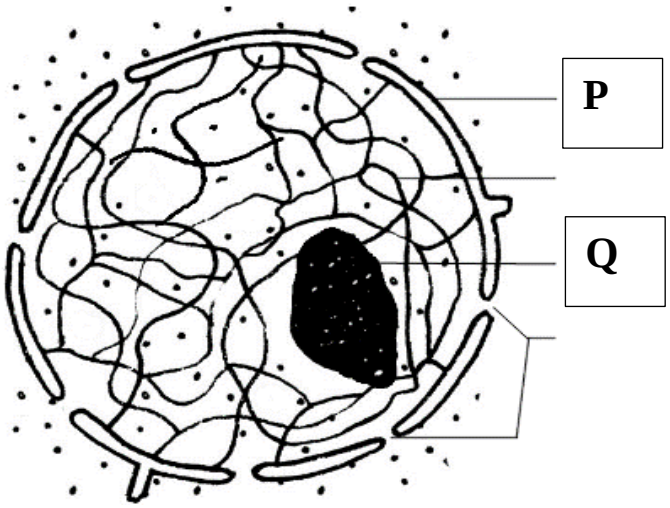
FOR EXAMINERS USE ONLY

MAX SCORE	STUDENT'S SCORE
80	

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Answer all the questions in the spaces provided.

1. The diagram shown below represents a nuscleus



a) State the role of the organelle labelled **Q** **(1mk**

……

……

b) Name a Kingdom whose members lack structure labelled **P** **(1mk**

……

c) Which is the general term given to organisms whose cells have structure **P**? **(1mk**

……

2. a) Name the **TWO** components of a lipid molecule **(1mk**

……

……

b) State **TWO** disadvantages of using fats as respiratory substrates **(2mks**

……

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3. a) Name the pigment that protects humans from the negative effect of Ultraviolet lights **(1mk**

……

b) Explain how sunlight contributes to stronger bones and teeth in human beings **(2mks**

……

……

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4. Name the main target organ of the following hormones: **(2mks**

a) Aldosterone ….. …….

b) Insulin …….

5. a) What is asexual reproduction? **(1mk**

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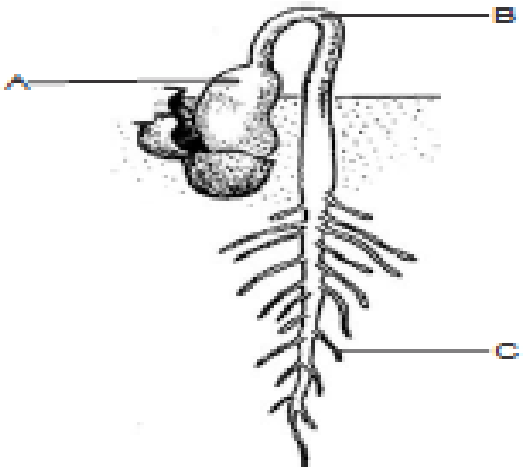
b) Give **TWO** disadvantages of sexual reproduction **(2mks**

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6. The diagram shown below represents a seeding. Use it to answer questions that follow



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a) Give a reason why the plant above is a member of Class Dicotyledonae **(1mk**

……

……

b) Explain why the biomass of part labelled **A** will be lower compared to the one found in the seed stage of the same plant **(2mks**

……

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7. a) State **TWO** ways in which blood clotting is important to a human being **(2mks**

……

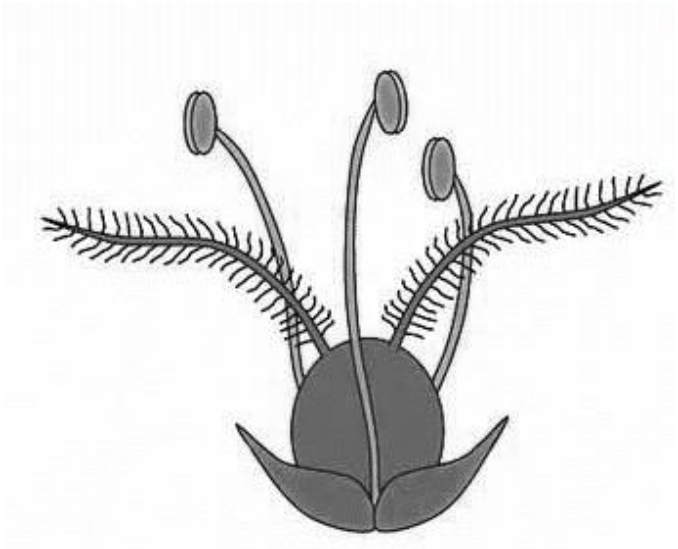
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b) What are the roles of thrombokinase enzyme during blood clotting? **(2mks**

……

……

8. The diagram shown below represents a flower



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a) Name the agent of pollination for the flower shown above **(1mk**

……

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

……

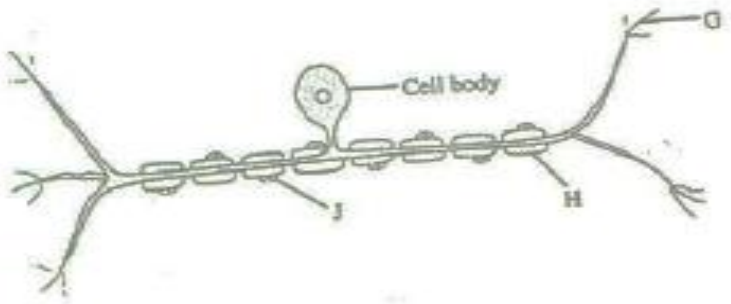
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9. State the differences between cones and rods in terms of the following **(2mks**

Feature	Cone	Rod
Visual acuity		
Photochemical		

10. Use the diagram of a nerve cell shown below to answer questions that follow



a) With a reason, give the identity of the nerve cell **(2mks**

Identity ……

Reason ……

b) Explain the significance of absence of part labelled **H** in nerve cells found in the brain**. (2mks**

……

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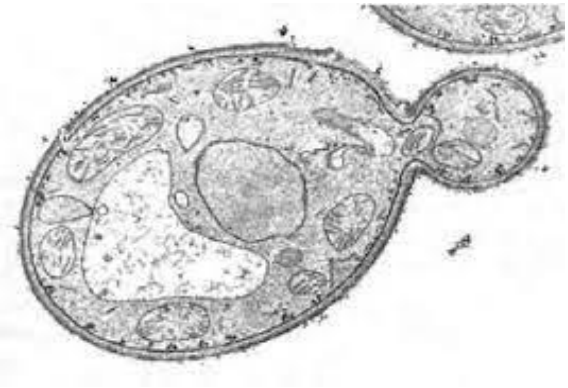
11. Give **THREE** features that make modern man to be more adaptable to the environment **(3mks**

……

……

……

12. The diagram below represents a living organism



a) State **TWO** economic importance of the above organism in the food industry **(2mks**

……

……

……

b) Why does the rate of respiration reduce under the following conditions? **(2mks**

i) Low temperature

……

……

ii) Metabolic poison

……

……

13. State **TWO** reasons why Biotechnology is important in modern science **(2mks**

……

……

……

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14. a) Fill in the table shown below to give differences between continuous and discontinuous variation **(2mks**

Continuous Variation	Discontinuous Variation

b) Explain how variation is important in the process of evolution? **(3mks**

……

……

……

15. a) Define the term species **(1mk**

……

……

b) State **TWO** contributions of Carolus Linnaeus (1708 – 1778) to taxonomy **(2mks**

……

……

16. a) In an experiment, Peter counted 9 cells along the diameter of field of view of a light microscope measuring 3.0mm. Determine the diameter of one cell in micrometers **(3mks**

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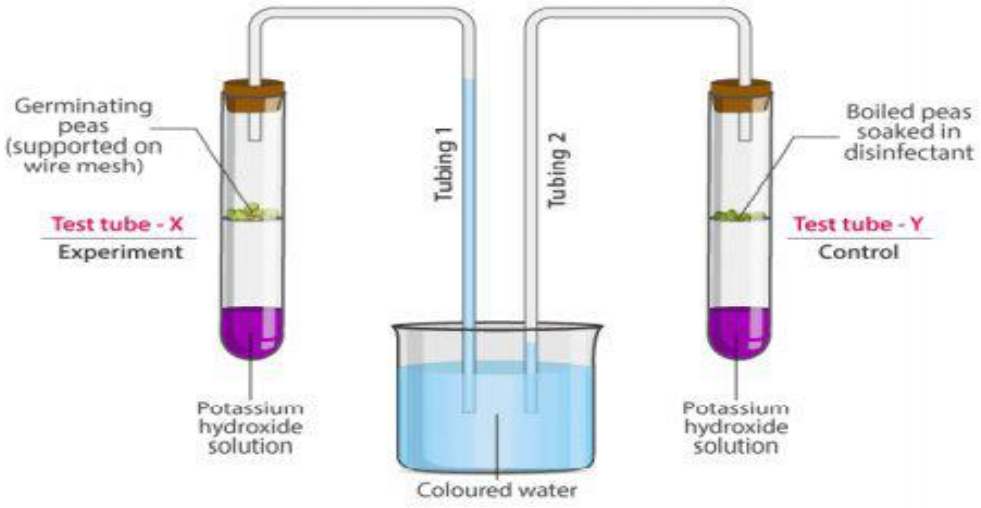
b) Why is electron microscope safer to the eye than light microscope during use? **(1mk**

……

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17. The following diagram represents results of an experiment carried out on two sets of germinating seeds.



a) Account for the result shown in test tube **X** **(2mks**

……

……

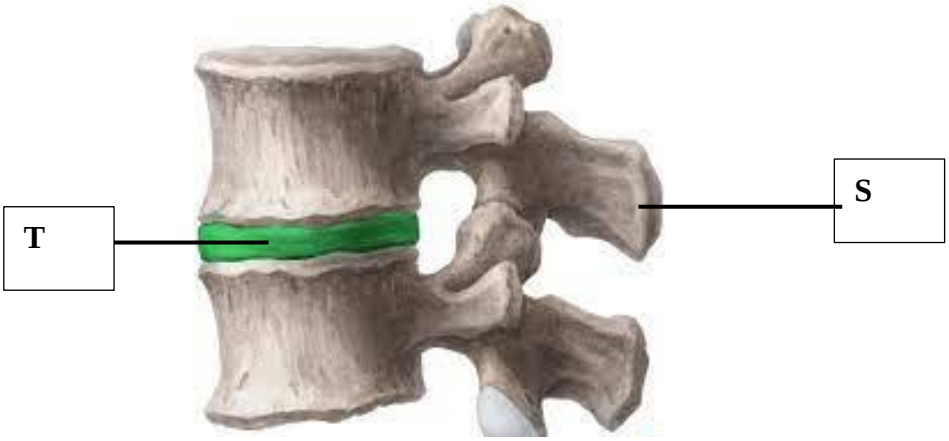
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b) What is the importance of dipping the boiled seeds in a disinfectant in test tube **Y**? **(1mk**

……

……

18. The diagram shown below represents a section of the vertebral column



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a) Name the part labelled **S** **(1mk**

……

b) State **TWO** ways in which part **T** is important to movement in human beings **(2mks**

……

……

……

19. Describe how the following cells adapt the structures where they are found to their functions

a) Companion cell **(2mks**

……

……

……

b) Schwann cell **(2mks**

……

……

……

20. A mother had a still birth and the expelled foetus showed clear signs of anaemia and jaundice

a) Give the name of this disorder **(1mk**

……

b) Describe how the disorder arose **(3mks**

……

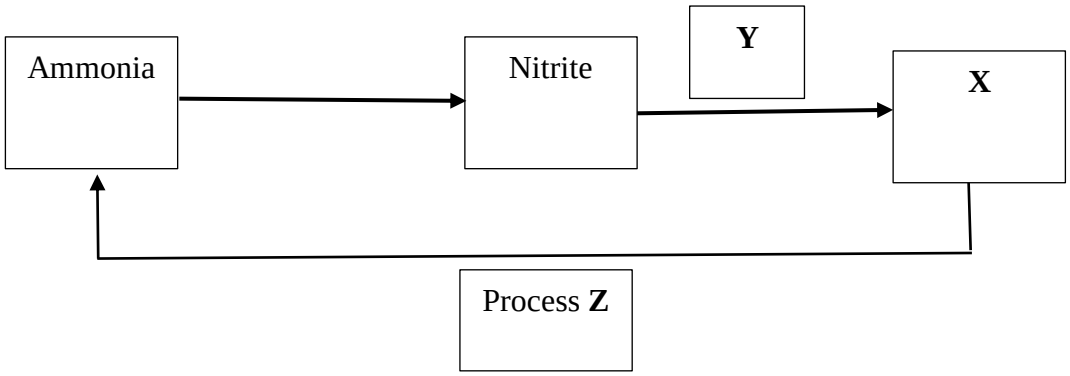
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21. The following equation represents a section of the Nitrogen Cycle



a) Name:

i) Bacterium labelled **Y** ……. **(1mk**

ii) Compound **X** ……. **(1mk**

b) Explain how Process **Z** affect plant growth in an area? **(2mks**

……

……

……

……

22. Samson had a road accident resulting in serious head injuries that left him with the following conditions: Loss of balance, low body temperature; poor speech, unregulated breathing and memory loss. Name the part of the brain affected that led to the following:

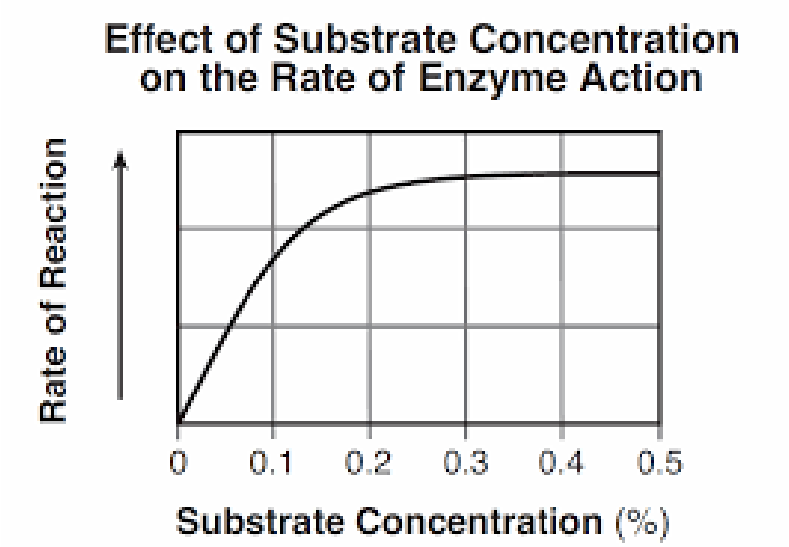
i) Low body temperature ……..…….…,,.. **(1mk**

ii) Memory loss ……..…….…….. **(1mk**

iii) Unregulated breathing ……..…… **(1mk**

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23. The graph shown below represents effect of substrate concentration on rate of enzymatic reaction



a) Account for the rate of enzymatic reaction when the substrate concentration was between 0.3 to 0.5%. **(2mks**

……

……

……

b) Name the substrates for the following enzymes

i) Carbonic anhydrase …… **(1mk**

ii) Thrombin …….... **(1mk**

24. A tilapia fish has a full length of 300mm but measures 200mm from the mouth tip to its anus. Determine the tail power of the fish **(2mks**

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KCSE 2023 PREDICTION EXAMS

SERIES 2 EXAMS

231/2

BIOLOGY

PAPER 2 (THEORY)

TIME: 2 HOURS

NAME…… ADM NO; ……

CLASS…… DATE……

SIGN: ……

Kenya Certificate of Secondary Education.

INSTRUCTIONS TO CANDIDATES

(a) *Write your name, school, index number in the space provided at the top of the paper.*
(b) *Sign and write the date of examination in the space provided above.*
(c) *This paper consists of two sections, **A** and **B**.*
(d) *Answer all the questions in section **A** in the spaces provided.*
(e) *In section **B** answer question **6 (compulsory)** and either **question 7 or 8**.*

FOR EXAMINER'S USE ONLY

Section	Question	Maximum Score	Candidate's Score
A	1-5	40	
B	6	20	
	7	20	
	8	20	
		80	

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SECTION A (40 marks)

Answer all the questions

1. a) Using the diagrams below, construct a dichotomous key that can be used to identify the leaves. **(2mks)**



COTTON WOOD



WHITE CLOVER





HONEY LOCUST

……

……

……

……

……

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

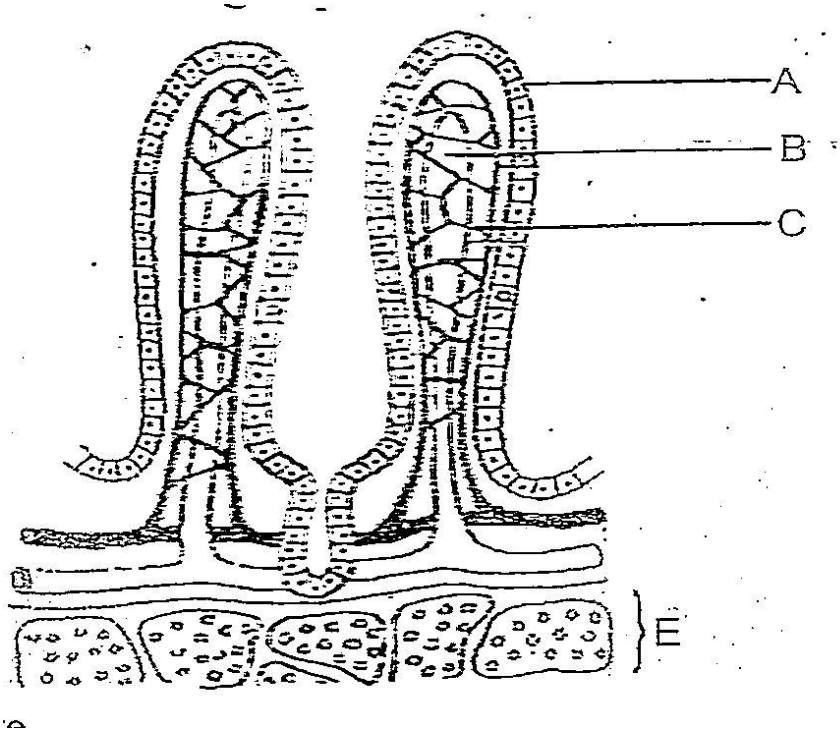
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2. The diagram below is a cross section through a part of human ileum.



(a)(i) Identify the structure drawn above **(1 mark)**

……

(ii) Sate the significance of the structure shown above. **(1 mark)**

……

……

(b) Name the parts labelled A, B and C **(3 marks)**

A……

B……

C……

(c) Give the functions of the part labelled B and C **(2 marks)**

B……

C……..

(d) Name the cell organelle more abundant in goblet cells. **(1 mark)**

……

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3. a) In human, premature baldness is controlled by a gene on the **Y** chromosome. Using **B** to represent the gene for baldness, work out a cross between a bald man and his wife . **(4mks)**

(b)i) What is the probability of their daughters being bald**?** **(1mk)**

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

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(c) Name one trait in human beings that is determined by multiple allele**.** **(1mk)**

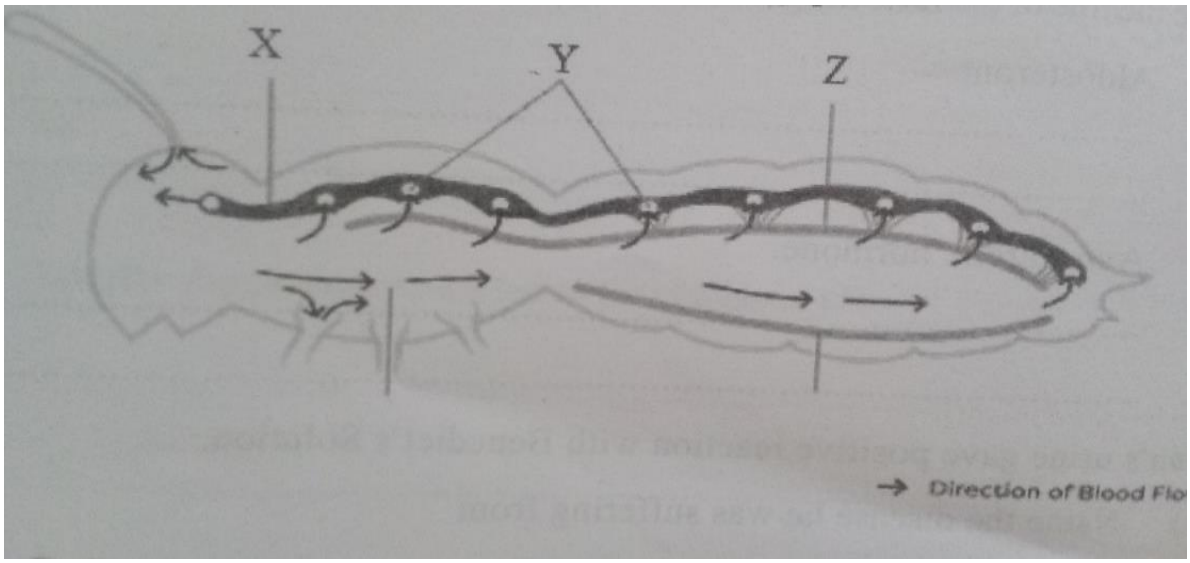
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(d) Name one genetic disorder affecting the red blood cells. **(1mk)**

……

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4. Study the diagram below and answer the following questions.



(a) i) Identify the type of circulatory system shown in diagram above. (**1mk)**

……

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

……

……

(b) Name the parts labelled X, Y and Z**.** **(3mks)**

X……

Y……

Z……

(c) Explain the disadvantage of having the above circulatory system in the animals. **(2mks)**

……

……

……

(d) Explain why amoeba lack a circulatory system**.** **(1mk)**

……

……

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5. An experiment was carried out to find out the concentration of ions in the cell sap of an aquatic plant and that of the pond water in which they were found.

	Concentration in	
Ions	Cell sap	Pond water
Na^+	50	1.2
K^+	49	0.5
Mg^{2+}	11	3.0
Ca^{2+}	13	1.3
Cl^-	101	1.3
SO_4^{2-}	13	0.67

(a)(i) Name the process by which the aquatic plant absorbs ions from pond water. **(1 mk)**

……

(ii) State the four roles of the process you have named in (a)(i) above in a mammalian body**.(4 mks)**

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(b) Name the cell structure that allows passage of ions in and out of the cell. (**1mk)**

……

(c) How can the rate of uptake of ions by the aquatic plant be increased. **(2mks)**

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SECTION B (40 marks)

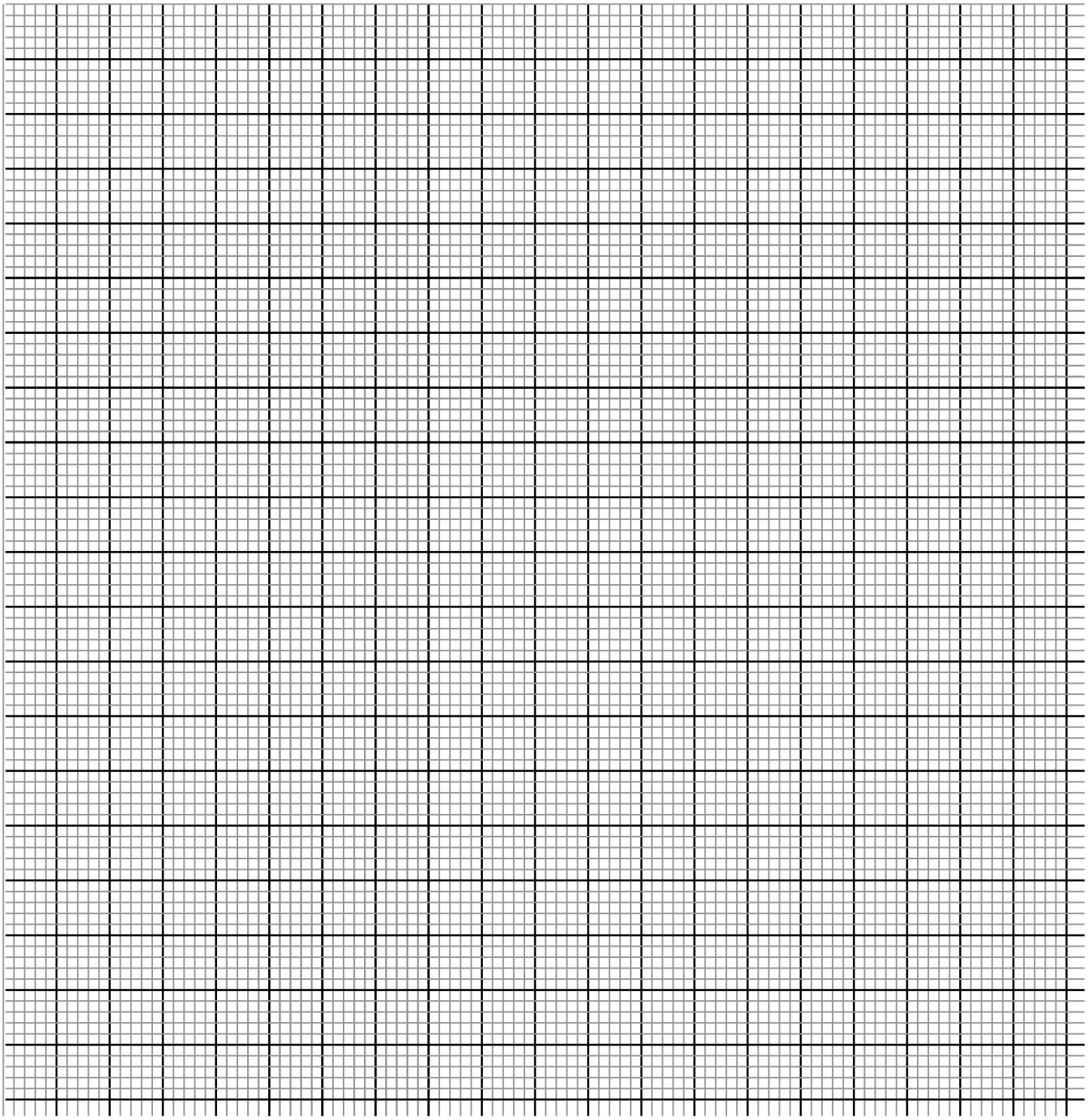
Answer question 6 (compulsory) and either question 7 or 8

6. The glucose level in mg per $100cm^3$ of blood was determined in two person Y and Z. Both had stayed for six hours without taking food. They were fed on equal amount of glucose at the start of the experiment .The amount of glucose in their blood was determined at intervals .The results are shown in the table below.

Times in minutes	**Glucose level in blood in mg /$100cm^3$**	
	Y	**Z**
0	85	78
20	105	110
30	105	110
45	130	170
60	100	195
80	93	190
100	90	140
120	90	130
140	88	120

a) On the grid provided, plot graphs of glucose levels in blood against time on the same axes.**(7mks)**

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b) What was the concentration of glucose in the blood of Y and Z at the 50th minute? **(2mks)**

Y.....

Z.....

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c) Account for the level of glucose in present Y

i) During the first 45 minutes. **(2mks)**

……

……

……

ii) After 45th minute to the end. **(4mks)**

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d) Account for the decrease in glucose level person Z after 60 minutes. **(2mk)**

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……

e) Low blood sugar level in harmful to the body. Explain. **(3mks)**

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……

……

7. (a) (i) Give four modes of expressing food relationship in an ecosystem. **(4 marks)**

(ii) Explain how food as a factor regulate the population of animals in an ecosystem.**(8 marks)**

(b) How are desert plants adapted to conserving water? **(8 marks)**

8. Describe the structure and functions of various organelles in a mature animal cell**.** **(20mks)**

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KCSE 2023 PREDICTION EXAMS

SERIES 2 EXAMS

231/3

BIOLOGY

PAPER 3 (PRACTICAL)

TIME: 1¾ HOURS

(CONFIDENTIAL PAPER)

Each student should have;

1. 4 test tubes and a test tube rack
2. Iodine solution – supplied with dropper
3. 10cm visking tubing labeled J
4. Piece of string 20cm long
5. 10cm3 solution of a mixture of soluble starch and glucose labeled K

N/B. 30g glucose mixed with 3g starch then add 100cm3 water and heat to boil then cool.

6. 500 ml beaker
7. Adequate distilled water/ clean rain water
8. Benedict's solution
9. Means of heating/ Bunsen burner
10. Measuring cylinder – 10 ml
11.A scalpel.
12.A dry bean seed labeled $S_{1.}$
13. A bean seedling labeled $S_{2.}$
14. A maize seedling labeled $S_{3.}$

Specimen S_2 and S_3 should be ready 1 week before the exams and must have the seeds intact.

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KCSE 2023 PREDICTION EXAMS

SERIES 2 EXAMS

231/3

BIOLOGY

PAPER 3 (PRACTICAL)

TIME: 1¾ HOURS

NAME…… ADM NO; ……

CLASS…… DATE……

Kenya Certificate of Secondary Education.

INSTRUCTIONS TO CANDIDATES:

(a) *Write your **name, index number** and **school** in the spaces provided above.*
(b) ***Sign** and write the **date** of examination in the spaces provided above.*
(c) *Answer all the questions in the spaces provided.*
(d) *You are required to spend the first **15** minutes of the **1¾** hours allowed for*
(e) *this paper reading the whole paper carefully before commencing your work.*
(f) *This paper has **three** questions.*

FOR EXAMINER'S USE ONLY:

Question	Maximum Score	Candidate's Score
1	14	
2	12	
3	14	
Total Score	40	

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Answer all the questions in the spaces provided

1. You are provided with visking tubing labeled **J**, a piece of thread and a solution labeled **K**.

Dip the visking tubing in distilled water to moisten it, open it, and then tie one end tightly with the thread provided. Half-fill the visking tubing with solution **K** then tie the open end of the tubing tightly. Ensure solution **K** does not spill out of the tubing. Immerse the visking tubing into distilled water in a beaker. Ensure that the visking tubing is completely immersed in the distilled water.

Leave the set-up for 20 minutes. Record your observations after 20 minutes.

(a) (i) Observations **(1mk)**

……

……

(ii) Explain you observations in a (i) above. **(2mks)**

……

……

……

(b) Remove the visking tubing carefully. Ensure the contents of the visking tubing do not mix with that of the beaker.Using the reagents provided, test for the food substance present in the visking tubing and the beaker.

I. Visking tubing **(4mks)**

FOOD TEST	PROCEDURE	OBSERVATIONS	CONCLUSION
Starch			

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Reducing sugars			

II. Beaker **(4mks)**

FOOD TEST	PROCEDURE	OBSERVATIONS	CONCLUSION
Starch			
Reducing sugars			

(c) Explain observations in the visking tubing and Beaker in 1(b) above. **(3mks)**

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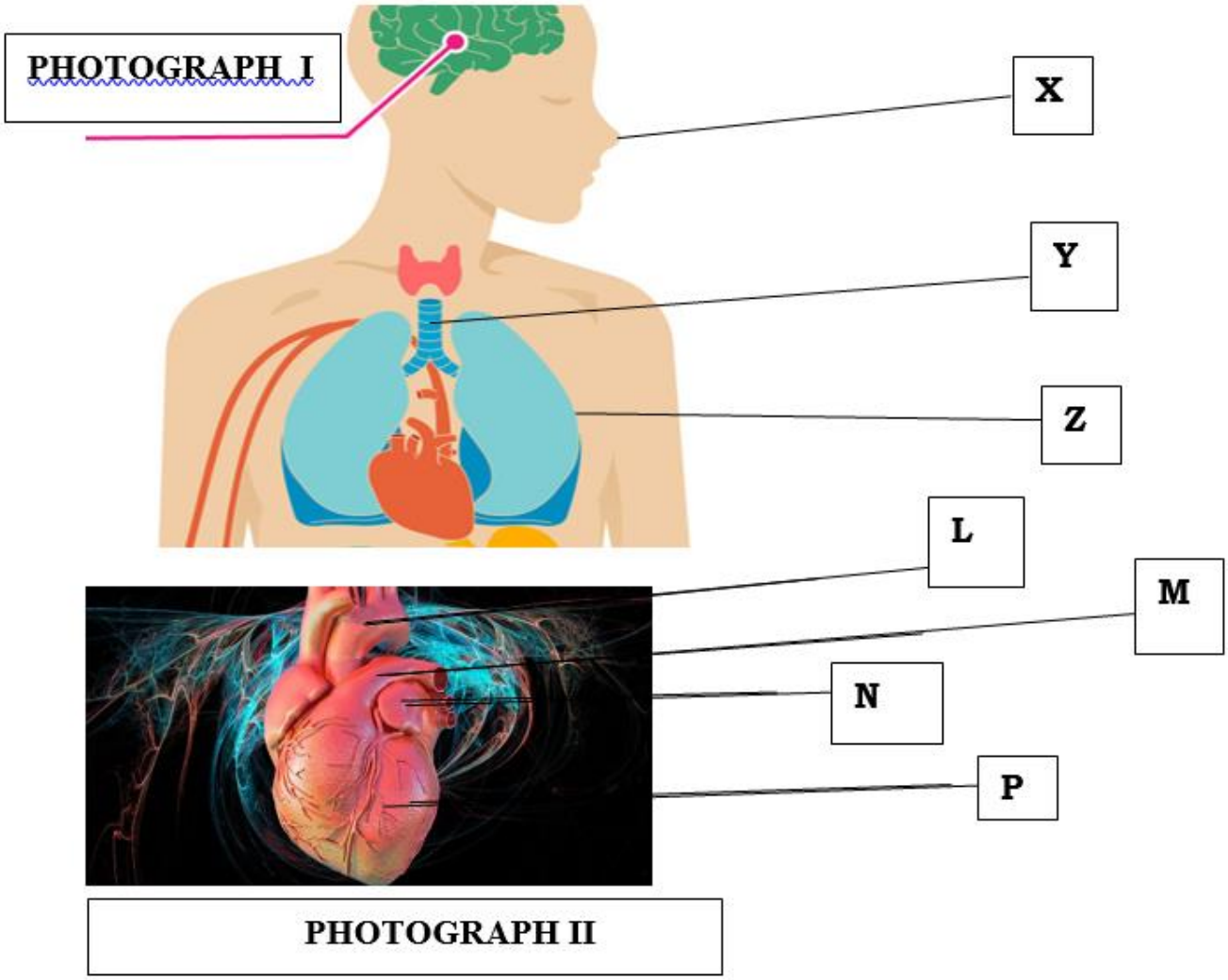
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2. The photographs I and II below illustrate parts of mammalian systems. Study them and answer the questions that follow.



(a) Identify the two mammalian systems shown above. **(2mks)**

……

……

(b) Name the membrane that covers part marked P and Z. **(2mks)**

P……

Z……

(c) Describe two ways by which organ P and Z are protected**.** **(2mks)**

……

……

……

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(d) How is the part labelled Y adapted to perform its function**.** **(2mks)**

……

……

……

(e) Identify the part labelled N. **(1mk)**

……

(f) State the difference in the content of blood in L and M. **(1mk)**

L	M

(g) State the role of the inner part of X in ensuring a healthy system**.** **(2mks)**

……

……

3. You are provided with specimens labeled S_1 , S_2 and S_3

(a) Using a scalpel blade split S_1 longitudinally and draw a well labeled diagram to show the internal structures**.** **(4mks)**

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(b) With a reason, state the class of the plant from which specimen S_1 was obtained.

(a) Class **(1mk)**

……

Reason **(1mk)**

……

(c) Specimen S_2 is a germinated seedling of S_1.

In the table below, name three structures of S_1 and identify the structures they developed into in specimen S_2 **(3mks)**

Structure in S_1	**Structure developed into, in S_2**
1_____	_____
2_____	_____
3_____	_____

(d) i) Using specimens S_2 and S_3 ,name the type of germination**.** **(2mks)**

S_2 ……

S_3 ……

ii) Give a reason for your answer in S_3 above**.** **(2mks)**

……

……

……

iii) Account for the type of germination in S_2 **(2mks)**

……

……

……

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KCSE 2023 PREDICTION EXAMS

SERIES 2 EXAMS

233/1

CHEMISTRY

PAPER 1 (THEORY)

TIME: 2 HOURS

NAME…… ADM NO; ……

CLASS…… DATE……

Kenya Certificate of Secondary Education.

INSTRUCTIONS TO CANDIDATES

a) *Write your **Name**, **Index Number** and **School** in the spaces provided above.*

b) *Answer **all** the questions in the spaces provided after each question.*

c) ***KNEC** Mathematical tables and **silent non-programmable** electronic calculators may be used.*

d) ***ALL** working **must** be clearly shown where necessary.*

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

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

FOR EXAMINER'S USE ONLY

QUESTIONS	MAX SCORE	CANDIDATE'S SCORE
1 – 29	80	

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

1 (a) Give the name of the first member of the alkyne homologous series **(1 mark)**

……

(b) Describe a chemical test that can be used to distinguish ethanol from ethanoic acid. **(2 marks)**

……

……

……

2 (**a**) Name the raw material from which aluminium is extracted **(l mark)**

……

(b) Give a reason why aluminium is extracted using electrolysis. **(1 mark)**

……

……

(c) Give **one** use of aluminium metal. **(l mark)**

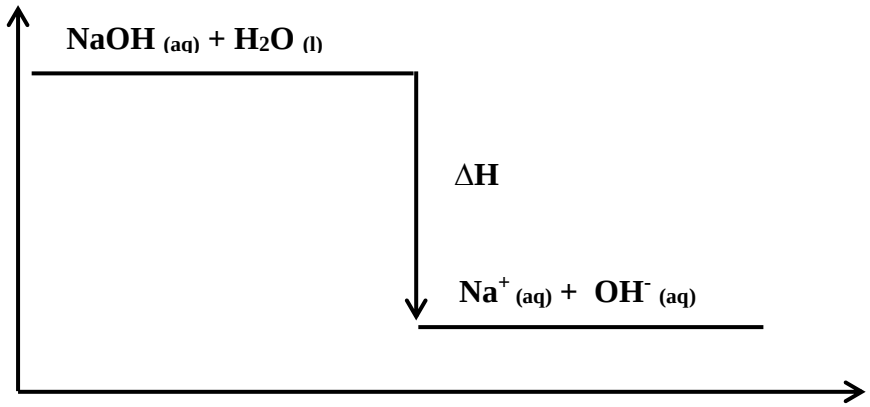
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3 (a) What is meant by lattice energy? **(1 mark)**

……

……

(b) Study the energy level diagram below and answer the question that follows:



What type of reaction is represented by the diagram? **(1 mark)**

……

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4 (a) Sketch a graphical representation of Boyles law on the axes below. **(1 mark)**



(b) A gas occupies 400 cm^3 at 25°C and 100,000 Pa. What will be its volume at 27°C and 101325 Pa? **(2 marks)**

……

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……

5 (a) What is half- life? **(1 mark)**

……

……

(b) The half-life of protactinium - 234 is 1.17 minutes. Determine the mass that decays in 5.85 minutes starting with 100 g of the sample. **(2 marks)**

……

……

……

……

6 State **two** disadvantages of hard water. **(2 marks)**

……

……

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7 Hydrogen chloride gas can be prepared by reacting sodium chloride with an acid.

(a) Name the acid. **(1 mark)**

……

(b) Write an equation for the reaction between sodium chloride and the acid. **(1 mark)**

……

(c) State **two** uses of hydrogen chloride. **(1 mark)**

……

……

8 When solid **B** was heated strongly, it gave off water and a solid residue. When water was added to the solid residue, the original solid **B**, was formed.

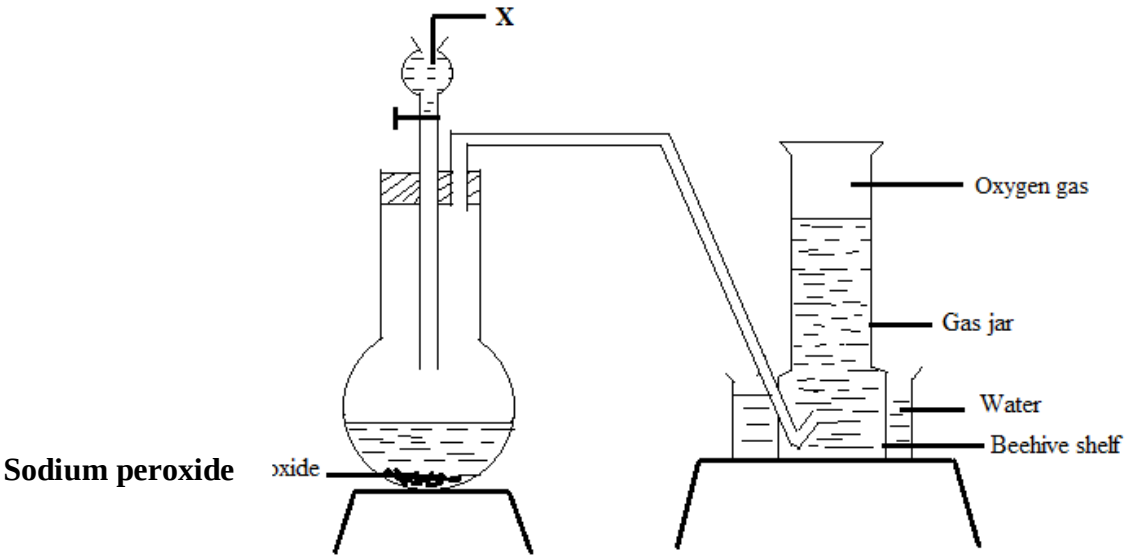
(a) What name is given to the process described? **(1 mark)**

……

(b) Give **one** example of solid **A**. **(1 mark)**

……

9 The set up below can be used to prepare oxygen gas. Study it and answer the questions that follow.



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(a) Identify **X**. **(1 mark)**

……

(b) Write the equation for the reaction which occurs in the flask. **(1 mark)**

……

……

(c) State **one** use of oxygen other than in welding **(1 mark)**

……

……

10 The atomic number of an element, **M** is 13.

(a) Write the electronic configuration of the ion $\mathbf{M^{3+}}$. **(1 mark)**

……

(b) Write the formula of the chloride of **M**. **(1 mark)**

……

(c) State the structure of the compound formed in (b) above **(1 mark)**

……

11 Concentrated sodium chloride was electrolysed using graphite electrodes. Name the product formed at the anode and give a reason for your answer. **(2 marks)**

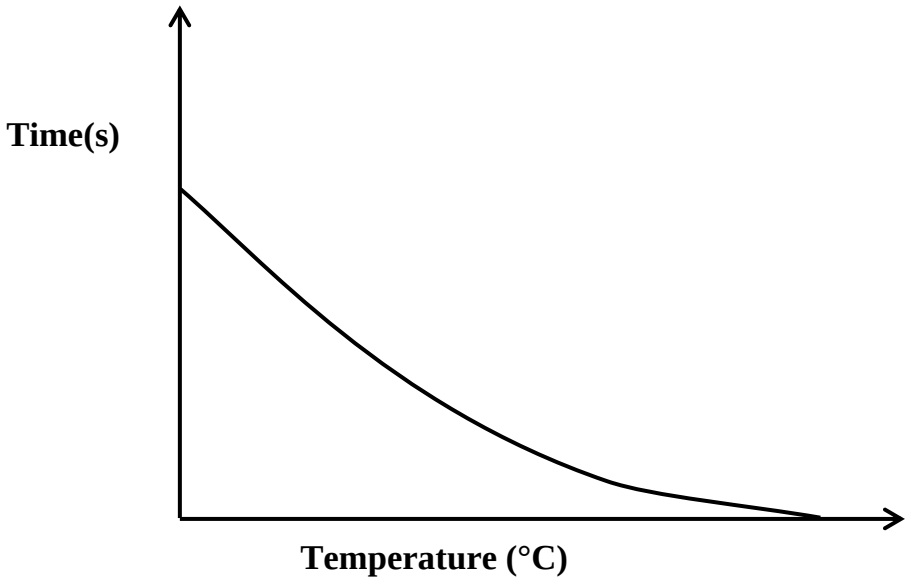
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12 The curve shown below shows the variation of time against temperature for the reaction between sodium thiosulphate and hydrochloric acid.



(a) Explain the shape of the curve. **(2 marks)**

……

……

……

(b) Other than temperature name **one** factor that affects the rate of reaction**.** **(1 mark)**

……

13 (a) Dry ammonia was passed over heated copper (II) oxide in a combustion tube.

(i) State the observations made in the tube **(1 mark)**

……

……

(ii) Write an equation for the reaction that occurs. **(1 mark)**

……

(b) What products would be formed if red hot platinum is introduced into a mixture of ammonia and oxygen? **(1 mark)**

……

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14 The table below shows behaviour of metals P, Q, R and S. Study it and answer the questions that follow:

Metal	Appearance on exposure to air	Reaction with water	Reaction with dilute sulphuric (VI) acid
P	Remains the same	Doesn't react	Reacts moderately
Q	Remains the same	No reaction	Doesn't react
R	Slowly tarnishes	Slow	Vigorous
S	Slowly turns white	Vigorous	Violent

(a) Arrange the metals in the order of reactivity starting with the most reactive. **(2 marks)**

……

……

(b) Name a metal which is likely to be **R** **(1 mark)**

……

15 Given the following substances: sodium carbonate, orange juice and sodium bromide.

(a) Name **one** commercial indicator that can be used to show whether sodium carbonate, orange juice and sodium bromide are acidic, basic or neutral. **(1 mark)**

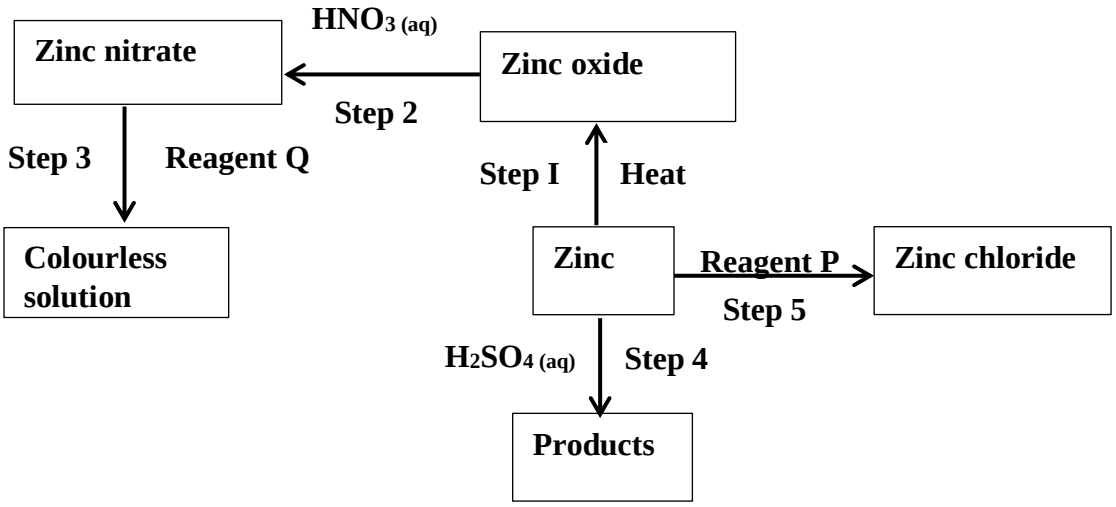
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(b) Classify the substances in 15 (a) above as acids, bases or neutral**.** **(2 marks)**

Acid	
Base	
Neutral	

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16 The flow chart below shows various reactions of zinc metal. Study it and answer the questions that follow:



(a) (i) Other than water, name another reagent that could be **Q**. **(1 mark)**

……

(ii) Write the formula of reagent **P**. **(1 mark)**

……

(b) Write an equation for the reaction in **step 4**. **(1 mark)**

……

17 (a) One of the allotropes of sulphur is monoclinic sulphur, name the other allotrope **(1 mark)**

……

(b) Concentrated sulphuric (VI) acid reacts with copper and prapanol. State the property of the acid shown in each case. **(2 marks)**

Copper ……

Propanol ……

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18 Study the standard electrode potentials in the table below and answer the questions that follow.

Half -reaction	E^{θ}(V)
$Ag^{+}(aq) + e \longrightarrow Ag(s)$	+ 0.80
$Cu^{2+}(aq) + 2e \longrightarrow Cu(s)$	+ 0.34
$Mg^{2+}(aq) + 2e \longrightarrow Mg(s)$	- 2.38
$Ca^{2+}(aq) + 2e \longrightarrow Ca(s)$	- 2.87

(a) Which of the metals is the strongest oxidising agent? **(1 mark)**

……

(b) What observations will be made if a copper coin was dropped into an aqueous solution of calcium nitrate? Explain. **(2 marks)**

……

……

……

19 Calculate the number of sulphate ions present in 22.5 cm^3 of 2 M aluminium sulphate solution. ($L=6.0 \times 10^{23}$) **(3 marks)**

……

……

……

……

20 (a) A crystal of iodine, heated gently in a test tube gave off a purple vapour.

(i) Write the formula of the substance responsible for the purple vapour. **(1 mark)**

……

(b) What type of bond is broken when the iodine crystal is heated gently? **(1 mark)**

……

(b) State **one** use of chlorine. **(1 mark)**

……

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21 Describe how samples of barium (II) sulphate, ammonium chloride and common salt can be obtained from a mixture of the three. **(3 marks)**

……

……

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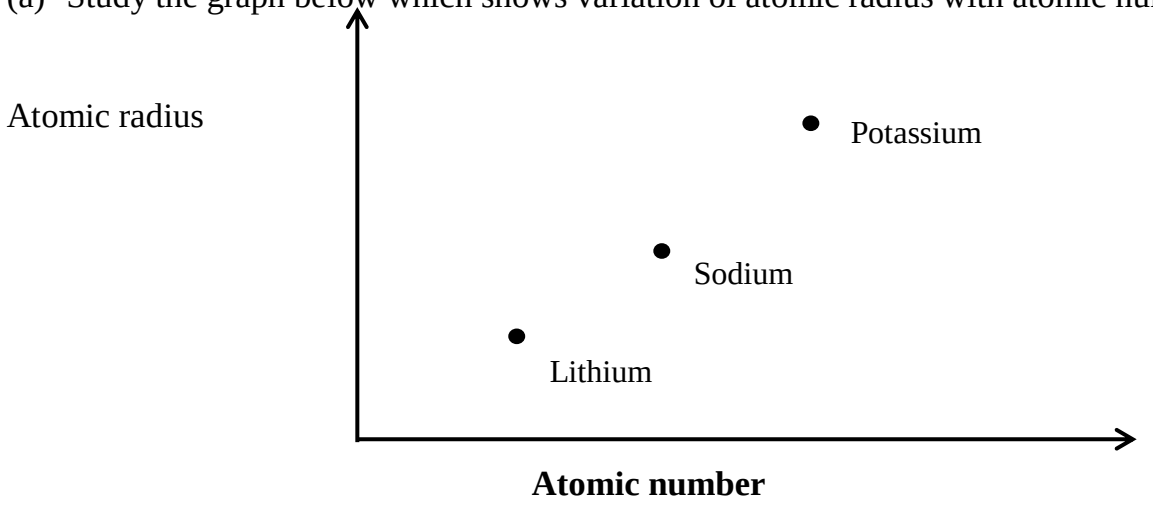
22 (a) Give the name of the process which takes places place when maize flour is converted to ethanol **(1 mark)**

……

(b) Write the formula of the compound formed when ethanol reacts with sodium metal. **(1 mark)**

……

23 (a) Study the graph below which shows variation of atomic radius with atomic number



State and explain the trend shown in the graph above. **(2 marks)**

……

……

……

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(b) State **one** use of sodium. **(l mark)**

……

24 A farmer intended to plant blueberries in her farm. She first tested the pH of the soil and found it to be 10.0. In order to obtain high yield, what advice would be given to the farmer if blueberries do well in acidic solution? **(2 marks)**

……

……

……

25 Starting with calcium nitrate solution, describe how a pure dry sample of calcium carbonate can be prepared in the laboratory. **(3 marks)**

……

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26 A hydrocarbon contains 81.82% of carbon. If the molar mass of the hydrocarbon is 44, determine the molecular formula of the hydrocarbon. **(C = 12.0; H = 1.0)** **(3 marks)**

……

……

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……

27 (a) Describe how Carbon (II) Oxide can be distinguished from Carbon (IV) Oxide using calcium hydroxide solution. **(2 marks)**

……

……

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(b) What is the role of carbon (IV) oxide in fire extinguishing? **(l mark)**

……

……

28 (a) Name **one** source of alkanes. **(1 mark)**

……

(b) Methane gas was reacted with one mole of chlorine gas. State the condition necessary for this reaction. **(1 mark)**

……

29 (a) What is meant by heating value of a fuel? **(1 mark)**

……

……

(b) Other than heating value, name **one** factor to be considered when choosing a fuel.**(1 mark)**

……

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KCSE 2023 PREDICTION EXAMS

SERIES 2 EXAMS

233/2

CHEMISTRY

PAPER 2 (THEORY)

TIME: 2 HOURS

NAME…… ADM NO; ……

CLASS…… DATE……

Kenya Certificate of Secondary Education.

Instruction to the candidates

a) *Write your Name and Index number, Admission Number and Class in the spaces provided.*
b) *Answer all the questions in the spaces provided in this paper using English.*
c) *KNEC Mathematical tables and silent electronic calculators may be used.*
d) *All working MUST be clearly shown where necessary*

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Questions	Maximum score	andidate's Score
1	10	
2	14	
3	14	
4	10	
5	11	
6	11	
7	10	
	80	

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1. (a) Define nuclear fission**.** **(1 mark)**

……

……

(b) State two similarities between nuclear fission and nuclear fusion? **(2 marks)**

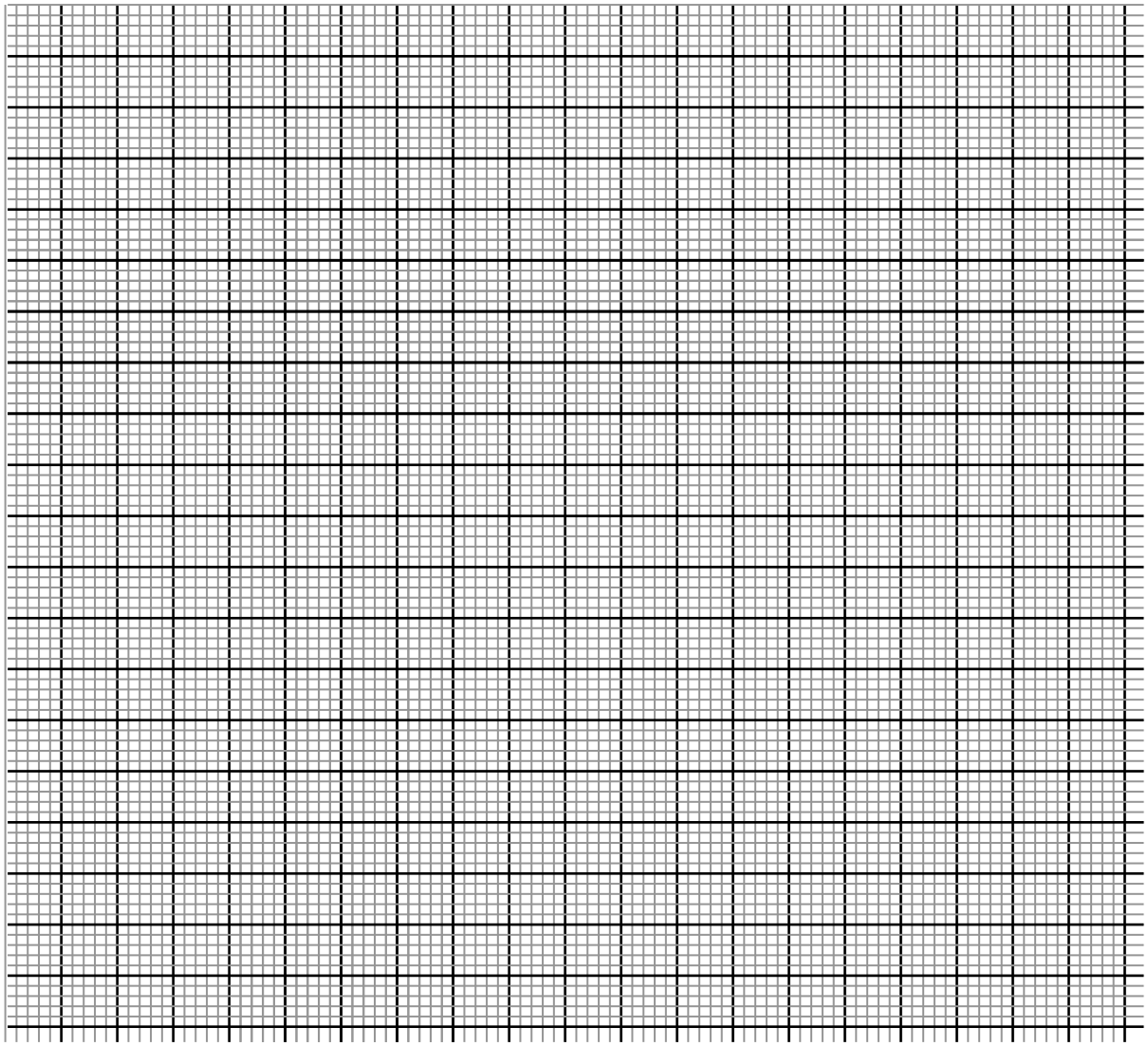
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(c) The following table shows the activity of a sample of protactinium ($^{234}_{91}Pa$), a radioactive element, measured at regular intervals.

Time (sec)	10	30	50	70	90	110	130	150	170	190
Activity(c/s)	33	29	23	17	14	12	10	9	8	6

(i) Plot a graph of activity against time**.** **(3 marks)**



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(ii) From the graph:

(I) The initial activity of the element**.** **(1 mark)**

……

(II) Determine the half-life of the nuclide. **(1 mark)**

……

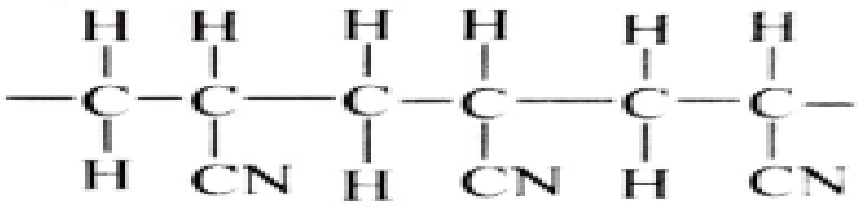
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(d) State two dangers associated with radioactivity. **(2 marks)**

……

……

2. (a)Acrylan and orlon are names of fibers which are made of the polymer.



(i) How many repeat units are shown in this structure**?** **(1 mark)**

……

(ii) Draw a structural formula of the monomer unit from which the polymer is made. **(1 mark)**

(iii) State two disadvantages of using the above synthetic fiber. **(2 marks)**

……

……

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(b) Detergents contain additives that enhance their cleaning performance. Name two such additives. **(2 marks)**

……

……

(c) Calculate the mass of ethanol that can be made from 56g of ethene. **(2 marks)**

……

……

……

(d) An organic **compound P** is found on analysis to have the empirical formula $\mathbf{C_6H_{14}O}$. Compound P is slightly soluble in water. On oxidation compound P is converted into a **compound Q** of empirical formula $\mathbf{C_3H_6O}$ and relative molecular mass 116. Both compound P and Q react with sodium metal liberating hydrogen gas.

(i) To what class of compounds does compound P belong? **(1 mark)**

……

(ii) Draw the displayed structural formula of **P.** **(1 mark)**

(iii) Deduce the molecular formula of Q and draw its displayed structural formula. **(2 marks)**

……

……

……

(iv) What other test would you carry out on Q to confirm the presence of the functional group you have indicated? **(2 marks)**

……

……

……

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3. (a) During the electrolysis magnesium sulphate a current of 2 amperes was passed through the solution for 4 hours. Calculate the volume of the gas produced at the anode. (1 faraday 96,500 coulombs and volume of a gas at room temperature is 24,000cm^3). **(2 marks)**

……

……

……

(b) Table gives standard reduction potentials for some half cells.

Half-cell	Half-cell equation	E^0 /V
I	Cr^{3+} (aq) + e^- → Cr^{2+} (aq)	-0.41
II	Cd^{2+} (aq) + $2e^-$ → Cd (s)	-0.40
III	Na^+ (aq) + e^-→ Na (s)	-2.71
IV	Cu^{2+} (aq) + $2e^-$ → Cu (s)	+0.34
V	Pb^{2+} (aq) + $2e^-$ → Pb (s)	-0.13
VI	Br_2 (aq) + $2e^-$ → $2Br^-$ (aq)	+1.07
VII	$2H^+$(aq) + $2e^-$ → H_2(g)	0.00
VIII	Fe^{2+}(aq) + $2e^-$ → Fe(s)	-0.44V
IX	O_2(g) + $2H_2O$ (l) + $4e^-$ → $4OH^-$(aq)	+0.40V
X	H_2O_2(aq) + $2H^+$(aq) + $2e^-$ → $2H_2O$(l)	+1.23V

(i) Identify**:** **(1 mark)**

I. The strongest oxidizing agent.

……

II. The strongest reducing agent.

……

(ii) Construct an electrochemical cell from half-cells **V** and **VI**. **(3 marks)**

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(iii) Write the equation and calculate the electrode potential for the electrochemical cell constructed from half-cells **V** and **VI**. **(2 marks)**

……

……

……

(iv) Explain why it is not advisable to use aqueous sodium sulphate as the salt bridge in the electrochemical cell formed between half-cells **V** and **VI.** **(1 mark)**

……

……

(v) Write the cell diagram for an electrochemical cell made using half-cells **V** and **VI**. **(1 mark)**

……

……

(vi) Write an equation to show how rusting occurs**.** **(2 marks)**

……

(vii) Give two reasons why electroplating is necessary. **(2 marks)**

……

……

4. Below is a periodic table grid study it and answer the questions. (*The letters does not represent the actual symbols of the elements*)

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

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(a) Which element will require the least amount of energy to remove one of the outermost electrons. **(1 mark)**

……

(b) Select the most reactive metal. **(1 mark)**

……

(c) What name is given to the family of elements to which **elements D** and **G** belong? **(1 mark)**

……

(d) An **element A** has atomic number 9. Indicate the position of **A** on the grid. **(1 mark)**

(e) Explain why the atomic radius of **D** is smaller than that of **C**. **(1 mark)**

……

……

(f) Explain why the atomic radius of **A** is smaller than its ionic radius. **(2 marks)**

……

……

……

(g) Element **C** combines with oxygen to from an oxide. Using dots (•) and crosses(**x**) to represent the outermost electrons, show how the two elements combine. **(1 mark)**

(h) Explain why **chloride of E** has higher melting point than **chloride of D**. **(2 marks)**

……

……

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5. (a) Describe how you can determine change in mass when magnesium is heated**. (3 marks)**

……

……

……

……

……

(b) The table below shows the tests that were carried out on five portions of a compound and the results obtained. Study it and answer the questions that follow.

	Test	Observation
1	Addition of few drops of sodium hydroxide to the first portion until in excess.	White precipitate soluble in excess.
2	Addition of few drops of aqueous potassium iodide to the second portion	No yellow precipitate is formed.
3	Addition of few drops of acidified barium nitrate to the third portion.	White precipitate formed.
4	Addition of few drops of Lead (II) nitrate to the fourth portion.	White precipitate formed.
5	Addition of few drops of dilute nitric (V) acid to the fifth portion.	Effervescence of a colorless gas.

(i) Identify the ions likely present in; **(2 marks)**

I. **Step 2**

……

II. **Step 5**

……

(ii) Write an ionic equation for the reaction in the fifth portion. **(1 mark)**

……

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(iii) Dilute nitric (V) acid was added to a solid which is an alloy of copper. The resultant mixture was then filtered. To the filtrate, few drops of sodium hydroxide solution was added till in excess.

I. Sate any two observations made when dilute nitric (V) acid is added to the alloy. **(2 marks)**

……

……

……

II. Name the other metal present in the alloy**.** **(1 mark)**

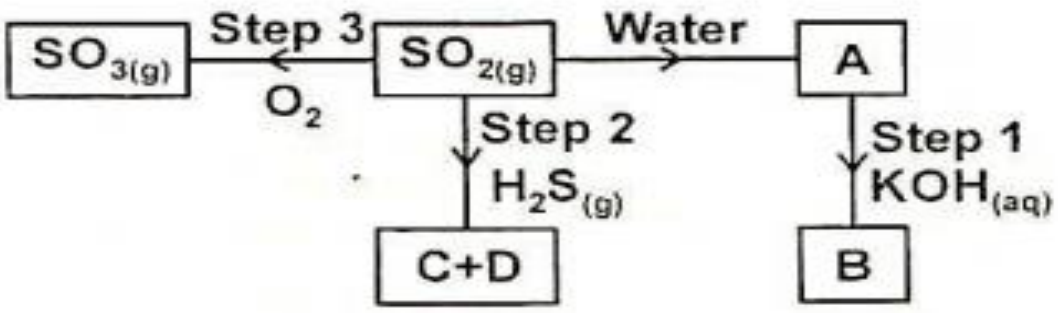
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III. Write an ion equation for the reaction that took place when few and excess sodium hydroxide solution is added**.** **(2 marks)**

……

……

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



(i) Name a suitable method of gas collection that can used to collect Sulphur (VI) oxide gas in the laboratory**.** **(1mark)**

……

(ii) Name substances A, B, C and D**.** **(2 marks)**

……

……

……

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(iii) State the property of Sulphur (IV) oxide exhibited in step 2. **(1mark)**

……

(b) (i) Explain the observations made when burning magnesium is lowered into a gas jar containing carbon (IV) oxide**.** **(3 marks)**

……

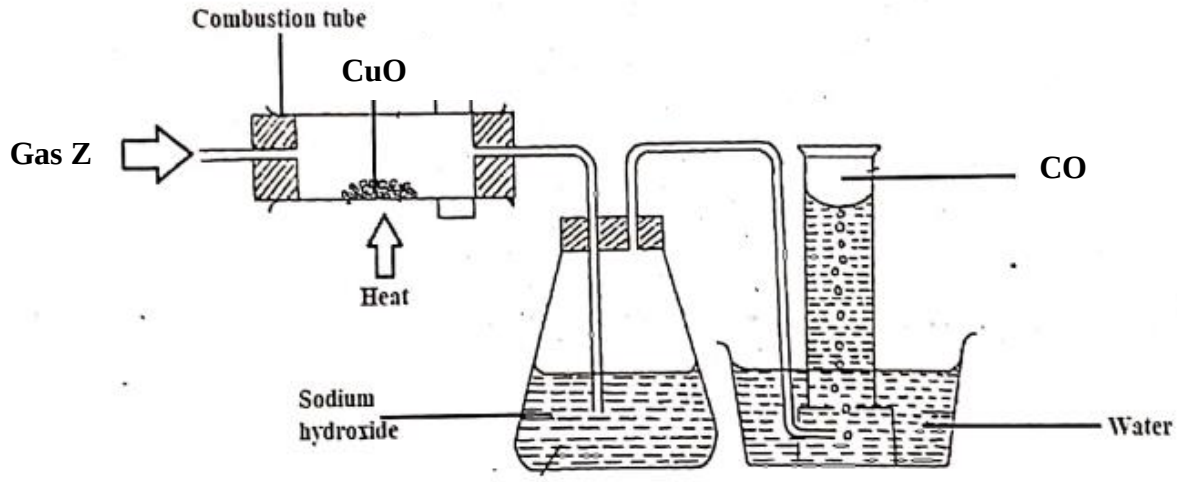
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(ii) Study the diagram below and answer the questions that follows.



I. Name gas Z. **(1 mark)**

……

II. Write an equation for the reaction taking place in the combustion tube. **(1mark)**

……

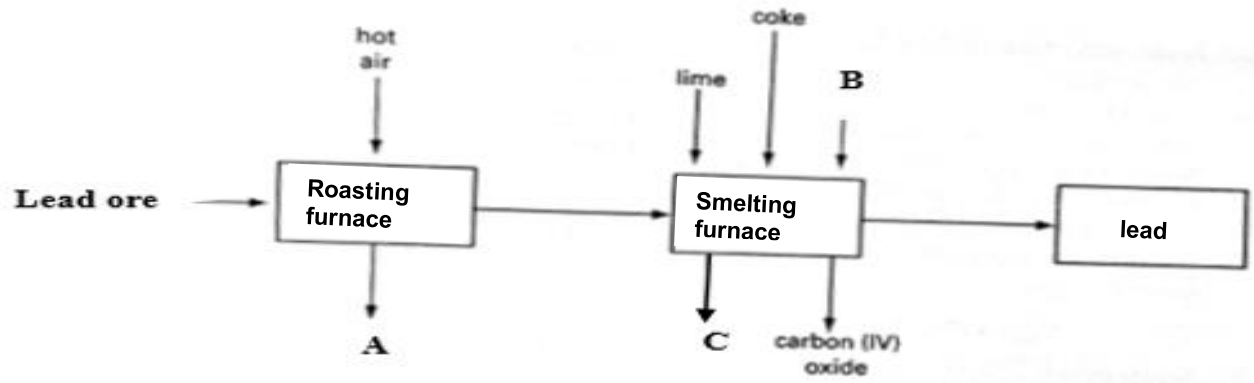
III. State and explain the observations made in the combustion tube. **(1 mark)**

……

……

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7. The flow chart in the figure below represents some stages in the extraction of lead metal. Study it and answer the questions that follow.



(a) Identify:

(i) The lead ore. **(1 mark)**

……

(ii) Substance A, B and C. **(3 marks)**

……

……

……

(b) Write an equation for the reaction that forms **substance C**. **(1 mark)**

……

(c) Name an impurity resent in the ore. **(1 mark)**

……

(d) State the process by which the ore is concentrated. **(1 mark)**

……

(e) Write an equation for the reaction which occurs in the roasting chamber.**(1 mark)**

……

(f) State any one use of lead. **(1 mark)**

……

(g) Give one reason why the extraction of lead causes pollution to the environment.

(1 mark)

……

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KCSE 2023 PREDICTION EXAMS

SERIES 2 EXAMS

233/3

CHEMISTRY

PAPER 3 (PRACTICAL)

CONFIDENTIAL

Instructions to Schools:

The information contained in this paper is to enable the head of the school and the teacher in charge of Chemistry to make adequate preparation for the Chemistry Practical Examination.

NO ONE ELSE should have access to this paper or acquire knowledge of its content. Great care MUST be taken to ensure that the information herein does NOT reach the candidates either directly or indirectly. The teacher in charge of Chemistry should NOT perform any of the experiments in the SAME room as the candidates nor make the results of the experiment available to the candidates of give any information related to the experiments to the candidates. Doing so will constitute an examination irregularity.

REQUIREMENTS FOR CANDIDATES

In addition to fittings, and apparatus found in the chemistry laboratory, each candidate will require:

1. 100 cm^3 of **Solution A** – Potassium iodate solution, KIO_3.
2. 50 cm^3 of **Solution B** – Acidified sodium hydrogen sulphite, $NaHSO_3$.
3. About 30 cm^3 of **Solution C** – Starch indicator solution.
4. 150 cm^3 of **Solution D** – Acidified potassium manganite (VII), $KMnO_4$.
5. 150 cm^3 of **Solution E** – 5g/l of dibasic acid, $H_2M.2H_2O$.
6. About 1g of **Solid F** – Calcium hydroxide in a stoppered boiling tube.
7. About 1g of **Solid G** – Pure maleic acid .in a stopper container.
8. About 0.5g of sodium carbonate.
9. Distilled water.
10. One 50 cm^3 burette.
11. One 25 cm^3 pipette.
12. One 10 cm^3 measuring cylinder.
13. One 100 cm^3 beaker.
14. Six, clear dry test-tubes placed in a rack.
15. One stop watch / stop clock.
16. One boiling tube.
17. One spatula metallic.

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ACCESS TO:

1. Phenolphthalein indicator supplied with a dropper.
2. 2M Sulphuric (VI) acid supplied with a dropper.
3. Aqueous potassium iodide supplied with a dropper – KI.
4. 2M Ammonia solution supplied with a dropper
5. Source of heat (Bunsen burner).
6. Acidified potassium dichromate (VI) – $K_2Cr_2O_7$.

PREPARATIONS

1. **Solution A** is prepared by dissolving 2g of **solid A** (Potassium iodate) in distilled water and making it up to one litre.
2. **Solution B** is prepared by dissolving 0.40 g of **solid B** (Sodium hydrogen sulphite) in about 200 cm^3 of distilled water, and adding 20 cm^3 of 1M sulphuric acid, shaking well, and making up to one litre with distilled water.
3. **Solution C** is prepared placing 1.0g of **solid C** (Starch) in

100 cm^3 beaker and adding 2 cm^3 of distilled water to make a paste and pouring the paste into 100 cm^3 of boiling distilled water and boiling the mixture for about one minute and allowing it to cool **solution C** is ***to be prepared in the morning of the examination***.

4. **Solution D** is prepared by dissolving 9g of solid potassium manganate(VII) in about 600 cm^3 of 2M sulphuric(VI) acid and adding distilled water to make a litre of the solution.
5. **Solid G** is pure maleic acid.
6. **Solution E** prepared by dissolving 5 g of oxalic acid in 250 cm^3 of water and making it to one litre of solution.

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KCSE 2023 PREDICTION EXAMS

SERIES 2 EXAMS

233/3

CHEMISTRY

PAPER 3 (PRACTICAL)

TIME: 2¼ HOURS

NAME…… ADM NO; ……

CLASS…… DATE……

Kenya Certificate of Secondary Education.

INSTRUCTION TO THE CANDIDATES

a) *Write your Name and Index Number, Admission Number and Class in the spaces provided at the top of this page.*

b) *Answer all the questions in the spaces provided in this paper using English.*

c) *KNEC Mathematical tables and silent electronic calculators may be used.*

d) *All working MUST be clearly shown where necessary.*

FOR EXAMINER'S USE ONLY

Questions	Maximum score	andidate's Score
1	11	
2	09	
3	20	
	40	

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Answer all the questions in the spaces provided

1. You are provided with:

- **Solution A,** potassium iodate solution.
- **Solution B**, acidified sodium hydrogen sulphite solution.
- **Solution C,** starch indicator.
- Stop watch.
- Distilled water.

You are required to find out the **effect** of **concentration of potassium iodate**, **A** on the **rate of reaction** with acidified sodium hydrogen sulphite, **B**.

NB: *The end point of reaction of potassium iodate with acidified sodium hydrogen sulphite is indicated by the formation of a blue colored complex using starch indicator.*

Procedure 1:

Step 1

- **Label** 5 test tubes as 1, 2, 3, 4 and 5 and place them in a test tube rack.

Step 2

- Using a 10 cm^3 measuring cylinder add **5 cm^3** of acidified sodium hydrogen sulphite, **solution B** to **each** of the test tube in the rack.

Step 3

- Using a burette pour **10 cm^3** of potassium iodate solution to the **first** test tube.

Step 4

- Add **8 cm^3** of potassium iodate solution to the **second** test tube, **6 cm^3** to the **third** test tube, **4 cm^3** to the **fourth** test tube and **2 cm^3** to the **fifth** test tube.

Step 5

- Using a 10 cm^3 measuring cylinder add **2 cm^3** of distilled water into the **second** test tube, **4 cm^3** to the **third** test tube, **6 cm^3** to the **fourth** test tube and **8 cm^3** to the **fifth** test tube.

Step 6

- Using a 10 cm^3 measuring cylinder add 10 **cm^3** of **solution B** into a 100 cm^3 beaker, add 3 drops of **solution C** and shake well. To this mixture add quickly contents in the first test tube and start a stopwatch immediately. Shake the mixture and note the time taken for the blue color to appear. Record the time taken in **table I.**

Step 7

- **Rinse** the beaker and **repeat** procedure in **step 6** using the other solutions prepared in **step 4** above and complete the **table I**.

Table I

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Experiment	Volume of Sodium hydrogen sulphite ($NaHSO_3$) used (cm^3)	Volume of distilled water used (cm^3)	Volume of potassium iodate (KIO_3) used in (cm^3)	Time taken to change color (secs)
1	5	0	10	
2	5	2	8	
3	5	4	6	
4	5	6	4	
5	5	8	2	

(3 marks)

(a) On the grid below plot a graph of time taken for the color change against volume of aqueous potassium iodate used**.** **(3 marks)**

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(b) (i) From your graph determine the time taken for the blue colour to appear if 7cm^3 of aqueous potassium iodate was used**.** **(1 mark)**

……

……

(ii) Calculate the volume of distilled water required if 7 cm^3 of aqueous potassium iodate was used. **(1 mark)**

……

……

(c) On the graph sketch the graph that could be expected if the above experiments were done at a higher temperature. Explain**.** **(1 mark)**

(d) How does the volume of potassium iodate **solution A**, affect its rate of reaction with acidified sodium hydrogen sulphite **B**? Explain your answer. **(2 marks)**

……

……

……

2. You are provided with:

- **Solution D**, which is 0.05M acidified potassium manganate (VII) solution ($KMnO_4$).
- **Solution E**, containing 5.0g/l of a dibasic acid, $H_2M.2H_2O$

You are required to determine the **concentration** of dibasic acid $H_2M.2H_2O$, **solution E** and then the **formula mass** of **M**.

Procedure II

1. Fill the burette with **solution D**.

2. Using a clean pipette, place 25 cm^3 of **solution E** into a clean conical flask. Heat this solution to about 70^0C.

3. Titrate using **solution D** until a permanent pink colour just appears. *Shake* thoroughly during titration.

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4. Record the reading in **table II** below.

5. Repeat the titration one more time to complete the table below.

(a) Complete the **table II** below.

Table II **(3 marks)**

Titration	**I**	**II**	**III**
Final burette reading (cm^3)			
Initial burette reading (cm^3)			
Volume of solution D used (cm^3)			

(b) Determine the average volume of **solution D** used. **(1 mark)**

……

……

……

(c) Calculate:

(i) The number of **moles** of manganate (VII) ions in the average volume of solution B used above.

(1 mark)

……

……

……

(ii) Given that 2 moles of manganate (VII) ions react with 5 moles of dibasic acid $H_2M.2H_2O$.

Calculate the number of moles of the dibasic acid $H_2M.2H_2O$ in the 25 cm^3 of **solution E**.

(1 mark)

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(iii) The **concentration** of **solution E** in moles per litre. **(1 mark)**

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(iv) Calculate the formula mass of **M** in the dibasic acid $H_2M.2H_2O$. (H = 1, O=16). **(2 marks)**

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3. (a) You **are provided** with **solid F**. **Carry out** the tests below. Write **your observations** and **inferences in the spaces** provided.

(i) Place about one third of **solid F** in a clean dry test-tube and heat it strongly.

Observations	Inference
(1 mark)	**(1 mark)**

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(ii) Place the remaining **solid F** in a boiling tube. Add about 10 cm^3 of distilled water. Shake the mixture thoroughly for about one minute. Filter and divide the filtrate into four portions.

Observations	Inference

(1 mark) **(1 mark)**

I. To the first portion, add 2 drops of **phenolphthalein indicator**.

Observations	Inference

(1 mark) **(1 mark)**

II. To the second portion, add 2 cm^3 of **dilute sulphuric (VI) acid.**

Observations	Inference

(1 mark) **(1 mark)**

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III. To the third portion, add 3 cm^3 of **aqueous potassium iodide**.

Observations	Inference

(1 mark) **(1 mark)**

IV. To the fourth portion, add **dilute ammonia solution** drop wise until excess

Observations	Inference

(1 mark) **(1 mark)**

b) You are provided with **solid G**. Carry out the following tests and record your observations and inferences in the spaces provided.

i) Using a metallic spatula, take one third of **solid G** and **ignite** it using a Bunsen burner flame.

Observations	Inference

(1 mark) **(1 mark)**

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ii) Place the remaining **solid G** in a boiling tube. Add about $10cm^3$ **distilled water**. Shake the mixture well. Divide the mixture into two portions.

Observations	Inference

(1 mark) **(1 mark)**

I. To about $4cm^3$ of the solution, add **solid sodium carbonate** and shake well.

Observations	Inference

(1 mark) **(1 mark)**

II. To about 4 cm^3 of the solution, add 3 drops of **acidified potassium dichromate (VI)**. **Warm** the mixture.

Observations	Inference

(1 mark) **(1 mark)**

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KCSE 2023 PREDICTION EXAMS

SERIES 2 EXAMS

232/1

PHYSICS

PAPER 1 (THEORY)

TIME: 2 HOURS

NAME…… ADM NO; ……

CLASS…… DATE……

SIGN: ……

Kenya Certificate of Secondary Education.

INSTRUCTIONS TO CANDIDATES

- This paper consists of two sections ***A*** and ***B***.
- Answer **all** the questions in the two sections in the spaces provided after each question
- All working **must** be clearly shown.
- Electronic calculators, mathematical tables may be used.
- All numerical answers **should be expressed** in the **decimal** notations.
- You may use 'g' as $10m/s^2$

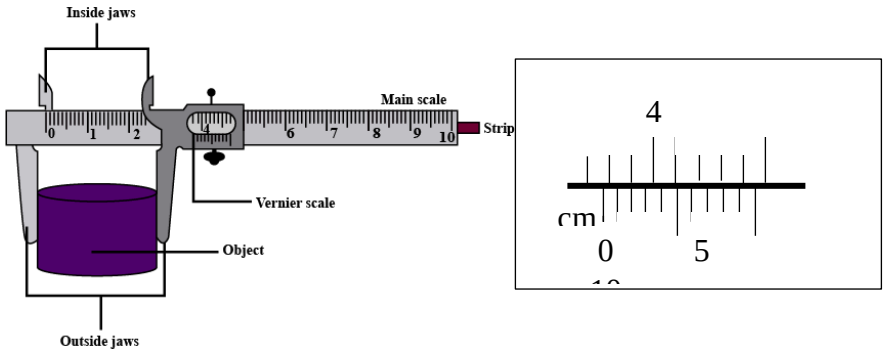
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SECTION	QUESTION	MAX MARKS	SCORE
A	1 – 13	25	
B	14	13	
	15	13	
	16	14	
	17	07	
	18	08	
	TOTAL	80	

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SECTION A (25 MARKS)

1. Figure 1, shows a Vernier caliper of zero error 0.02 cm being used for measuring the diameter of a cylindrical container of height 10 cm. The scale reading of the Vernier is as shown alongside.

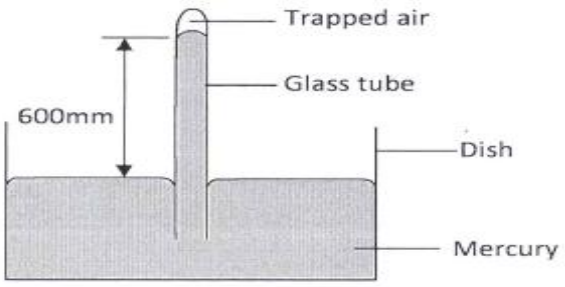


a. Determine the diameter of the container **(2 marks)**

b. Estimate the volume of a liquid which can completely fill the container **(2 marks)**

2. State **one** factor that affects the turning effect of a force on a body**.** **(1 mark)**

3. Figure 2 shows some air trapped by mercury in a glass tube. The tube is inverted in a dish containing mercury.



Given that the atmospheric pressure is 760 mmHg and the height of mercury column in the tube is 600 mm, determine the pressure of the air trapped in the tube in mmHg. **(2 marks)**

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4. Figure 3 shows drops of mercury and water on a glass surface, Explain the difference in the shapes of the drops. **(2marks)**



5. A ball is thrown from the top of a cliff 20m high with a horizontal velocity of $10ms^{-1}$. Calculate the distance from the foot of the cliff to where the ball strikes the ground. **(3 marks)**

6. Explain o**n**e advantage of mercury over alcohol as a thermometric liquid**.** **(1mark)**

7. A body of mass **M** is allowed to slide down an inclined plane. State **two** factors that affect its final velocity at the bottom of the inclined plane. **(2marks)**

8. A stopwatch reads 08:10:84 and 09:10: 90 before and after an experiment respectively. Determine the duration of the event in SI units. **(2marks)**

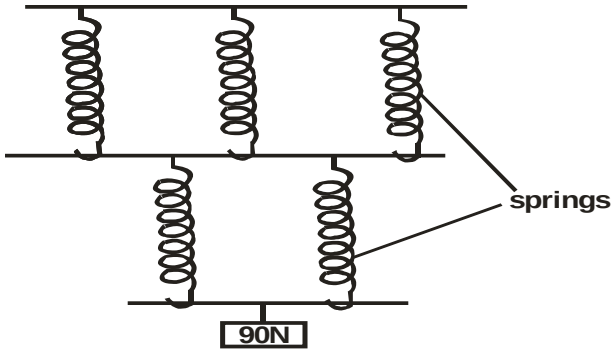
9. Explain the meaning of thermodynamics as a branch of physics. **(1 mark)**

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10.

a. State the Hooke's Law. **(1mark)**

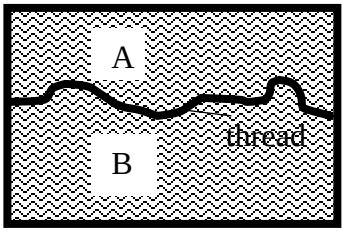
b. Figure 4 shows identical spiral springs supporting a load of 90N. Each spring has a spring constant k = 200N/m



Determine the total extension of the system (take the weight of the cross bars and springs to be negligible) **(2 marks)**

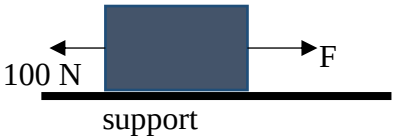
11. **Figure 5** shows a rectangular loop with a thin thread loosely tied and dipped into a soap solution.

Draw on the space provided what is observed when point **A** is punctured. **(1mark)**



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12. Two horizontal strings are attached to a block, resting on a frictionless surface, as shown in figure 6.



A force of 100N pulls on one string. The block does not move. Find the value of the force, F on the other string. **(1 mark)**

13. A wooden bench feels neither warm nor cold when touched by your bare hands. Explain this observation. **(2 marks)**

SECTION B (55 MARKS)

14.

a) Explain why bodies in circular motion undergo acceleration even when their speed is constant. **(1mark)**

b) A particle moving along a circular path of radius 5cm describes an arc of length 2cm every second. Determine:

i. Its angular velocity. **(1mark)**

ii. Its periodic time. **(2marks)**

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c) A stone of mass 150g is tied to the end of a string 80cm long and whirled in a vertical circle at 2rev/s. Determine the maximum tension in the string. **(3marks)**

d) State **one** factor affecting centripetal force **(1mark)**

e) State the principle of conservation of linear momentum **(1 mark)**

f) A bullet of mass 60g is fired horizontally with a velocity of 200 m/s into a suspended stationary wooden block of mass 2940g. Determine:

i. Common velocity of both the bullet and the block, if the bullet embedded into the block. **(2 marks)**

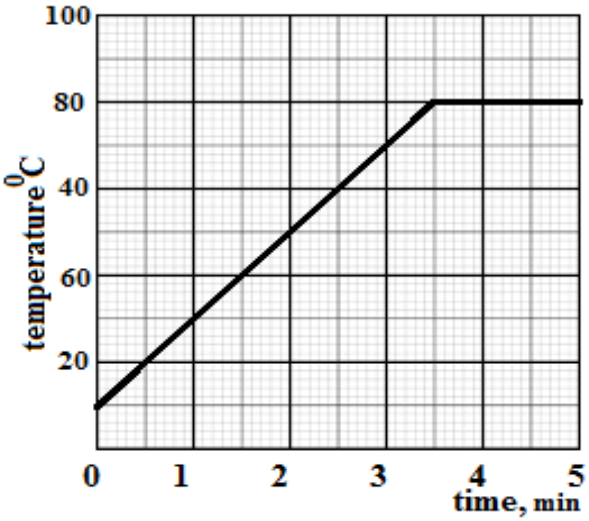
ii. Height to which the block rises. **(2 marks)**

15.

a) State two factors that affect the boiling point of a liquid **(2 marks)**

b) 100g of a liquid at a temperature of 10^0 C is poured into a well lagged calorimeter. An electric heater rated 50W is used to heat the liquid. The graph in figure 7 shows the variation of the temperature of the liquid with time.

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(i) From the graph, determine the boiling point of the liquid **(1 mark)**

(ii) Determine the heat given out the by the heater between the times t = 0.5 minutes and t = 5.0 minutes **(3 marks)**

c) From the graph determine the temperature change between the times t = 0.5 minutes and t = 5.0 minutes, hence determine the specific heat capacity of the liquid **(3 marks)**

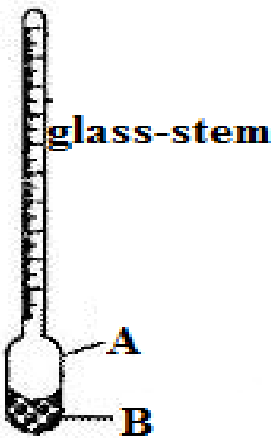
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d) 1.8 g of vapor was collected from above the liquid between the times t= 3.5 minutes and t= 4.5 minutes. Determine the specific latent heat of vaporization of the liquid **(4 marks)**

16.

a) State the law of floatation **(1 mark)**

b) Figure 8 below shows a simple hydrometer



A
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B
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i. Identify the parts labelled A and B **(2 marks)**

ii. State the purpose of the part labelled B **(1 mark)**

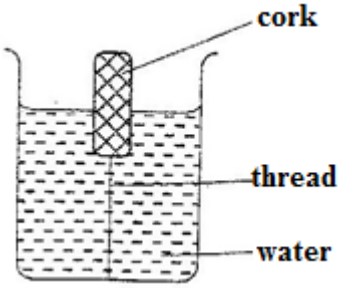
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c) How would the hydrometer be made more sensitive? **(1 mark)**

d) Describe how the hydrometer is calibrated to measure relative density **(3 marks)**

e) Figure 9 shows a cork floating on water and held to the bottom of the beaker by a thin thread.

i. Name the forces acting on the cork **(3 marks)**

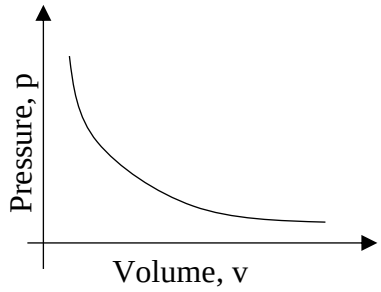


ii. Describe how each of the forces mentioned in (i) above changes when water is added until the container is completely filled **(3 marks)**

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17.

a) Figure 10 shows a graph of pressure against volume for a fixed mass of a gas at constant temperature.



In the space provided, sketch a graph of pressure, p against $\frac{1}{v}$ **(1 mark)**

b) Explain the pressure law using the kinetic theory of matter **(3 marks)**

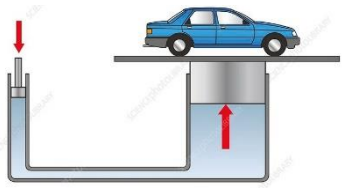
c) $20cm^3$ of a gas exerts a pressure of 760mmHg at 25^0C. Determine the temperature of the gas when the pressure increases to 900mmHg and the volume decreases to 15 cm^3. **(3 marks)**

18.

a) Define the term velocity ratio of a machine (**1 mark)**

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b) The figure 11, below shows part of the hydraulic lift system. State any **one** property of the liquid under which the hydraulic system works **(1 mark)**



c) The hydraulic lift machine above has velocity ratio 45 and it overcomes a load of 4500 N when an effort of 135 N is applied. Determine:

i. The mechanical advantage of the machine **(2 marks)**

ii. Efficiency of the machine **(3 marks)**

iii. The percentage of work that goes to waste **(1 mark)**

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KCSE 2023 PREDICTION EXAMS

SERIES 2 EXAMS

232/2

PHYSICS

PAPER 2 (THEORY)

TIME: 2 HOURS

NAME…… ADM NO; ……

CLASS…… DATE……

SIGN: ……

Kenya Certificate of Secondary Education.

INSTRUCTION TO CANDIDATES

(a) *Write your name, index number in the spaces provided above.*
(b) *Sign and write the date of examination in the spaces provided above.*
(c) *This paper consists of* **two** *sections:* **A** *and* **B**.
(d) *Answer* **all** *the questions in sections* **A** *and* **B** *in the spaces provided.*
(e) ***All*** *working* **must** *be clearly shown.*
(f) *Silent non-programmable electronic calculators may be used.*

FOR EXAMINERS USE ONLY

Section	Question	Maximum Score	Score
A	1 – 11	25	
B	12	12	
	13	12	
	14	12	
	15	9	
	16	10	
Total Score		**80**	

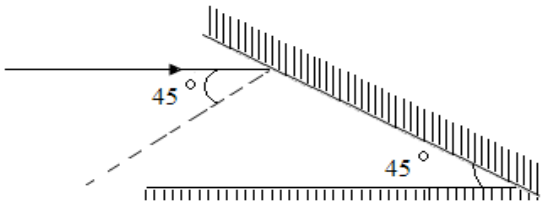
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SECTION A 25 MARKS

Answer all the questions in the spaces provided.

1. The figure below shows a ray of light incident on a mirror at an angle of 45°. Another mirror is placed at an angle of 45° to the first one as shown. Sketch the path of the ray until it emerges.

(2 marks)



2. State any two ways of reducing the magnetic force of attraction of a magnet **(2 marks)**

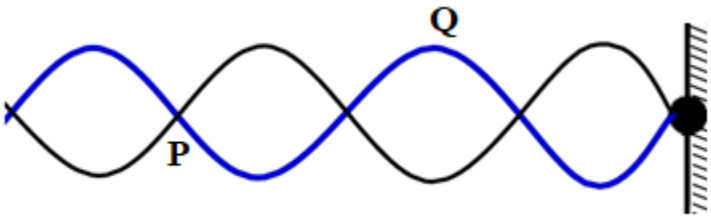
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3. The figure below shows a transverse stationary wave along a string.



Name P and Q and explain how each is formed. **(3 marks)**

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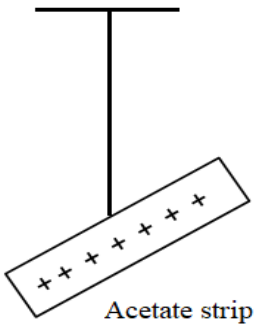
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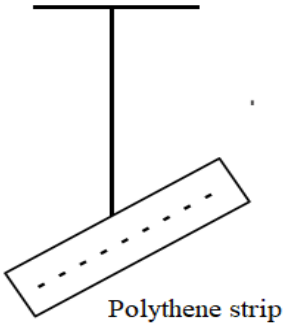
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4. The diagrams below show a positively charged acetate strip and a negatively charged polythene strip freely suspended and isolated.



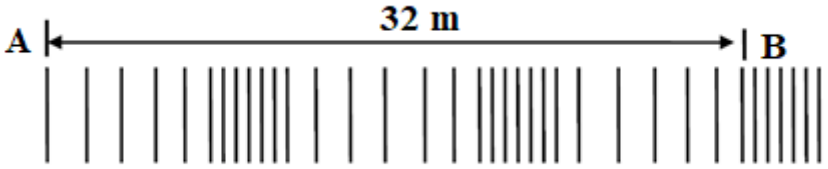


Two rods X and Y are brought up in turn to these strips. X attracts the acetate strip but repels the polythene strip. Rod Y does not repel either the acetate or the polythene. State the type of charge on each rod.

X ..... **(1 mark)**

Y ..... **(1 mark)**

5. The diagram below shows waves generated from a tuning fork. If the wave takes 0.1 second to move from point A to B. determine the frequency of the wave. **(4 marks)**



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6. Name two detectors of **microwave** **(2 marks)**

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7. Other than current state two other factors that affect the magnitude of force on a current carrying conductor placed in a magnetic field. **(2 marks)**

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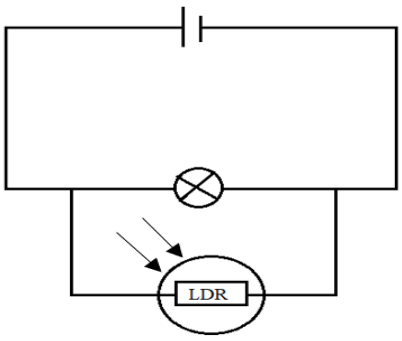
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8. Give a reason why a concave mirror is not preferred as a driving mirror. **(1 mark)**

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9. A student connected the set up below in the laboratory. Explain the observation made on the bulb when the set-up below is taken to a dark room **(2 marks)**



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10. A person standing 110 m from the foot of a cliff claps his hands and hears a sound 0.75 seconds later. Find the speed of sound in air. **(3 marks)**

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11. The figure below is part of electromagnetic spectrum.

A		Visible light	UV	

Identify radiation A and state its source. **(2 marks)**

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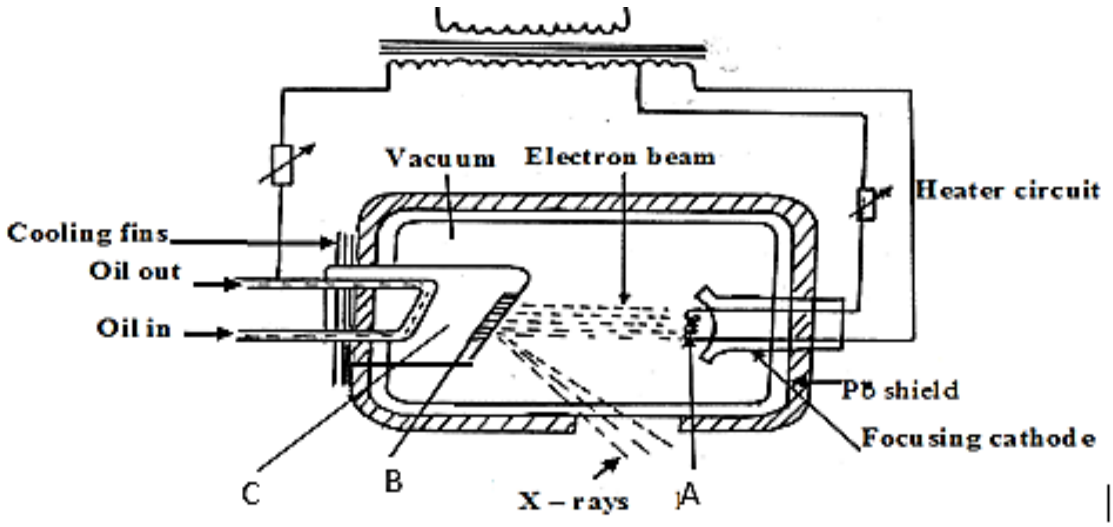
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SECTION B 55 MARKS

Answer all the questions in this section in the spaces provided.

12. (a) The figure below shows a X-ray tube.



(i) Name the part labelled C **(1 mark)**

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(ii) State the property of the material labelled B on the diagram which makes it suitable for use in the X-ray tube. **(1 marks)**

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(iii) Why is C inclined at an angle of 45^{o}? **(1 mark)**

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(iv) State the adjustment that can be made to vary

I. The quality of X-rays **(1 mark)**

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……

II. The quantity of the X-rays. **(1 mark)**

……

……

(v) An x-ray tube has an accelerating potential of 100KV. Determine the maximum frequency of the x-rays produced.

(Plank's constant = 6.63×10^{-34} Js, e = 1.6×10^{-19}C) **(3 marks)**

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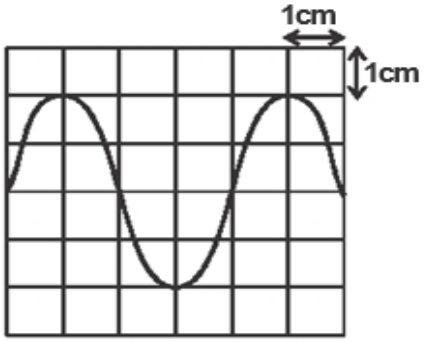
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(b) In a CRO, waveform given below was displayed on the screen when the sensitivity at the Y plate was10V/cm and time base set at 20 milliseconds/cm.



Determine:

(i) peak voltage **(2 marks)**

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(ii) frequency of the signal **(2 marks)**

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13. a) $88226\ Ra$ decays into $86222\ Rn$ by emission of an alpha particle. Write a nuclear equation for the decay **(1 marks)**

b) i) What do you understand by the term half-life of a radioactive substance? **(1 mark)**

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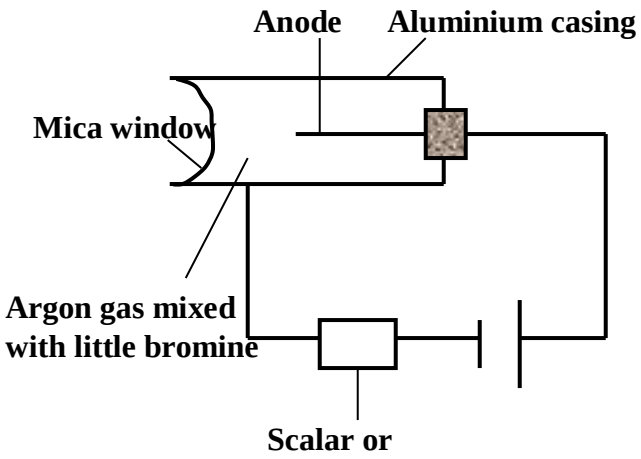
ii)A G.M tube registers 20 counts. When a radioactive source is brought close to it, it registers 3220 counts and 120 counts 30 hours later. What is the half-life of this substance? **(3 marks)**

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c) The figure below shows a G.M tube.



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i) What is the purpose of the mica window? **(1 mark)**

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ii) Explain the purpose of the bromine **(2 mark)**

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iii) Why should argon gas be kept at low pressure **(1 mark)**

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iv) What is meant by the term "*dead time"* as used in GM tube **(1 mark)**

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v) Briefly explain how GM tube works. **(2 marks)**

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14. (a) State the Ohm's Law **(1 mark)**

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(b) You are provided a rheostat, 2 cells, a voltmeter, an ammeter, a switch and a fixed resistor.

i) Draw a circuit diagram that can be used to verify Ohm's law. **(2 marks)**

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ii) Describe how the above set up can be used to determine Ohms law. **(4 marks)**

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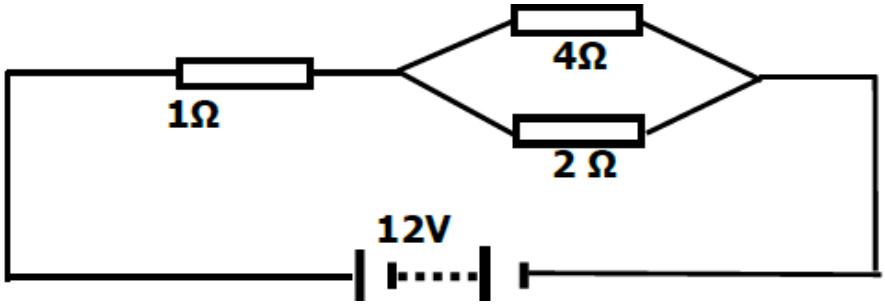
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(b) Study the circuit diagram below and answer the questions that follow.



Calculate

(i) Determine the total resistance in the circuit. **(2 marks)**

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(ii) The current through the 4Ω resistor **(3 marks)**

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15. a) State Snell's law **(1 mark)**

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b) A ray of light travelling from water to glass makes an angle of incident of 30^0. Find the angle of refraction in the glass. Refractive index of water $= \frac{4}{3}$. Refractive index of glass $= \frac{3}{2}$ **(3 marks)**

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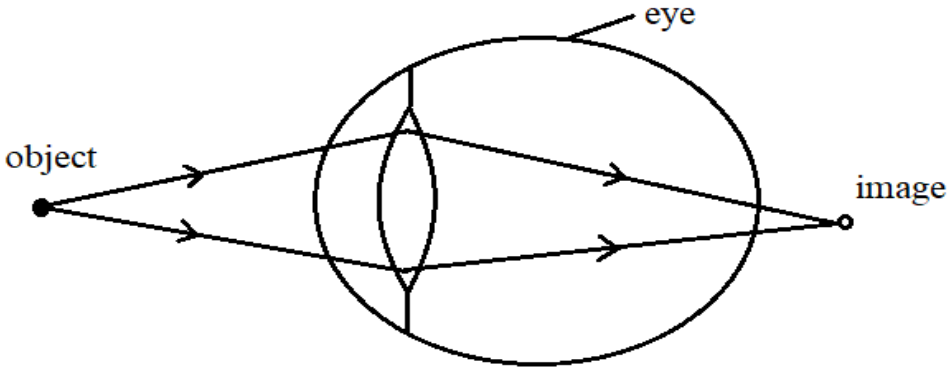
c) State the necessary and sufficient conditions for total internal reflection to occur. **(2 marks)**

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d) The figure below shows a human eye defect.



(i) State one possible cause of this defect. **(1 mark)**

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(ii) On the diagram, show how the defect is corrected. **(2 mark)**

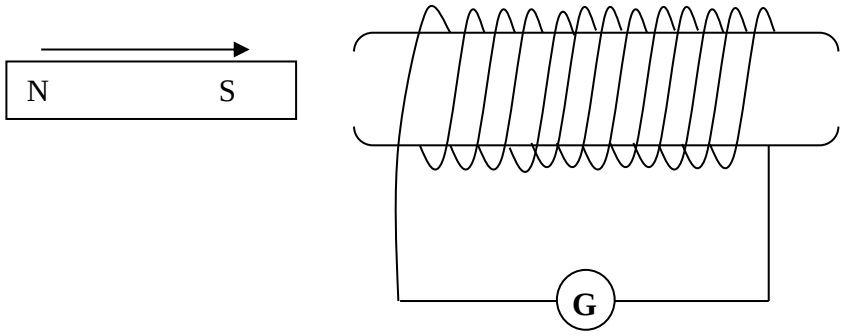
16. (a) State the Lenz's law of electromagnetic induction. **(1 mark)**

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(b) A bar magnet is moved into a coil of an insulated copper wire connected to a zero centre galvanometer as shown below



(i) Show on the figure above the direction of the induced current in the coil **(1 mark)**

(ii) State and explain what is observed on the galvanometer when the south pole of the magnet is moved into and then withdrawn from the coil. **(2 marks)**

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(c) A transformer has 800 turns in the primary and 40 turns in the secondary winding. The alternating voltage connected to the primary is 240V and current of 0.5.A. If 10% of the power is dissipated as heat within the transformer, determine the current in the secondary coil. **(3 marks)**

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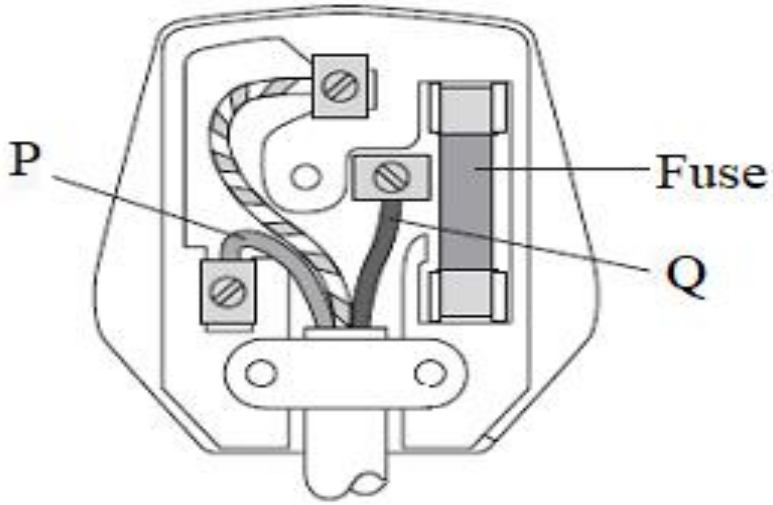
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(d) The diagram below shows a three-pin plug.



(i) Name the colour of conductors P and Q **(2 marks)**

P……

Q……

(ii) Why is the earth pin longer than the rest in the three-pin plug shown above? **(1 mark)**

……

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KCSE 2023 PREDICTION EXAMS

SERIES 2 EXAMS

232/3

PHYSICS

PAPER 3 (PRACTICAL)

TIME: 2½ HOURS

CONFIDENTIAL

INSTRUCTION TO THE PHYSICS TEACHER:

The physics teacher should plan with school management to ensure availability of the following apparatus for the learner to carry-out this practical examination.

Each candidate is expected to be provided with the following apparatus:

QUESTION ONE

- A milli-ammeter
- A volt-meter (0-3V)
- A switch
- Two enameled copper rods (each 10 cm long and about 0.10mm thick)
- Eight connecting wires with at least 4 fitted with crocodile clips
- Glass stirrer
- A micrometer screw-gauge (may be shared)
- 50 ml plastic beaker (labelled A)
- 75 ml of distilled water (beaker labelled B)
- 8g of solid copper II sulphate (crystal) labelled solid X
- Measuring cylinder
- Thermometer
- Sand paper

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QUESTION TWO

- Complete retort-stand (clamp, boss and stand)
- Half metre-rule(wooden)
- Metre-rule (wooden)
- G-clamp (laboratory size clamp)
- Office pin (should be fixed at one end of the half metre-rule to act as a pointer on the scale)
- Four 100g masses (or its equivalent)
- Some celotape
- Vernier calipers (to be shared)
- String/thread (about 30 cm long)
- One 50g mass with a hook
- Knife-edge (at least 15 cm high)
- Knife-edge (about 10 cm high)

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KCSE 2023 PREDICTION EXAMS

SERIES 2 EXAMS

232/3

PHYSICS

PAPER 3 (PRACTICAL)

TIME: 2½ HOURS

NAME…… ADM NO; ……

CLASS…… DATE……

Kenya Certificate of Secondary Education.

INSTRUCTIONS:

- *Answer all the questions in this paper*
- *You are supposed to spend the first 15 minutes of the* $2\frac{1}{2}$ *hours allowed for this paper reading the whole paper carefully before starting your work.*
- *Marks are given for clear record of the observations made, their suitability and accuracy and the use made of them.*
- *Candidates are advised to record observations as soon as they are made*
- *Mathematical table and electronic calculators may be used.*
- ***The earth's gravitational pull,*** $g = 10Nkg^{-1}$

For Examiner's use only:

QUESTION	TOTAL MARKS	CANDIDATE'S SCORE
1	**20**	
2	**20**	
GRAND TOTAL	**40**	

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QUESTION ONE

You are provided with the following apparatus:

- Two new size 'D' dry-cells
- switch
- milli-ammeter
- voltmeter (0-3V)
- two enameled copper rods
- rheostat ($0 - 100\Omega$)
- eight connecting wires with at-least 4 fitted with crocodile clips
- Micrometer screw-gauge (to be shared)
- 50 ml beaker (labelled, A)
- 75 ml of distilled water (labelled, B)
- solid X
- Measuring cylinder
- Thermometer
- Glass-rod for stirrer
- Sand-paper

Proceed as follows:

a) Measure the temperature of the distilled water in beaker, B

Temperature, $\boldsymbol{\theta}$ = **.....** **(1 mark)**

b) Place the provided solid X into the beaker labelled, A. measure 50 ml of the distilled water and gently pour it into beaker A and stir gently until all the solid X is dissolved to form solution, C.

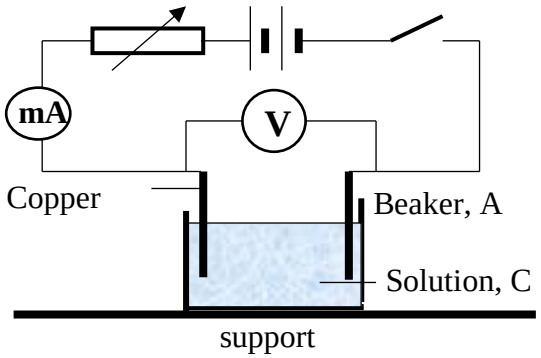
c) Measure the diameter, d of one of the copper rods.

i. diameter, d = ... m **(1 mark)**

ii. determine the cross-section area, A of the copper rod **(2 marks)**

A =

d) Using the sand paper, remove the insulating coating at the both ends of each of the copper rods. Now set-up the apparatus as shown in figure 1 below.



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e) With the help of the rheostat, set the current value to 30 mA and measure its corresponding voltage, V.

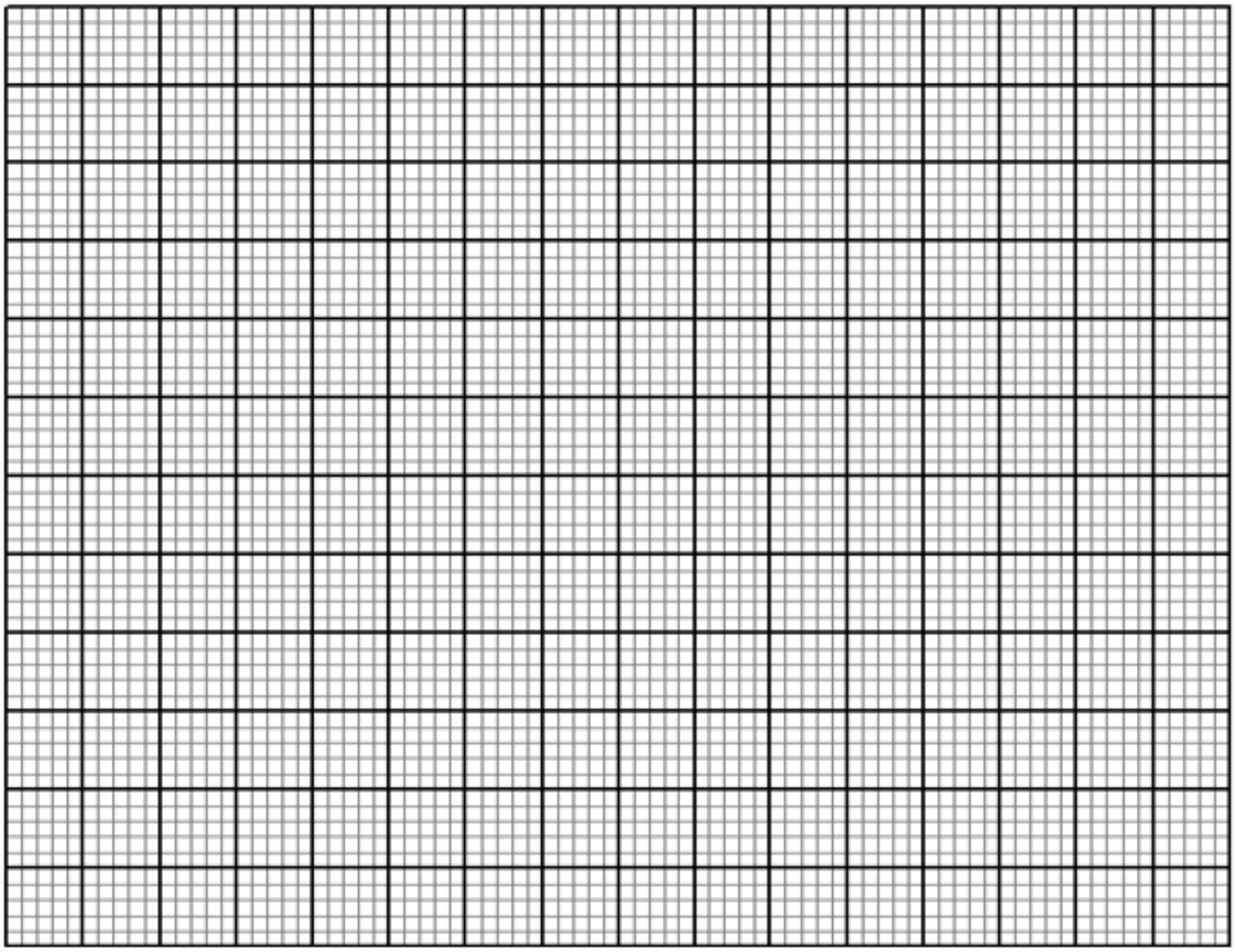
V = ... **(1 mark)**

f) Repeat the above procedure for the values of current indicated in the table, 1 below and note their corresponding voltages. Complete the table. **(5 marks)**

Table 1

Current, I (mA)	**30**	**40**	**50**	**60**	**70**
Current, (A)					
Voltage, V					

g) In the grid provided, plot a graph of voltage (y-axis) against current (A) (X-axis) **(5 marks)**



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h) Determine the slope, S of the graph **(3 marks)**

i) The voltage and current are related by the equation: $V - \frac{bI}{A} = 0$

Determine the value of b. **(2 marks)**

$\boldsymbol{b} =$ **.....**

QUESTION TWO

You are provided with the following apparatus:

- Complete retort-stand (clamp, boss and stand)
- Half metre-rule
- Metre-rule
- G-clamp
- Office pin
- Four 100g masses (or its equivalent)
- Some celotape
- Vernier calipers (to be shared)
- String/thread (about 30 cm long)
- One 50g mass
- Knife-edge

PART A

Proceed as follows:

a) Arrange the apparatus as shown in figure 2, below. Ensure the 10 cm mark of the half metre-rule is at the edge of the table and firmly held by the G-clamp while the pin (pointer) is at the 90 cm mark on the scale of the metre-rule. (The clamp should not be removed for the entire duration of carrying-out this experiment)

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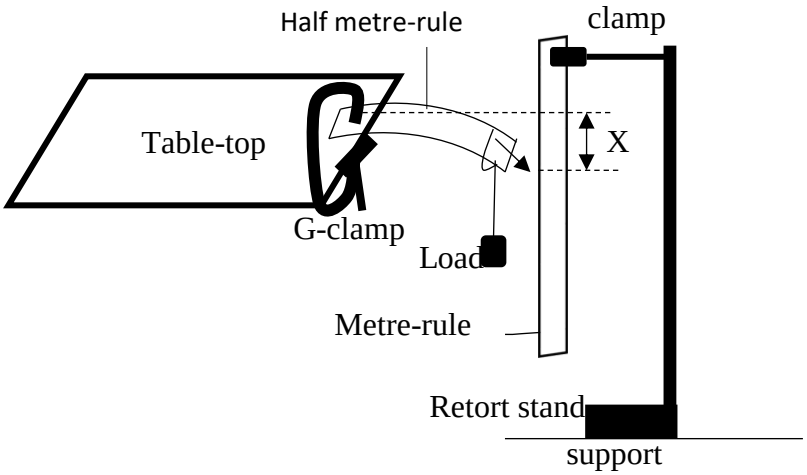


Figure 1

b) Suspend one 100 g mass at the 49.5 cm mark and record the new pointer reading, P_1

P_1 =..... **(1 mark)**

c) Continue adding the load in 100 g steps, each time recording the pointer position. Ensure that the half metre-rule is not overloaded.

d) Determine the amount of sagging, X and complete the table, 2 below. **(6 marks)**

Table 2

Mass (g)	Load (N)	Pointer position (cm)	Amount of sagging, X (m)
100			
200			
300			
400			

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PART B

Procedure

e) Use the Vernier calipers to determine the width, a and breadth, b of the half metre-rule

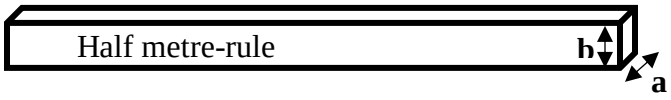


Figure 2

Width, a = ... cm **(1 mark)**

breadth, b = ... cm **(1 mark)**

f) Using a loop of thread suspend the 50g mass at the 49.5cm mark on the half-metre rule.

g) With the 50g mass fixed at that position adjust the position of the half-metre rule on the knife edge until it balances horizontally as shown in figure 4.

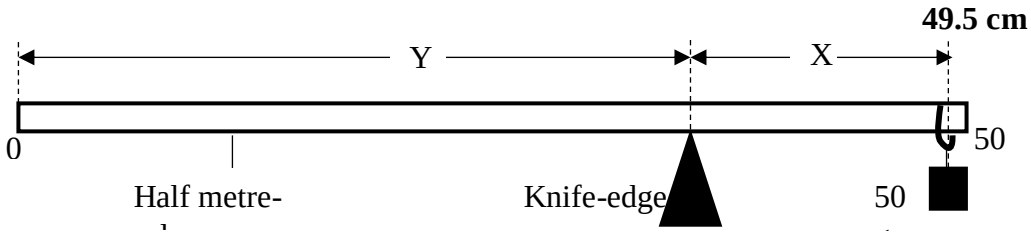


Figure 3

h) At the balance position, read off the length x and y and record in table 3.

i) Using the values of x and y obtained in 'h' above, determine the weight, W of the half metre-rule **(3 marks)**

W = ...

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j) Move the suspended mass 2cm towards the centre of the rule and repeat parts (g) and (h) to obtain other values of x and y so as to complete table 3. **(4 marks)**

Table 3

Position of the mass of 50g	**X (cm)**	**Y (cm)**
49.5 cm mark		
47.5 cm mark		
45.5 cm mark		
43.5 cm mark		
41.5 cm mark		

k) Given that quantity, P is given by: $p = \frac{W}{g\,(5ab \times 10^{-5})}$; determine the value of P **(3 marks)**

l) State the significance of the quantity, P **(1 mark)**

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KCSE 2023 PREDICTION EXAMS

SERIES 2 EXAMS

443/1

AGRICULTURE

PAPER 1 (THEORY)

TIME: 2 HOURS

NAME…… ADM NO; ……

CLASS…… DATE……

Kenya Certificate of Secondary Education.

INSTRUCTIONS TO CANDIDATES

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

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

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

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

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

FOR EXAMINER'S USE ONLY

SECTION	QUESTION	MAXIMUM SCORE	CANDIDATES SCORE
A	1 – 20	30	
B	21 - 26	40	
C	27-29	20	
Total Score		90	

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SECTION A

*Answer **ALL** questions from this section*

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

……

……

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

……

……

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

……

……

4. State **three** ways in which trees improve soil fertility. **(1 ½ mks)**

……

……

……

5. Give **three** causes of hardpans in cultivation. **(1 ½ mks)**

……

……

……

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

……

……

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

……

……

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

……

……

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……

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

……

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……

10. Give **three** reasons why agriculture is defined as a science. **(1 ½ mks)**

……

……

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……

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

……

……

……

……

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

……

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

……

……

……

……

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

……

……

……

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

……

……

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

(i) 6……

(ii) 4……

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

……

……

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

……

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

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

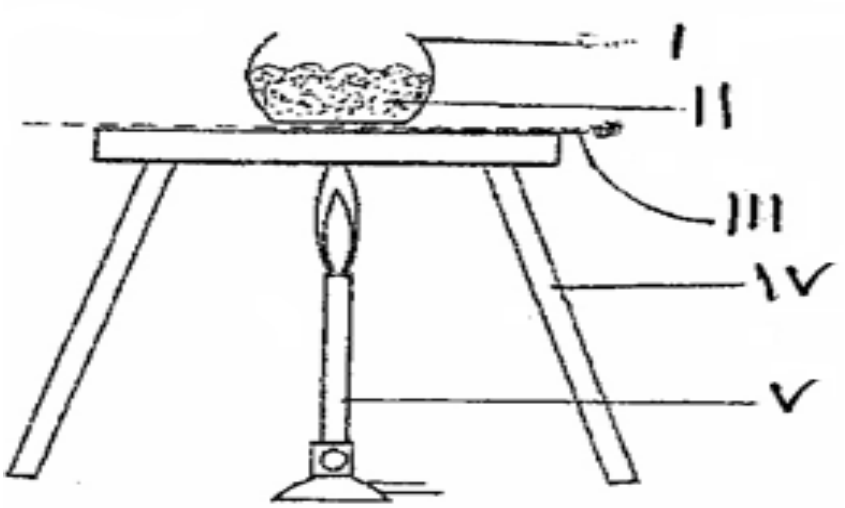
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SECTION B

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



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

I……

II……...

III……..

IV……...

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

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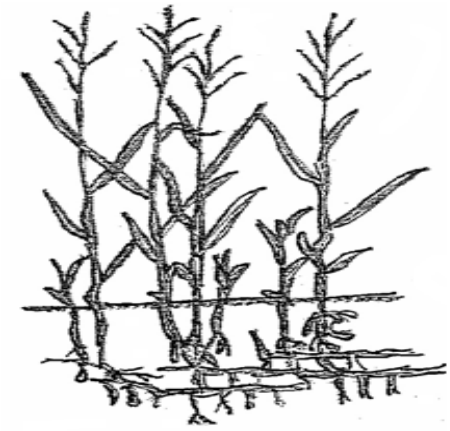
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22.

G



H



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

G ……

H ……

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

……

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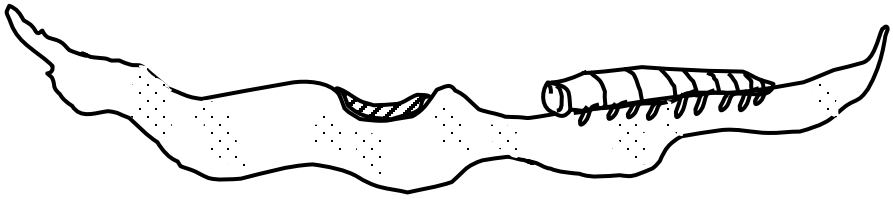
(iii) Why is it difficult to control weed in diagram **G**? **(1 mark)**

……

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



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

……

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

……

……

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

……

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



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

……

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

……

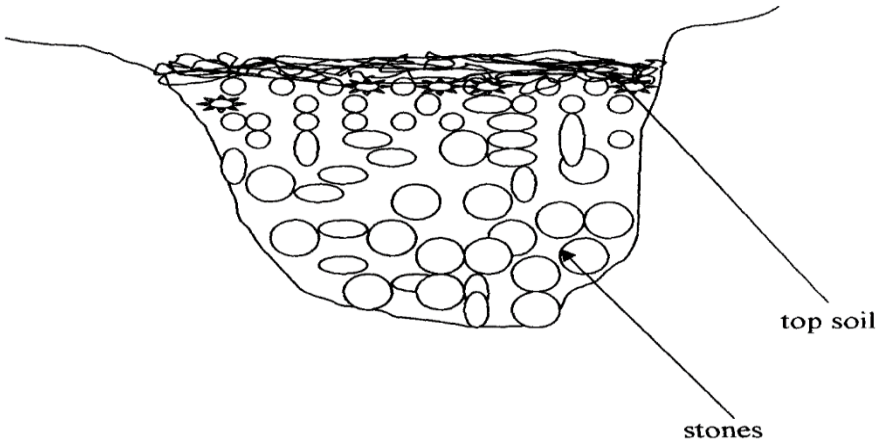
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(iii) Give another practice that could be carried out to give the same results. **(1 mark)**

……

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



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

……

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

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

……

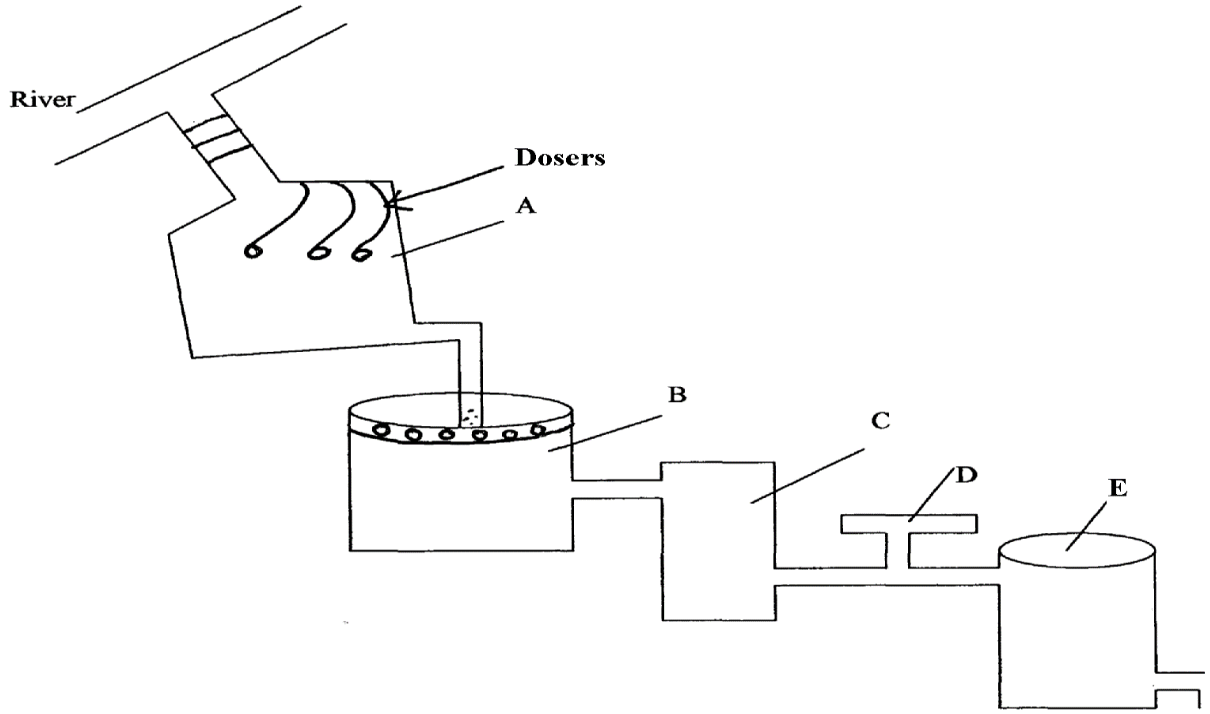
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26. Study the processes of chemical water treatment below and answer the questions that follow:



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

A……

B……

C……

D……

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

……

……

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

……

……

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

……

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

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SECTION C (20MKS)

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

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

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

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

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

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

b) Harvesting **(4 marks)**

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

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

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KCSE 2023 PREDICTION EXAMS

SERIES 2 EXAMS

443/2

AGRICULTURE

PAPER 2 (THEORY)

TIME: 2 HOURS

NAME…… ADM NO; ……

CLASS…… DATE……

Kenya Certificate of Secondary Education.

INSTRUCTIONS TO CANDIDATES

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

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

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

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

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

FOR EXAMINER'S USE ONLY

SECTION	QUESTION	MAXIMUM SCORE	CANDIDATES SCORE
A	1 – 29	40	
B	30 - 35	30	
C	36 - 38	20	
Total Score		90	

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SECTION A (30 Marks)

*Answer **ALL** questions from this section*

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

……

……

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

(a) Brown ear tick **(½ mark)**

(b) Tsetse fly **(½ mark)**

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

……

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

……

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……

……

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

……

……

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

……

……

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

……

……

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

……

……

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

……

……

……

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

……

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

……

……

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

……

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……

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

……

……

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

……

……

……

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

……

……

……

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

……

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……

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

……

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……

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

……

……

……

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

(i) Mature male pig……

(ii) Sterilised birds ……

(iii) Mature female goat ……

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

……

……

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……

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

……

……

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

……

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

……

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……

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

……

……

……

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

……

……

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

……

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

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

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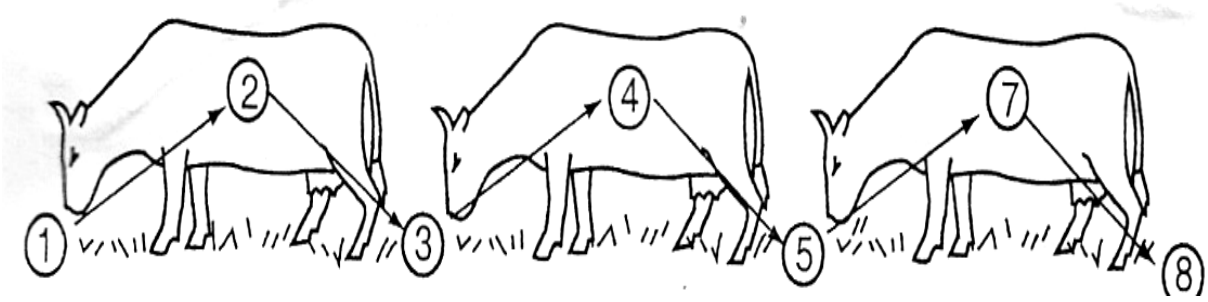
29. Give one role of a damp proof course in the foundation of a farm building **(1mk)**

……

……

SECTION B (30MKS)

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



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

1……..……

……

……

4……..……

……

……

5……..……..……..

……

……

7……..……

……

……

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

……

……

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

……

……

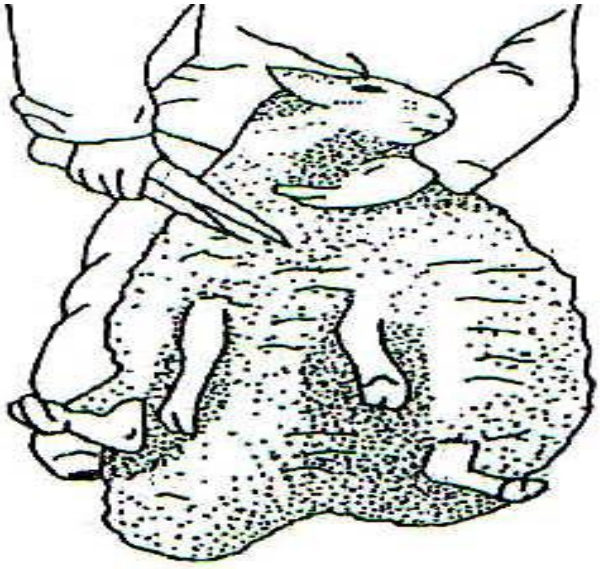
(d) Give **two** examples of a three host tick **(1mark)**

……

……

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



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

……

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

……

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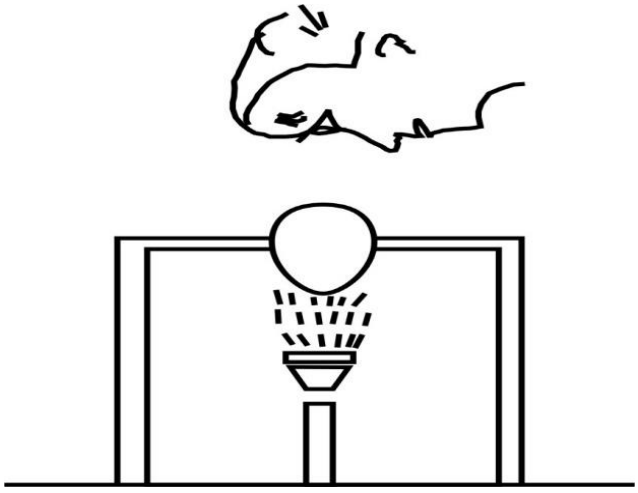
(iii) How often should the practice be carried out? **(1mark)**

……

……

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



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

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

.....

.....

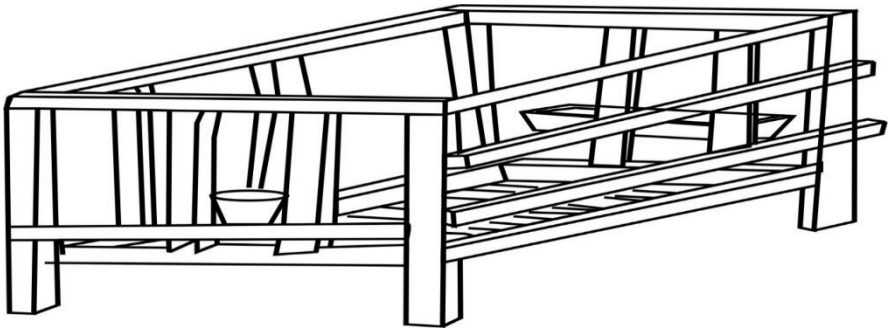
.....

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

.....

.....

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



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

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

……

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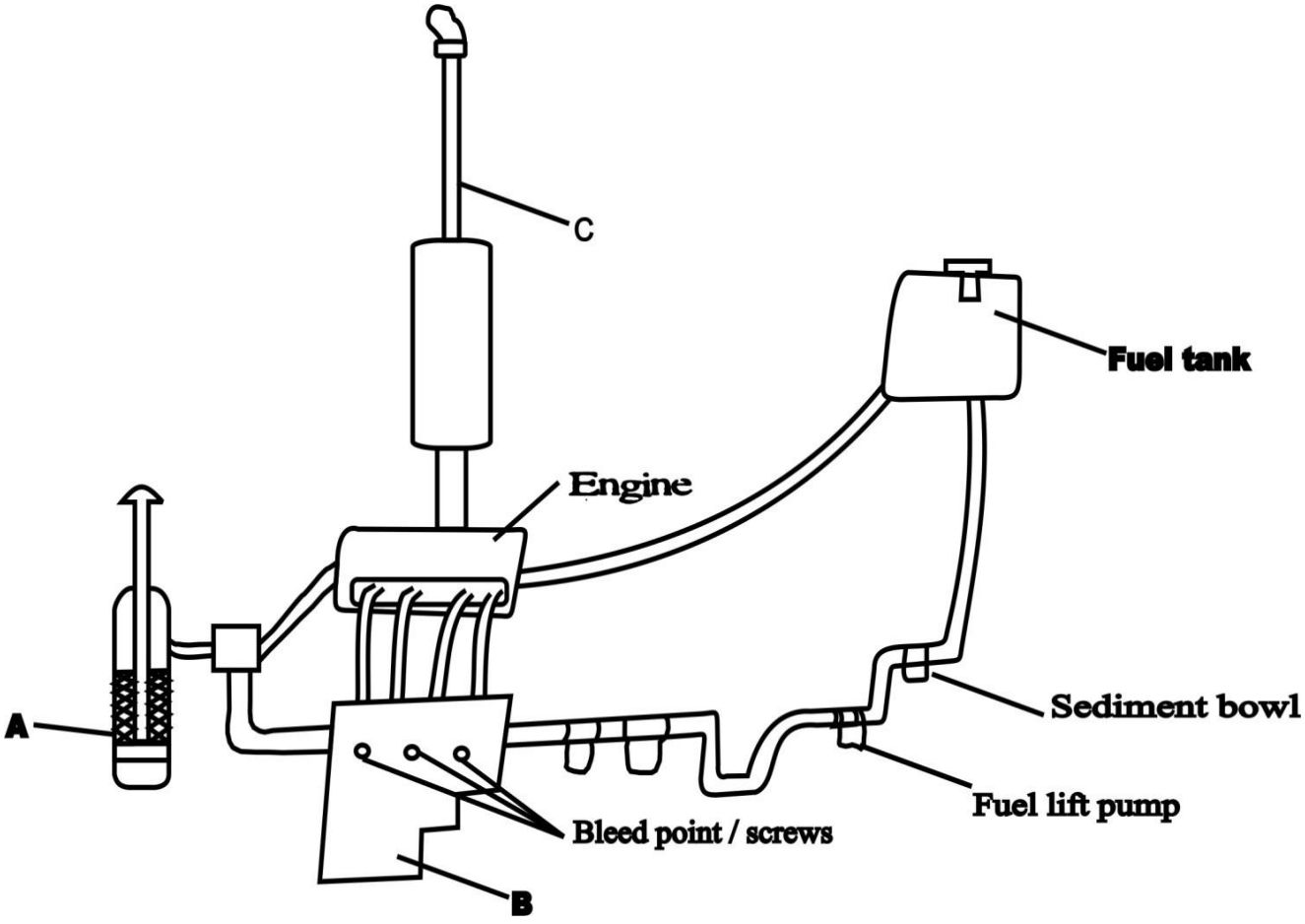
c) Why should the calf pen be near the milking parlour? **(2mks)**

……

……

……

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



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

A……

B……

C……

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

……

……

……

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

……

……

……

SECTION C (20MKS)

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

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

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

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

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

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

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

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

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

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KCSE 2023 PREDICTION EXAMS

SERIES 2 EXAMS

565/1

BUSINESS STUDIES

PAPER 1

TIME: 2 HOURS

NAME…… ADM NO; ……

CLASS…… DATE……

SIGN: ……

Kenya Certificate of Secondary Education.

INSTRUCTIONS TO CANDIDATES

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

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

(c) *This paper consists of **25** questions.*

(d) *Answer ALL questions in the spaces provided*

FOR EXAMINER'S USE ONLY

Question	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Marks															

Questions	16	17	18	19	20	21	22	23	24	25
Marks										

TOTAL MARKS

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ANSWER ALL QUESTIONS IN THIS PAPER

1. Outline four benefits that consumers get from warehousing. **(4mks)**

……

……

……

……

2. Name the business document that each of the following descriptions refers. **(4 Marks)**

Description	Document
a)It is used to correct an overcharge in an invoice	
b)It is used to alert the buyer that ordered goods are on the way	
c)Summarize all monthly credit transactions between regular buyer and seller.	
d)It is a reply to an inquiry which contains descriptions, illustrations, terms of sale and prices of goods	

3. Outline four reasons why a business person may prefer written communication to verbal communication. **(4 Marks)**

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4. Outline factors that may lead to a shift in the supply curve to the right. **(4mks)**

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5. Using a tick(√) indicate the effect of the following transactions on capital **(4mks)**

Transaction	Increase	Decrease	No effect
a)Withdrew cash for personal use			
b)Used personal savings to buy stock			
c)Paid a creditor by cheque			
d)Bought office furniture in cash			

6. Omamo a trader had the following assets and liabilities on 1st February 2020.

	Shs
Capital	120,000
Machinery	80,000
Trade creditors	10,000
Trade Debtors	20,000
Stock in trade	25,000
Cash at hand	5,000

On 2nd Feb the following transactions took place

Purchased goods on credit for shs. 15,000

Received a cheque sh. 10,000 from a debtor

Sold the machinery for shs. 90,000 in cash

Required: Prepare Omamo Balance Sheet as at 2nd January 2020 after the above transactions

(5mks)

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7. State four external factors that may positively influence the operation of a business**.(4mks)**

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8. Outline four circumstances when the government may introduce regulatory measures to protect consumers from exploitation by business people. **(4mks)**

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9. State four features of a perfectly competitive market **(4mks)**

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10. Identify four factors that may cause demand- pull inflation to occur in a country **(4 Marks)**

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11. The following transactions relate to Salim traders

a) 15th Feb 2020 sold an old business vehicle for shs. 150,000 on credit to Recovery Motors

b) 20th Feb 2020 bought a new sewing machine on credit from singer limited for shs.50,000

Required: Record the above transactions in a General Journal

12. State four demerits that are associated with water transport. **(4 Marks)**

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13. State four advantages of an open office layout to an organization **(4mks)**

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14. Highlight four features private limited company **(4 Marks)**

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15. Open relevant ledger accounts using the following information. **(4 Marks)**

1/2/2011 started business with sh. 10,000 in cash and sh. 50,000 at bank.

2/2/2011 Bought goods on credit from LK traders worth sh.5000

4/2/2011 Withdrew sh. 2000 from bank for office use.

16. Outline four circumstances where personal selling is appropriate. **(4 Marks)**

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17. Highlight four benefits that a firm may enjoy by preparing a business plan. **(4 Marks)**

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18. Highlight four forms of economic integration **(4 Marks)**

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19. A business had the following record for the year ended 31st December 2018

Capital as at 31/12/18	64,000
Net profit for the year	14,000
Capital as at 1st Jan 2018	42,000
Monthly drawings	1,500

Calculate the additional investments made during the year **(4 Marks)**

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20. Outline four principles that guide a government in spending public **finance** **(4 Marks)**

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21. State four negative implications of ageing population in a country **(4 Marks)**

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22. State four errors which may affect the agreement of a trial balance **(4mks)**

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23. The following information relates to Mumbua traders for the year ended 31st April 2020.

Cash at bank	30,000
Cash in hand	40,000
Current liability	500,000
Sales	920,000
Opening stock	150,000
Closing stock	230,000

Margin 25%

Expenses 15% of sales

Determine

i) Gross profit **(1Mark)**

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ii) Cost of sales **(1Mark)**

iii) Purchases for the year **(1Mark)**

iv) Net profit **(1Mark)**

24. State any four money transfer facilities offered by commercial **banks** **(4 Marks)**

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25. State four problems encountered at the plan implementation stage in economic planning and development **(4 Marks)**

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KCSE 2023 PREDICTION EXAMS

SERIES 2 EXAMS

565/2

BUSINESS STUDIES

PAPER 2

TIME: 2½ HOURS

NAME…… ADM NO; ……

CLASS…… DATE……

Kenya Certificate of Secondary Education.

INSTRUCTIONS TO CANDIDATES

a) *Write your name, and Index number in the spaces provided after the questions.*
b) *Sign and write the date of examination.*
c) *This paper consists of* ***Six*** *questions.*
d) *Answer* ***any five*** *questions in the spaces provided after the questions.*
e) *All questions carry equal marks*
f) ***Candidates should answer the questions in English.***

FOR EXAMINER'S USE ONLY

Question	Maximum Score	Candidate's Score
1	20	
2	20	
3	20	
4	20	
5	20	
6	20	
Total Score	100	

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*Answer **any five** questions in the spaces provided*

1. a) Explain **five** circumstances that can cause a business to succeed in their activities. **(10 marks)**

b) Describe the procedure an insured must take when making an insurance claim. **(10 marks)**

2. (a) Mzalendo Enterprises started business on 1st July 2010 with Shs. 250,000 consisting of:
Cash at bank Shs.200,000, Cash in Hand Shs. 30,000 and Furniture Shs. 20,000.
The following transactions took place during the month of July 2010.
3rd July 2010, Motor Van worth Shs. 85,000 and stock of Shs. 25,000 were bought on credit
4th July 2010, more stock worth shs.10,000 was bought by cash
10th July 2010, withdrew money from bank sh 50,000 for office use
15th July 2010, Sold stock at cost to a customer on credit for shs. 18,500
19th July 2010, received a cheque for the full settlement of a debt owed from the transaction of 15th July 2010
23rd July 2010, paid Shs. 65,000 by cheque for the motor van bought earlier on credit
29th July 2010, paid Shs. 20,000 cash for the stock bought on credit

Required:

Prepare the balance sheet of Mzalendo Enterprises as at 30th July 2010**.** **(10marks)**

(b) Explain **five** reasons why upward communication should be encouraged in an organization. **(10 marks)**

3. (a) On 1st March 2020, Yawa had cash in hand shs. 7,800 and a bank overdraft of shs 23,400. During the month of the following transaction took place.
March 3: Cash sales sh. 6500 paid directly into the bank.
March 4: Bought goods for sh. 15,000 by cheque.
March 6: cash sales sh. 50,000
March 9: Received a cheque for sh. 18,000 from Amolo in full settlement of his account of sh. 20,000.
March 13: Paid insurance premiums sh. 16,000 in cash.
March 14: Paid Kimotho by cheque sh. 9,700 in full settlement of his debt of sh. 10,000.
March 17: Cash sales sh. 150,000 paid directly into the bank.

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March 21: Withdrew shs. 30,000 from bank for office use.

March 23: Received a cheque of sh. 23,750 from Rotich after having deducted 5% cash discount.

March 25: Paid wages shs. 20,000 in cash.

March 26: The cheque received by Amolo was dishonoured.

March 30: Banked all cash except sh. 3,000.

Required: Prepare a three-column cashbook. (10mks)

(b) Explain five challenges that may be experienced by a country whose population is made up of a large proportion of young people. **(10mks)**

4. (a) Explain five circumstances under which personal selling may be appropriate as a method of product promotion. **(10mks)**

(b) Explain five factors that may hinder entrepreneurial activities in a country. **(10mks)**

5. a.) As business expands, it experiences economies of scale such as division of labour and specialization. Explain Five benefit of the economy of scale mentioned to the business **(10mks)**

b.) Kamau operates a large hardware business in a town in Kenya. A part from motor vehicle insurance policies, highlight giving reasons, five insurance policies that may be beneficial for this business. **(10mks)**

6. a) Explain **five** advantages of M-pesa **(10 mks)**

b) Using a well labeled diagram, illustrate, the effect of reduced cost of production on equilibrium price and output **(10mks)**

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KCSE 2023 PREDICTION EXAMS

SERIES 2 EXAMS

313/1

CHRISTIAN RELIGIOUS EDUCATION

PAPER 1

TIME: 2½ HOURS

NAME…… ADM NO; ……

CLASS…… DATE……

SIGN: ……

Kenya Certificate of Secondary Education.

INSTRUCTIONS TO CANDIDATES

a) *Write your name; admission number; Index number; class and date in the spaces provided above.*

b) *This paper consists of six questions.*

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

d) *Each Question carries 20 marks*

FOR EXAMINER'S USE ONLY

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

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Answer FIVE questions

1. a) State **FOUR** ways in which the study of C.R.E promotes National Unity. **(8mks)**

b) Explain why the Bible is written in different styles **(6mks)**

c) State **SIX** ways in which Christians can use the Bible in their evangelization ministry **(6mks)**

2. a) Describe ways in which the covenant between God and the Israelites was sealed at Mount Sinai **(7mks)**

b) Identify **SEVEN** challenges that Moses encountered as he led the Israelites during the Exodus **(7mks)**

c). State **SIX** ways in which the church worship is abused today. **(6mks)**

3 a) List ways in which the King of Israel used to bring the people back to God. . **(8mks)**

b) Identify the failures of King Ahab **(6mks)**

c) Give **FIVE** reasons why some Christians have lost faith in God **(6mks)**

4 a) what was the relationship between the Old Testament prophets and those of the New Testament? **(8mks)**

. b)Describe the social background of Amos **(7mks)**

c). Explain the relevance of Amos' teaching on the Remnant for Christians. **(5mks)**

5 a) Describe the religious background of Prophet Nehemiah **(6mks)**

b) Compare Nehemiah's experiences to the life of Jesus as shown in Saint Luke's gospel. **(8mks)**

c). what lessons can a Christian learn from Nehemiah's leadership qualities? **(6mks)**

6 a) what conditions did one have to fulfil in order to be made an elder in traditional African society. **(7mks)**

b). State occasions when seers were consulted in Traditional African society. **(7mks)**

c) What aspects of traditional religion have been integrated into the Christian faith? **(6 mks)**

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KCSE 2023 PREDICTION EXAMS

SERIES 2 EXAMS

313/2

CHRISTIAN RELIGIOUS EDUCATION

PAPER 2

TIME: 2½ HOURS

NAME…… ADM NO; ……

CLASS…… DATE……

SIGN: ……

Kenya Certificate of Secondary Education.

INSTRUCTIONS TO CANDIDATES

a) *Write your name; admission number; Index number; class and date in the spaces provided above.*

b) *This paper consists of six questions.*

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

d) *Each Question carries 20 marks*

FOR EXAMINER'S USE ONLY

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

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Answer Five Questions

1 a) with specific examples, show how Jesus fulfilled the prophecies of Isaiah concerning the Messiah **(8mks)**.

b) Explain what the magnificant reveals about the nature of God. **(6mks)**

c) Explain **SIX** ways in which Christian youths should show gratitude to God. **(6mks)**

2 a). Describe Zechariah's vision in the temple (Luke 1:8-23) **(8mks)**

b) State **SIX** teachings of Jesus about John the Baptist. **(6mks)**

(c) Six reasons why preachers may be disliked by some people in the modern society **(6mks)**

3.a) Outline Jesus teaching about the Kingdom of God. **(7mks)**

b) Describe the incident when Jesus was questioned about marriage and resurrection in Luke 20:27-38) **(7mks)**

c) State **SIX** lessons why Christians find it difficult to accept the gospel. **(6mks)**

4 a) Explain how the use of the Holy Spirit brought disunity in the Church at Corinth **(6mks)**

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

c. Explain ways in which Christians use the fruit of the Holy Spirit to spread the gospel **(6mks**)

5 a) Discuss the biblical teaching on acquisition and use of wealth **(7mks)**

b) Outline **SIX** ways Christians in Kenya help to narrow the gap between the rich and the poor. **(6mks)**.

c) Show how misuse of wealth leads to family instability **(7mks)**

6. a) Outline the rights of a Kenyan citizen. **(7mks)**

b) Give the role played by the church in the political life of a nation **(7mks)**

c) Explain how corruption has led to social disorder in the society. **(6mks)**

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KCSE 2023 PREDICTION EXAMS

SERIES 2 EXAMS

312/1

GEOGRAPHY

PAPER 1

TIME: 2¾ HOURS

NAME…… ADM NO; ……

CLASS…… DATE……

Kenya Certificate of Secondary Education.

INSTRUCTIONS TO CANDIDATES

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

(b) *This paper has **two** sections: **A** and **B***

(c) *Answer **all** the questions in section **A***

(d) *Answer **question 6** and any other **two** questions from section **B***

(e) *All answers must be written in the answer sheets provided.*

FOR EXAMINER'S USE ONLY

SECTION	QUESTION	MAX SCORE	SCORE
A	1 – 5	25	
B	6	25	
		25	
		25	
TOTAL SCORE			

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SECTION A.

Answer all the questions in this section

1. a) What is the relationship between Geography and Economics. **(2 marks)**

b) Differentiate between habitat and environment. **(2 marks)**

2. a) Define the terms rotation and rotation of the earth. **(2 marks)**

b) List the three major methods of mining. **(3 marks)**

3. a) Name two minerals that make up granite rocks. **(2 marks)**

b) Name two features that results from fissure eruption. **(2 marks)**

4. a) List three types of faults.

b) Identify two agents of weathering. **(2 marks)**

5. a) i) Identify two effects of ocean currents on the adjacent coastal regions. **(2 marks)**

ii) Distinguish between an ocean and a sea. **(2 mark)**

b) Give two ways in which Kenya has benefited from coastal landforms. **(2 marks)**

SECTION B

Answer question 6 and any other two questions from this section.

6. (a) Study the map of Kisumu East 1:50,000 (sheet 116/2) provided and answer the following questions.

i. What type of map is Kisumu East map extract? **(1mark)**

ii. Give two scales that have been used in the map extract. **(2marks)**

iii. What is the bearing of the trigonometrical station at grid square 0383 from the Air Photo Principal Point at grid square 0281? **(2marks)**

(b). i. Measure the length of the All Weather Road Bound Surface B2/1 from the junction at Grid square 9793 to the western edge of the map extract. Give your answer in kilometer. (**2mks)**

ii. What is the altitude of the highest point in the area covered by the map? **(2marks)**

(c). Draw a rectangle measuring 16cm by 10cm to represent the area enclosed by Eastings 02 and 10 and Northing 90 and 00. **(1mark)**

On the rectangle, mark and name the following. **(4marks)**

- Nyando escarpment.
- All Weather Road Bound Surface C543/1

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- Prison
- Agricultural Sugar Research Station.

(d). i. Describe the drainage of the area covered by the map. **(5marks)**

ii. Citing evidence from the map, identify three social services offered in Kisumu Municipality. **6marks)**

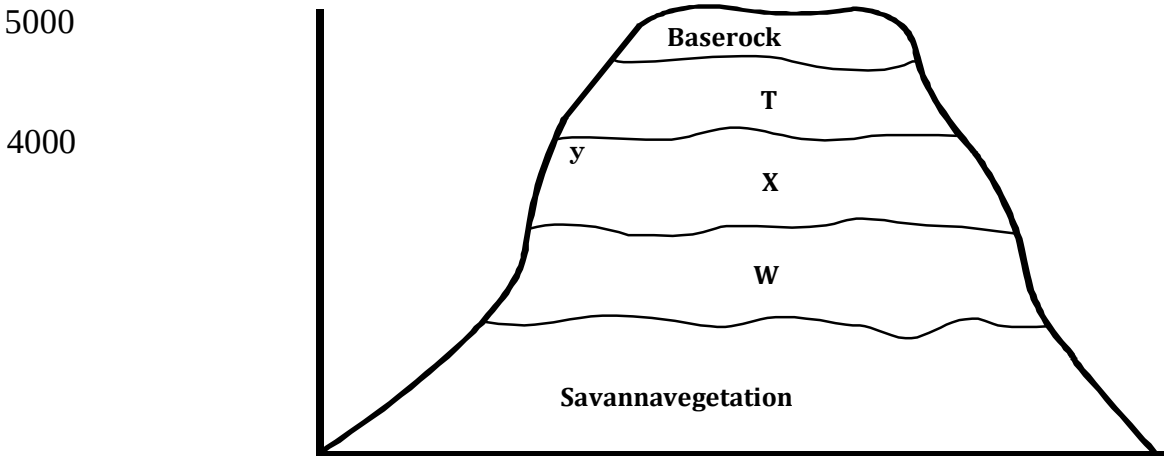
7.a) What is vegetation. **(2 marks)**

b) Explain how the following factors influence vegetation in Kenya.

i) Soil **(2 mks)**

ii) Relief **(2 mks)**

c) The diagram below represents zones of natural vegetation on a mountain in Africa. Use it to answer questions (i) and (ii)



i) Name the vegetation zones marked W, X and Y. **(3 marks)**

ii) Describe the characteristics of vegetations zone marked W. **(6 marks)**

d) i) Give three impact of climate change on vegetation in Kenya. **(6 marks)**

ii) You are planning to carry out a field study on a rainforest vegetation.

Identify four challenges you are likely to face. **(4 marks)**

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8.a) i) What is an ice sheet? **(2 marks)**

ii) Give two reasons why there are no ice sheets in Kenya. **(2 marks)**

iii) Explain three factors that influence the movement of ice from the place of accumulation. **(6 marks)**

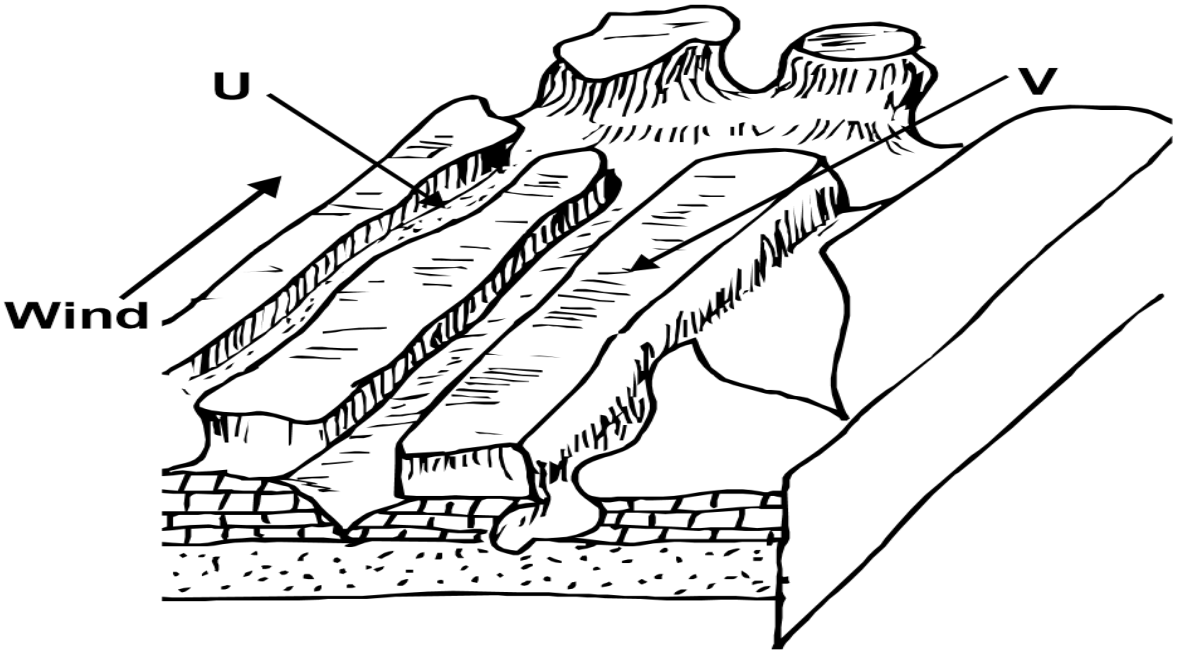
b) Describe how an arête is formed **(4 marks)**

c) i) Name three types of glacial moraines. **(3 marks)**

d) ii) Explain four positive effects of glaciations in lowland area. **(8 marks)**

9. a) i) Name the tree ways in which wind erosion takes place. **(3 marks**

The diagram below represents features resulting from wind erosion in a desert. Use it to answer question a(ii)



ii) Name the features marked U and V **(2 marks)**

b) i) Explain how an oasis is formed. **(6 marks)**

ii) Explain four ways in which desert features are of significance to human activities. **(8 marks)**

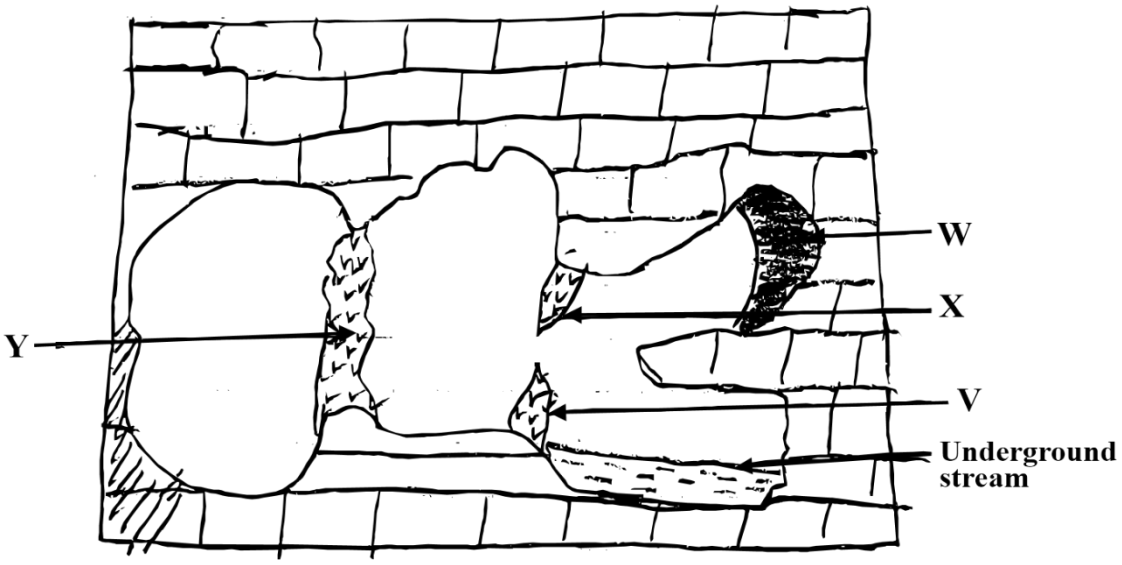
c) You plan to carry out a field study in an arid / desert area. Describe what you are likely to observe. **(6 marks)**

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10. a) Name TWO processes of underground movement of water in limestone areas. **(2 marks)**

b) State two factors that influence the occurrence of underground water**. (2 marks)**

c) The diagram below shows the inner part of a limestone area. Use it to answer the questions that follow.



i) Name the features X, V and W. **(3 marks)**

ii) Describe how the feature marked Y is formed. **(6 marks)**

d) Explain two factors that influence the formation of features in limestone areas. **(6 marks)**

e) Your class is planning a field study of the area eroded by water.

i) Give three reasons why you will need a map of the area of the study. **(3 marks)**

ii) Name two erosion features you are likely to observer. **(2 marks)**

iii) After your study, what recommendations will you give to assist the local community to rehabilitate the area under study. **(3 marks)**

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KCSE 2023 PREDICTION EXAMS

SERIES 2 EXAMS

312/2

GEOGRAPHY

PAPER 2

TIME: 2¾ HOURS

NAME…… ADM NO; ……

CLASS…… DATE……

Kenya Certificate of Secondary Education.

INSTRUCTIONS TO CANDIDATES

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

(b) *This paper has **two** sections: **A** and **B***

(c) *Answer **all** the questions in section **A***

(d) *Answer **question 6** and any other **two** questions from section **B***

(e) *All answers must be written in the answer sheets provided.*

FOR EXAMINER'S USE ONLY

SECTION	QUESTION	MAX SCORE	SCORE
A	1 – 5	25	
B	6	25	
		25	
		25	
TOTAL SCORE			

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SECTION A

Answer all questions in this Section

1.a) Name two tree species of high commercial value in a coniferous forest. **(2mks)**

b) State three characteristics of Tropical hardwood forests which hinder exploitation. **(3mks)**

2. State two factors that influence exploitation of minerals. **(2mks)**

b) Describe how soda ash is extracted in Lake Magadi. **(3mks)**

3.a) i) Distinguish between population distribution and population density. **(1mk)**

ii) What is dependency ratio? **(1mk)**

b)State three reasons for reduced fertility rate in Kenya. **(3mks)**

4. a) i)Name two dairy cattle breeds reared in Kenya. **(2mks)**

b)State three differences between beef farming in Argentina and Kenya. **(3mks)**

5.a) Give two advantages of wood as a source of fuel. **(2mks)**

b)State three conditions necessary for the formation of Oil. **(3mks)**

SECTION B

6. Study the table below that shows Kenya's visible balance of Trade with some selected countries. 1982-1984 (figures in pounds '000).

County	1982		1983		1984	
	Exports	**Imports**	**Exports**	**Imports**	**Exports**	**Imports**
UK	72,000	135,000	96,000	120,000	140,000	152,000
Germany	60,500	75,5000	82,000	70,000	98,000	98,000
USSR	4,500	150	3,000	100	4,000	300
U.S.A	35,000	54,000	40,000	56,000	38,000	50,000
Uganda	58,000	1,300	7,2000	800	67,000	100,000

a)i) Draw a comparative line graph showing the exports from 1982 to 1984 using a vertical scale of 1:10 million and horizontal scale. **(8mks)**

ii) State three disadvantages of this graph experienced during the construction. **(3mks)**

b) i) Define balance of trade. **(2mks)**

ii) Calculate the balance of trade for Kenya 1984. **(2mks)**

c. i) Name two major exports and two major imports of Kenya. **(4mks)**

ii)Give three reasons for the nature of Kenya's balance of trade from the table above. **(3mks)**

d) State three measures the government has taken to achieve a favourable balance of trade.

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7.a) i) Name two provinces in Canada where wheat is grown. **(2mks)**

ii) Explain four physical factors favouring wheat growing in Kenya. **(8mks)**

b) Compare wheat farming in Kenya and Canada under the following headings:

- cultivation **(2mks)**
- harvesting **(2mks)**
- marketing **(2mks)**

c. i) Explain three human and economic problems facing wheat farming in Canada. **(6mks)**

ii) State three importance of wheat farming in Canada. **(3mks)**

8.a.i) Name two countries found in the north West pacific fishing ground. **(2mks)**

ii) Explain four physical factors that favour fishing in the above fishing ground. **(8mks)**

b) Describe the following methods of fishing:

i) drifting **(4mks)**

ii) purse seine **(4mks)**

c) compare fishing in Kenya and Japan under the following sub-headings:

i) fishing ground **(2mks)**

ii) climate **(2mks)**

d) State 3 significance of fishing to the economy of Kenya. **(3mks)**

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KCSE 2023 PREDICTION EXAMS

SERIES 2 EXAMS

311/1

HISTORY AND GOVERNMENT

PAPER 1

TIME: 2½ HOURS

NAME…… ADM NO; ……

CLASS…… DATE……

SIGN: ……

Kenya Certificate of Secondary Education.

INSTRUCTIONS

a)*This paper consists of three sections: A, B and C*

b)*Answer all questions in section A, Three questions in section B, and Two questions in Section C.*

c)*Answers to all questions must be written in the answer booklet provided.*

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

FOR EXAMINER'S USE ONLY

SECTION A	SECTION B				SECTION C			
1-17								
	18	19	20	21	22	23	24	

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SECTION A (25 MARKS)

*Answer **All** Questions from This Section*

1. **State two** ways through which archeologists obtain information on the History of Kenya. **(2mks)**
2. **State one** similarity in the political organization of the Ameru and Abaluyha of Kenya during the 19th century. **(1mk)**
3. **Name** two important landmarks that were built by the Portuguese along the coast of East Africa**.** **(2mks)**
4. Give two reasons why the government may limit a person's freedom of speech**.** **(2mks)**
5. Identify the constitutional amendment that made Kenya return to a multi-party state**.** **(1mk)**
6. State the main function of the Kenyan Bill of Rights. **(1mk)**
7. **Give** two reasons why the British used the Imperial British East Africa Company (IBEACo) to administer its possession in Kenya**.** **(2mks)**
8. **Name** the body that made laws in Kenya during the colonial period**.** **(1mk)**
9. **Give** the main reason why the colonial government created African Reserves in Kenya**.** **(1mk)**
10. **State two** grievances raised by the Asians in Kenya that were addressed by the Devonshire white paper of 1923**.** **(2mks)**
11. Give the main political contribution of Christian missionaries in Kenya during the struggle for independence up to 1939. **(1mk)**
12. State two challenges that the independent schools faced in Kenya during the colonial period. **(2mks)**
13. **What** was the main contribution of Joseph Thomas Mboya to the History of Kenya**.** **(1mk)**
14. **Name** two finance committees of Kenyan parliament**.** **(2mks)**
15. **State** the military power of the president in Kenya**.** **(1mk)**
16. **Name** two superior courts in the Kenyan Judiciary**.** **(2mks**
17. **Name one** elective seat in the county government in Kenya. **(1mk)**

SECTION: B (45 MARKS)

*Answer **All** Questions In This Section*

18a) State three political functions of the council of elders among the Luo in Pre-Colonial Kenya**.** **(3mks)**

b) Describe the social organization of the Agikuyu during the Pre-Colonial period. **(12mks)**

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19a) Give three reasons why the British used direct rule in some parts of Kenya during colonial period **(3mks)**

b) Explain six negative effects of the British colonial rule on the people of Kenya **(12mks)**

20a) Outline five roles played by President Daniel Arap Moi in the development of education sector between 1979-2002 **(5mks)**

b) Explain five factors that promoted the rise of nationalism in Kenya after 1945 (10mks)

21 a) Outline five grievances expressed by Kikuyu Central Association presented by Jomo Kenyatta to the colonial secretary in **1929** **(5mks)**

b) Describe five political roles played by African Elected Members Organization during the struggle for independence in Kenya **(10mks)**

SECTION: C (30 MARKS)

Answer Two Questions from This Section

22a) State three ways through which direct democracy is exercised in Kenya **(3mks)**

b) Explain six rights of the arrested person in Kenya **(12mks)**

23a) Name three categories of members of the County **Assembly** **(3mks)**

b) Explain six functions of a returning officer in the general elections in **Kenya** **(10mks)**

24a) Identify five internal sources of revenue for the National Government in Kenya **(5mks)**

b) Explain five ways in which the County Government ensure effective utilization of public finance **(10mks)**

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KCSE 2023 PREDICTION EXAMS

SERIES 2 EXAMS

311/2

HISTORY AND GOVERNMENT

PAPER 2

TIME: 2½ HOURS

NAME…… ADM NO; ……

CLASS…… DATE……

SIGN: ……

Kenya Certificate of Secondary Education.

INSTRUCTIONS

a)*This paper consists of three sections: A, B and C*

b)*Answer all questions in section A, Three questions in section B, and Two questions in Section C.*

c)Answers *to all questions must be written in the answer booklet provided.*

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

FOR EXAMINER'S USE ONLY

SECTION A	SECTION B				SECTION C			
1-17	18	19	20	21	22	23	24	

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SECTION A(25MKS)

Answer all questions in this section

1. Give the relationship between "History" and "Government". **(1mk)**

2. Name two types of dwellings used by the early man during the Early Stone Age period **(2mks)**

3. Give two inventions that led to the Agrarian Revolution in Britain. **(2mks)**

4.State any two improvement which were made on macadamized roads in the 19th century **(2mks)**

5.Give two advantages of the use of electricity in industries during the industrial revolution **(2mks)**

6.Give two reasons why early urban centers in Egypt developed in the Nile valley **(2mks)**

7. Identify one form of picture writing during the early civilizations **(1mk)**

8. State one way in which centralization of the authority contributed to the success of the Buganda Kingdom **(1mk)**

9.State one political factor which leads to the scramble for colonies in Africa **(1mk)**

10.Name one community in West Africa which resisted European invasion in the 19th century **(1mk)**

11.Give two resolutions of the Berlin conference of 1884 to 1885 **(2mks)**

12.Give two reasons. Why the League of Nations was formed in1919 **(2mks)**

13.State one major event that led to the outbreak of the First World War **(1mk)**

14.Identify two major ways used by the superpowers to fight during the cold war **(2mks)**

15.Give one main function of the international labour organization (ILO) **(1mk)**

16.Name the philosophy that Tanzania adopted at independence to spearhead her development **(1mk)**

17. Give one disadvantage of a federal system of government **(1mk)**

SECTION B (45 Marks)

Answer any three questions from this section

18.(a) Give five reasons why hunting of wild animals was mainly a group activity during the Stone Age period. **(5 marks)**

(b) Describe five ways in which the development of the upright posture improved the early man's way of life. **(10 marks)**

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19. (a) Give three uses of wind as a source of energy in ancient times. **(3 marks)**

(b) Explain six effects of iron working technology on African communities before the 19th Century. **(12 marks)**

20.(a) Identify the three methods used by the French to acquire colonies in West Africa **(3mks)**

(b) Explain six factors that led to the defeat of Samori Toure by the French. **(12mks)**

21.a)State three ways used by nationalists in Ghana to fight for independence. **(3mks)**

b) Explain six factors that led to the development of African Nationalism in Ghana **(12mks).**

SECTION C (30 MARKS)

Answer any two questions from this section.

22.(a)Give three reasons why the British used direct rule in Zimbabwe. **(3mks**)

(b)Explain six reasons why indirect rule was not successful in Southern Nigeria. **(12mks)**

23.(a)Name three permanent members of the United Nations Security Council. **(3 marks)**

(b) Explain six ways in which the United Nations provides humanitarian assistance**.** **(12 marks)**

24.(a)State five objectives for the formation of Common Market for Eastern and Southern Africa **(COMESA)** **(5 marks)**

(b)Explain five challenges facing the Common Market for Eastern and Southern Africa. (COMESA) **(10 marks)**

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KCSE 2023 PREDICTION EXAMS

SERIES 2 EXAMS

101/1

ENGLISH

PAPER 1

Functional Writing

TIME: 2 HOURS

NAME…… ADM NO; ……

CLASS…… DATE……

SIGN: ……

Kenya Certificate of Secondary Education.

INSTRUCTIONS

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

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

iii. *Check to ascertain that the paper has all questions.*

FOR EXAMINER'S USE ONLY

QUESTIONS	MAXIMUM SCORE	CANDIDATE'S SCORE
1.Functional Writing	20	
2. Cloze Test	10	
3. Oral Skills	30	
	60	

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FUNCTIONAL WRITING **(*20 marks)***

1. Imagine you are the principal at Kilimambogo Teachers Training College. Lydia Moraa, a former employee at the college, has been invited to attend an interview at Rift Valley Institute of Technology. The principal has written to you requesting that you provide information about Moraa's; professionalism, inter-personal relationship, reliability, mastery and content delivery and her general conduct. Send this information to the principal via an email. Copy in, the chairperson of the board Rift Valley Institute of Technology without the principal knowing that the chair has the same information.

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CLOZE TEST

2. Read the passage below and fill the blanks provided with a suitable word. (10 marks)

Conducting a job search 1_____the Internet has definitely 2_____-_____how job seekers contact hiring 3_____. The availability of copying and pasting a text version CV into a format 4_____company's Website has laid the foundation for an easier and 5_____ convenient process. 6_____ the Internet's convenience, a breeding ground for scam artists continues to 7_____each year as well. Identity thefts have increased to an overwhelming 10 million 8_____ per year and many of them are the result of phishing-not surprisingly, the employment industry is 9_____ attack as well. Knowing what to look for and how to stop fraud can be the best deterrent to ensuring you have a safe experience while conducting your 10_____ search.

ORAL SKILLS **(30mks)**

3 a. Read the narrative below and then answer the questions that follow.

There was a great famine in the land where Obunde and his wife, Oswera, lived with their nine children. The only creatures who had some food were the ogres and before they would part with their food, they demanded a lot of things.

One day, Oswera went to one ogre's home and asked him for some food, for by then her children were almost dying of hunger.

"I have no more food except sweet potatoes, the ogre told her.

"I shall be happy to have the potatoes. We have nothing not a grain of food at my house and the children are starving. Please let me have some and I shall repay you after the harvest."

"No, if you want food you must exchange with something right now. Will you give me one of your children in exchange for my potatoes? Oswera hesitated, her children were dear to her, but then they would die without food.

"Yes, I shall let you have one of them for this meal, if only you could let us have some potatoes," Oswera answered. Then she took a big basket full of potatoes and told the ogre the exact time he could go to her home to collect one of her children for a meal.

Oswera thought hard and she decided she should not give a single one of her children to the ogre for a meal. She therefore cut young bananas stalks and cooked them nicely.

When the ogre came, she gave them to him and the beast greedily went away satisfied, Soon the potatoes were finished and she had to go to the ogre again.

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Oswera and Obunde, her husband kept on cooking banana stalks for the ogre each time he came for one of their children, until one day, she had no more banana stalks to cook for the animal.

"You have now eaten all my children, yet we still need the potatoes. What shall we give you now?" Oswera asked in despair.

"Then I shall come for you and your husband," the ogre replied angrily as he helped Oswera to load her basket on her head.

"Yes, come tomorrow at the usual time in the afternoon and get me. I shall have cooked myself for you," Oswera said calmly.

The following day the ogre went promptly as Oswera had told him and he found the home almost deserted. He looked everywhere but a part from Obunde there was no trace of anybody. Then he looked at the usual place and found a huge bowl of a big meal Oswera had cooked for him. The ogre did not realize they had prepared a dog instead of Oswera. When he had eaten the ogre told Obunde he would come for him the following day. Obunde got very worried and the night he could not sleep. The following day he started crying.

"Ah Oswera my wife, how did you cook yourself and how shall I cook myself for the ogre." He sat down in the dust of his compound and wept. Oswera became very annoyed with her husband. You, you stupid, foolish man! Why sit and cry there all day long? How do you think I cooked myself? Take one of the dogs and quickly prepare it for the ogre!"

Very quickly Obunde got up, caught, killed and prepared a dog for the ogre. Then he joined his wife and children in a huge hollow part of a tree in his compound where they had hidden. That day the ogre knew he was going to have his last meal of juicy human flesh. Being a generous and unselfish ogre, he brought many of his fellow ogres. They were going to have a feast.

Suddenly as they were eating, they heard a man singing very happily. No, they could not believe it! It was Obunde singing! And he was boasting of how he had cheated the ogre.

The greedy ogre ate banana stalks
Not my family;
The greedy ogre ate a dog
Not Obunde Magoro!
The greedy ogre at banana stalks
Not my family;
Now come and get Obunde,
His children and wife.

Obunde sang the words and the ogres got very angry. The first ogre rushed into the hollow of the tree, but Oswera had heated a long piece of iron until it was white. She pushed the iron into the ogre's mouth. The beast fell down dead. The next one rushed into the hollow and Oswera killed him in the same way. In this way she killed all the ogres and saved her husband and all their children.

My story ends there.

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QUESTIONS.

i) Identify **three** features that show that this story is an oral narrative. **(3 marks)**

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ii) Give **two** ways you would use to capture the audience attention before narrating the story. **(2 marks)**

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iii) How would you say the words of the ogre, "I have more food except sweet potatoes"? **(2 mks)**

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……

iv) As a narrator, what would indicate to you that your audience is not attentive? **(3 marks)**

……

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……

b. From the list below, classify words according to the sound of the underlined letters. An example of each sound has been given. **(4 marks)**

(Bran**ch**, **Ch**auvinism, **Ch**ampagne, **Ch**olera, **Ch**olesterol, Ma**ch**ete, **Ch**aos)

/s/	/tf/	/k/
ma**ch**ine	**ch**ips	**ch**arisma

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c. You have just been invited for an interview to work as an accountant in a certain company. What would you require to do before and during an interview to ensure you succeed? **(4 marks)**

……

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……

……

d. In the words below, underline the part that should be stressed. **(5 marks)**

i) Chal.lenge

ii) Pro.se.cute

iii) A.larm

iv) A.gree.ment

v) Ap.proach

e. Read the following telephone conversation between Mato and the secretary and then answer the questions that come after it.

Mato: I am Mato and want to speak with the manager.

Secretary: Why? What do you want with him?

Mato : That is none of your business. I want to speak with the manager now.

Secretary: He is not in. Say what you wanted and I will tell him.

Mato: Why are you wasting my time? Tell him to call me.

Secretary: How will he reach you? What is your telephone...

(*Phone is disconnected)*

Identify any four instances of lack of telephone conversations etiquette in the above conversation. **(4marks)**

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f. The underlining indicates the stressed word in the sentences below. Briefly explain what each sentence means. **(3 marks)**

i) **<u>Amanda</u>** rode the bus to school

ii) Amanda **<u>rode</u>** the bus to school

iii) Amanda rode the **<u>bus</u>** to school

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KCSE 2023 PREDICTION EXAMS

SERIES 2 EXAMS

101/2

ENGLISH

PAPER 2

[Comprehension, Literary Appreciation & Grammar]

TIME: 2½ HOURS

NAME…… ADM NO; ……

CLASS…… DATE……

Kenya Certificate of Secondary Education.

INSTRUCTIONS TO CANDIDATES

- *Write your **Name, Index number** and the **Date** in the spaces provided above.*
- *Answer **all** the questions in this paper.*
- *All your answers **must** be written in the spaces provided in this question paper.*
- *All working **must** be clearly shown where necessary*

FOR EXAMINER'S USE ONLY

Questions	Maximum score	Candidate's score
1	20	
2	25	
3	20	
4	15	
Total score	80	

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1. COMPREHENSION PASSAGE 20 MARKS

Read the passage below and then answer the questions that follow

You may think that expecting food to change your life is too much to ask. But have you considered that eating the right food at the right time will increase energy, help you manage weight and ward off major illness?

Researchers have found that eating a meal with plenty of protein leaves you feeling more satisfied for longer when compared to a meal loaded with low - quality carbohydrates. Your body takes longer to digest protein, leading to a gradual increase in blood sugar. The high protein breakfast will therefore carry you through the morning and more importantly, through your tea break, many high carbohydrate meals are absorbed quickly and send blood sugar on a roller coaster ride, taking your appetite with it and depleting your energy.

Many foods contain antioxidants, but fruits and vegetables may be the richest source. Behaving like chemical warriors, antioxidants neutralize molecules known as free radicals before they damage arteries and body cells. This protects you from heart diseases, high blood pressure, cancer and diabetes. You can now see why antioxidant foods should be consumed in generous portions

Actually, forget pills – antioxidants work best when consumed in foods. In fact, nutritionists recommend that we eat five portions of fruit and vegetables a day. It's less daunting than it sounds: a portion equals a piece of fruit, three tablespoons of cooked vegetables or a glass of fresh juice.

And do you desire to relive yourself of some baggage? Calcium is the latest weight – loss star to appear on the scene. Scientists stumbled on its magic by accident. From study that measured the blood pressure of obese people. It was discovered that those who took one large tub of yoghurt a day in their diet lost an average of eleven pounds of body fat in one year, even though they did not eat less.

A follow- up study found that people on a high calcium diet lost weight and fat than did people on a low – calcium diet - and again, both consumed the same number of calories. Researchers believe calcium encourages fat cells to stop " getting father" instead, the cells burn extra fat without you having to go anywhere near a gymnasium.

It probably sounds strange to say that you can eat more in order to lose weight. Obviously, the question you should ask immediately is, "Eat more of what?" We are talking about foods rich in fibre. They have what is referred to as low- energy density; that translates to few calories relative to weight. This means that you can down a mountain without fear of calories overload.

Fibre also aids weight loss because it's filling. Most high - fibre foods take a lot of chewing, triggering your body's fullness sensors. Moreover, you absorb the food more slowly so you feel full longer.

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Will the wonders of food ever cease? No if researchers in nutrition keep their pace. Let them keep the good news flowing- such as the fact that we don't have to starve ourselves to lose weight and keep diseases at bay. *(Adapted by Mwalimu Consultancy from Reader's Digest, January 2004*

(a) From the information given in the first paragraph, how can you improve your life? **(1 mark)**

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(b) In not more than 35 words, summarize the effects of eating carbohydrates **(4 marks)**

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(c) Explain how free radicals contribute to the occurrence of high blood pressure and cancer **(2 marks)**

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(d) In what two forms can antioxidants be consumed **(2 marks)**

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(e) In fact, nutritionists recommend that we eat five portions of fruit and vegetable a day.**"(1 mark)**

……

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(f) What is the attitude of the author towards calcium as a weight – cutting measure? **(3 marks)**

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(g) According to the passage, how can you use up excess fat? **(2 marks)**

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(h) Identify an instance of irony in the passage **(2 marks)**

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(i) Explain the meaning of the following expressions as used in the passage **(3 marks)**

a. Daunting

……

b. Baggage

……

c. Down a mountain

……

2. EXCERPT 25 MARKS

Read the following excerpt and answer the questions that follow

Krogstad : Are you sure of that?

Mrs Linde : Quite sure, but –

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Krogstad: (with a searching look at her) Is that what it all mean? That you want to save your friend at any cost? Tell me frankly. Is that it?

Mrs Linde: Nils, a woman who has once sold herself for another's sake doesn't do it a second time.

Krogstad: I will ask for my letter back.

Mrs Linde: No, no.

Krogstad: Yes, of course I will. I will wait here until Helmer comes; I will tell him he must give me my letter back-that it only concerns my dismissal-that he is not to read it.

Mrs Linde: No Nils, you must not recall your letter.

Krogstad: But, tell me wasn't it for that very purpose that you asked me to meet you here?

Mrs Linde: In my first moment of right, it was. But twenty-four hours have **elapsed** since then, and in that time I have witnessed **incredible** things in this house. Helmer must know all about it. This unhappy secret must be disclosed; they must have a complete understanding between them which is impossible with all this concealment and falsehood going on.

Krogstad: very well, if you take the responsibility. But there is one thing I can do in my case and I shall do it at once.

Mrs Linde: (listening) You must be quick and go! The dance is over, we are not safe a moment longer.

Krogstad: I will wait for you below

Mrs Linde: Yes, do. You must see me back to my door.

Krogstad: I have never had such an amazing piece of good fortune in my life!

QUESTIONS

a) Explain what happens before this excerpt. **(2mks)**

……

……

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……

b) Why does Krogstad say he would ask for his letter back? Explain. **(2mks)**

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c) Identify and explain the dominant theme in the excerpt. **(2mks)**

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d) "Nills, a woman who has once sold herself for another sake doesn't do it a second time". Briefly explain what makes Mrs Linde say this? **(3mks)**

……

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e) Explain the use of irony in this excerpt. **(2mks)**

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f) Identify and illustrate two character traits of Mrs Linde in this excerpt. **(4mks)**

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……

g) " I have never had such amazing piece of good fortune in my life!" Rewrite beginning never…… **(1mk)**

……

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h) What makes Krogstad say that he has never had such good fortune in his life**?** **(2mks)**

……

……

……

……

i) "But there is one thing I can do in any case and I shall do it at once." What is that Krogstad does and how does it affect the rest of the play? **(3mks)**

……

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……

j) Explain the meaning of the following words and phrases as used in the passage**. (4mks)**

i) At any cost –

ii) Recall –

iii) Elapsed –

iv) Incredible things –

3. <u>ORAL NARRATIVE</u> **(20 marks)**

Read the narrative below and answer the questions that follow.

<u>THE WISE MAN AND HIS SONS</u>

A long time ago there was a wise old man who was respected throughout Kenya because of his wisdom.

When he grew old and feeble and realized that his days were coming to an end, he called his six sons to his bedside to deliver his will.

'My dear sons,' he said, 'I am growing weak and old, and one of these days am going to die and leave you to take care of my wealth and perpetuate this family. I have great confidence in you, but I want to warn you that unless you live in unity and harmony you could easily get destroyed by your enemies.'

'We promise you father,' they replied, 'that we shall live in unity, and we shall uphold the respect you gained over the years, and we shall take care of this family and defend our property.'

'Once upon a time,' he began, 'cows lived in the wilderness like other wild beasts. They grazed in the jungle in large herds and were not afraid of the other animals. But they were constantly attacked by the other strong beasts like lions, leopards, elephants and when the cows realized that they could not live in peace in the jungle, they decided to seek help from men. They all agreed to live under the protection of men except for three stupid sister cows. Their names were Ndune (Red), Nyange (White), and Nguno (hornless). Ndune was as red as ochre and her eyes were fierce and had sparks like fire when she was angry. Her horns were long, sharp, and strong and she could scare any beast. Ndune was loved by her sisters dearly. Nyange had a white coat, as white as snow. She also had fierce horns, but looked more peaceful than Ndune, and was not so much feared, but when she was angry her white fur became whiter, and blinding to other animals. Nguno looked like a clown without horns, and annoyed other animals who regarded her as an abnormal creature of God who should not be attacked.

'I think you know this story,' he said
'Yes,' they replied, 'but please continue, father.'
'One day lion, who was very clever, decided to divide the three sister cows, kill them one by one, and eat them. Lion had tried to catch them before. But the three cows had fought and killed many beasts. Nyange and Nguno would charge their assailant from back and front while Ndune would come from the side and, with her sharp fierce horns, fierce the enemy's stomach, tear it open, and kill him instantly. Lion could not kill any of them unless he divided them and attached them separately.

'So one day the clever lion went and spoke to Ndune. He told her that she was respected in the jungle for her fierce horns and her beautiful red coat. He told her that if she lived apart from her sisters she would never be attacked by anyone. She would be made the duchess of the whole jungle kingdom. Her sisters were very ugly and annoying and that is why the three of them were constantly attacked. Ndune was very much tempted to leave her sisters when she heard what the clever lion told her. Next the lion went to Nyange and praised her beauty. He told her that she was born a peacemaker because of her white coat, and that she should have spent much of her time seeking peace in the jungle. He told her that if she left her fierce and domineering sister Ndune, and also avoid the company of her monstrous and abnormal sister Nguno, then lion would make her the beauty queen of the jungle and find her a good husband there. Nyange was flattered and started to think about the idea of living apart from her sisters.

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'Finally the lion went to see Nguno. He told her that she was the most peaceful cow that ever existed, and that she was highly respected for her elegant hornless head. It was risky on her part to live with her sisters who were constantly attacked by savage beasts because of their fierce horns and their provocative coats. Lion promised to protect Nguno if she deserted her sisters at once. Nguno, who was getting tired of fighting ceaseless battles was happy about this friendly gesture, and at once decided to desert her sisters without pausing to think it over.'

No sooner did she leave her sisters than she was caught by lion and killed.

Nyange also slipped away from Ndune the following day and went to look for lion so that she could be made the jungle queen of beauty. She too was caught and killed. Now Ndune was left alone, and she was also caught and killed. That was the fate of the three stupid cows. Had they continued to live together in unity, they would have lived.'

'It is a very good story, father,' said the six sons,' and it has a great lesson in it. We shall continue to live in unity.''

Good, my sons,' the old man continued, 'I am very pleased to hear that, and I know that you will not let me down. I have one more example to show you, come closer.' At this point he showed them six sticks, equal in size. He gave one to each of the sons. 'Break them in two, please,' he commanded. The sons broke the sticks at one go. He asked them to break them into smaller bits, and this they did. Then he produced a bundle to his sons, and asked to pass it to one another, to examine it closely and see how it was bound. Then he asked them to break the bundle, and they all tried one after the other. None of them could manage to break the bundle, and he took it back intact.

'You see, my sons,' each one of you is like these cows or these sticks,' he said. 'If you are not united you will be destroyed like the three cows that were devoured by lion, or like the six sticks you have just destroyed. But if you stay together like this bundle of sticks, you will defeat your enemies, and you will be able to protect your property and sustain this family.'

'Yes, father,' replied his sons, 'unity is strength and we shall always remain united.'

QUESTIONS

a) Identify and explain any three features of an oral narrative found in this story. **(3 marks)**

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b) Classify the two types of narratives found in this story. **(2 marks)**

……

……

c) What tactic does the lion use to separate the cows? **(2 marks)**

……

……

……

d) Identify and illustrate the character trait of the three cows. **(2 marks)**

……

……

……

e) Give two reasons why the old man uses the two illustrations to make his point clear instead of using one. **(3 marks)**

……

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……

f) Give two proverbs, one similar to and one contrasting to the one used in the story **(2 marks)**

……

……

g) Identify and show the effectiveness of any two styles in the story, apart from the one in (f) above. **(2marks)**

……

……

……

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h) How would you make rendition of this narrative lively? **(2 marks)**

……

……

……

i) Which are the social-economic activities of the given community? **(2 mark)**

……

……

……

4. GRAMMAR **(15MKS)**

a) Rewrite the following sentences according to the instructions given **(4mks)**

i) She will not be given a driving license. She passes the road test (Rewrite as one using'unless')

……

ii) The woman left the child with a neighbor and went to the market. (Begin: leaving….)

……

iii) The boys went to play in the field (underline the adverbial)

……

iv) I didn't give the money to my sister. I gave the money to my cousin. (Rewrite using 'rather')

……

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

(i) ……cost, it is not worth much.

(ii) I am calling…….my father

(iii) We went …….Mombasa but we did not see the bus.

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c. For each of the following sentences, use the correct form of the word in brackets to fill in the blank space. (3 marks)

(i) Once the sun has..... I cannot sleep any more.(rise)

(ii) How long have you..... here? (dwell)

(iii) It is advisable that we..... forgive those who wrong us. (condition)

d. Fill with most appropriate collective noun (2 marks)

1. A ……. of soldiers received medals from the president.
2. A…….of islands was submerged in the ocean when the cyclone occurred.

e. Supply the correct form of the verb in the following sentences. (3 marks)

i. All but my aunt …… arrived (has/have).

ii. Both dogs ……. chasing cars (enjoy/enjoys).

iii. The Minister as well as the Governor and the Speaker of the House……present (was/were).

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KCSE 2023 PREDICTION EXAMS

SERIES 2 EXAMS

101/3

ENGLISH

PAPER 3

(Imaginative Composition and Essays Based on the Set Texts)

TIME: 2½ HOURS

NAME…… ADM NO; ……

CLASS…… DATE……

Kenya Certificate of Secondary Education.

INSTRUCTIONS TO THE CANDIDATES

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

ii. *Question one and two are compulsory.*

iii. *Chose any one question in question three.*

iv. *Check to ascertain that the paper has all questions.*

FOR EXAMINER'S USE ONLY

QUESTIONS	MAXIMUM SCORE	CANDIDATE'S SCORE
1.Imaginative/Creative Writing	20	
2. Compulsory Set Book Essay	20	
3. Optional Set Book Essay	20	
	60	

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QUESTIONS

1. Imaginative Composition **(20 mks)**

Either

a) Write a story starting with the statement,

The news on the cancellation of my KCSE results after being in Bahati High School for five years was received with shock and resentment**…**

OR

b) Write a composition based on the following statement.

"The solution to the run-away corruption is in the hands of Kenyan's themselves."

2. Compulsory questions. ***The blossoms of savannah by Olet Kulet*** **(20 mks)**

'Our greatest enemies are those close to us.' Support this statement with illustrations from the novel.

3. Answer only one question from these choices

The optional setbooks **(20 mks)**

Either

a) Short story

Ninema is a short story about challenges of women in life. By referring to the life of Ninema, support this assertion. **(20 marks)**

OR

b) Write an essay to show the truth of the saying.

Discuss the theme of grief as depicted in the novel, An **Artist of The floating world by Kazuo Ishiguro** **(20 marks)**

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KCSE 2023 PREDICTION EXAMS

SERIES 2 EXAMS

102/1

KISWAHILI

PAPER 1

INSHA

TIME: 1¾ HOURS

NAME…… ADM NO; ……

CLASS…… DATE……

Kenya Certificate of Secondary Education.

MAAGIZO

*a) Andika insha **mbili**. Insha ya kwanza ni ya **lazima**.*

b) Kisha chagua insha nyingine moja kati ya hizo tatu zilizobakia.

*c) Kila insha isipungue maneno **400.***

d) Kila insha ina alama 20.

*e) Kila insha **lazima** iandikwe kwa lugha ya **Kiswahili.***

KWA MATUMIZI YA MTAHINI PEKEE.

Swali	Upeo	Alama
1	20	
2	20	
3	20	
4	20	
Jumla	40	

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MASWALI

1. Lazima:

Wewe ni mwakilishi wa vijana katika gatuzi lenu. Kumekuwa na tuhuma za vijana kutumia vibaya simu tamba katika jamii. Andika mahojiano yako na mwanahabari ukitetea namna simu tamba inavyowafaidi vijana.

2. Fafanua umuhimu wa kudumisha amani nchini wakati wa kampeni na uchaguzi wa kisiasa.

3. Andika insha inayooana na methali ***mchuma janga hula na wa kwao.***

4. Andika insha itakayoisha kwa maneno yafuatayo:

….nilipogutuka niliangaza macho huku na kule. Aah! Kumbe nilikuwa nikiota!

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KCSE 2023 PREDICTION EXAMS

SERIES 2 EXAMS

102/2

KISWAHILI

PAPER 2

LUGHA

TIME: 2½ HOURS

NAME…… ADM NO; ……

CLASS…… DATE……

Kenya Certificate of Secondary Education.

MAAGIZO

a) *Jibu maswali yote katika nafasi uliyopewa.*

b) *Andika majibu yako kwa lugha ya Kiswahili.*

KWA MATUMIZI YA MTAHINI PEKEE.

	SWALI	**UPEO**	**ALAMA**
1.	Ufahamu	15	
2.	Ufupisho	15	
3.	Matumizi ya lugha	40	
4.	Isimujamii	10	
	Jumla	80	

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1. UFAHAMU(alama 15)

Soma kifungu kifuatacho kisha ujibu maswali yanayofuata.

Athari za muda mrefu za pombe hutapakaa baina ya uwezekano wa faida za kiafya kwa watumiaji wa viwango vya chini vya pombe hadi madhara makubwa katika hali ya matumizi mabaya ya pombe kwa muda mrefu.

Viwango vya juu vya matumizi ya pombe huhusiana na ongezeko la hatari ya kuendeleza ulevi, ugonjwa wa moyo, kutofyonza vyakula, ugonjwa sugu wa kongosho, ugonjwa wa ini kutokana na pombe, na kansa. Uharibifu kwa mfumo mkuu wa neva na mfumo wa neva za pembeni unaweza kusababishwa na matumizi ya kila mara ya pombe. Matumizi ya pombe kupita kiasi kwa muda mrefu yanaweza kuharibu takribani kila kiungo na mfumo katika mwili. Ubongo unaokua wa kijana aliyebaleghe huwa hasa katika hatari kubwa ya kudhurika na sumu ya pombe.

Kihistoria, madaktari wametetea pombe kwa faida zake za kiafya na hivi karibuni kwa ajili ya uwezo wake wa kulinda watumiaji dhidi ya ugonjwa wa moyo. Kuna ushahidi wa faida kwa mishipa ya moyo inayotokana na kutumia kinywaji kimoja hadi viwili kwa siku, hata hivyo, faida za kiafya kutokana na unywaji pombe kwa wastani ni swali lenye utata. Shauku zimetolewa kuwa sawa na ilivyo katika sekta za dawa, wadau wa sekta ya pombe pia wamehusika katika kutilia chumvi faida za kiafya za pombe. Pombe inapaswa kuonekana kama dawa ya burudani yenye uwezo mkubwa wa kusababisha athari mbaya kwa afya na haipendekezwi kwa ulinzi wa moyo badala ya mbinu nyinginezo za salama na zilizothibitika za jadi kama vile lishe bora mazoezi na tiba.

Baadhi ya wataalamu wanadai kuwa faida za matumizi ya pombe ya wastani zinaweza kupitwa na ongezeko la hatari ikiwa ni pamoja na majeraha, vurugu, uharibifu wa mimba, aina fulani za saratani, ugonjwa wa kongosho na presha. Kwa vile faida bainifu za kiafya za matumizi ya pombe ya wastani ni ndogo kwa watu walio katika hatari ndogo ya kupata maradhi ya moyo, wataalamu wengine wanatahadharisha itumike kwa tahadhari kwa sababu ya uwezekano kwamba kupendekeza matumizi ya wastani ya pombe kunaweza kusababisha ongezeko la hatari ya matumizi mabaya ya pombe, hasa miongoni mwa vijana.

Madhara mabaya ya matumizi ya pombe kwa muda mrefu kupita kiasi ni sawa na yale yanaoonekana katika vitulizi-hipnoti vingine (mbali na sumu kwa viungo ambayo hutatiza zaidi katika pombe). Athari za kujiondoa katika pombe na utegemezi hukaribia sana kufanana. Pombe cha kiwango wastani ina athari chanya na hasi kwa afya. Athari hasi ni pamoja na ongezeko la hatari ya magonjwa ya ini, saratani ya orofarinji, kansa ya umio na magonjwa wa kongosho. Kinyume na hayo, unywaji wastani wa pombe unaweza kuwa na athari za faida kwa gastritis na kolelithiasi. Matumizi sugu na mabaya ya pombe huwa na athari kubwa kwa afya mwili na akili. Unywaji sugu wa pombe kupita kiasi au utegemezi pombe, unaweza kusababisha uharibufu mpana wa viungo mbalimbali vya neva za ubongo, mfumo wa neva ugonjwa wa mishipa ya moyo, maradhi ya ini, na neoplamsi isiyopona.

Matatizo ya akili ambayo huhusishwa na ulevi ni pamoja na mfadhailo mkubwa, disthimia, mania, hipomania, tatizo la hofu, tatizo la wasiwasi wa kijumla, tatizo la tabia za mtu, skizofrenia, kujinyoga, upungufu wa mfumo wa utendekazi mwilini (kwa mfano kazi za kumbukumbu, hisia,

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kazi za uamuzi, uwezo wa kuona, mwendo na uwiano) na uharibufu wa ubongo, utegemezi wa pombe ni huhusishwa na shinikizo la damu, ugonjwa wa moyo na kiharusi cha iskemi, kansa ya mfumo wa upumuaji, mbali pia na saratani ya mfumo wa mlo, ini, kifua na ovari.

Unywaji kupita kiasi huhusishwa na ugonjwa wa ini, kama vile sairosi. Tafiti zimelenga wanaume na wanawake, vikundi vya umri mbalimbali na watu wa makundi mengi ya kijamii. Machapisho kwa sasa yanafikia jumla ya mamia huku tafiti zikiweza kuonyesha uwiano uliopo kati ya matumizi wastani ya pombe na afya ambayo labda yanaweza kuwa yalitokana na athari za manufaa ya maingiliano ya kijamii ambayo mara nyingi huambatana na matumizi ya pombe. Baadhi ya njia mahususi ambapo pombe huweza kuathiri afya mishipa ya moyo zimetafitiwa.

Maswali

a. Yape makala haya mada faafu. **(alama 1)**

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b. Eleza madhara yanayotokana na uharibifu wa mfumo mkuu wa neva za pembeni **(alama 2)**

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c. Eleza faida za matumizi ya pombe kwa mujibu wa kufungu. **(alama 3)_**

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d. Mwandishi anapendekeza vipi kwa matumizi ya pombe ya kiwango cha wastani? **(alama 3)**

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e. Matumizi sugu yana malipo yapi kulingana na madaktari. **(alama 3)**

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……

f. Tafiti zilizofanywa zililenga jinsia ya kiume pekee. Thibitisha. **(alama 1)**

……

……

g. Eleza maana ya misamiati hii kulingana na taarifa **(alama 2)**

(i) wadau

……

……

(ii) aliyebaleghe

……

……

SEHEMU B

2. UFUPISHO(alama15)

Soma makala yafuatayo kasha ujibu maswali yafuatayo

Lugha ndio msingi wa maandishi yote. Bila lugha hakuna maandishi. Kila jambo tufanyalo kuhusiana na lugha husitawisha ufahamu wetu wa mambo tusomayo. Mazoezi katika kuandika husitawisha ufahamu katika kusoma kwa sababu katika kuandika ni lazima kuyatumia maneno vizuri kuzungumuza na kuwasikiliza wengine wakizumgumuza. Lugha tusomayo ni anina ya lugha ya masungumuzo.

Kuna ujuzi mwingi katika kuzungumuza kama vile michezo ya kuigiza, hotuba, majadiliano na mazungumuzo katika darasa. Haya yote husaidia katika uhodari wa matumizi ya lugha. Ujuzi wa kila siku utasaidika katika maendeleo ya kusoma na usitawi wa msamiati. Ikiwa mwanafunzi amemwona ndovu hasa, atakuwa amejua maana ya neno ndovu vizuri zaidi kuliko mwanafunzi ambaye hajawahi kumwona ndovu bali ameelezwa tu vile alivyo. Vilevile ujuzi wa kujionea sinema au michoro husaidia sana katika yaliyoandikwa. Ikiwa mwanafunzi ana huzuni au ana furaha, akiwa mgonjwa au amechoka an amefiwa, haya yote ni ujuzi . Wakati mwanafunzi asomapo juu ya mtu ambaye amepatikana na mambo kama hayo hana budi kufahamu zaidi.

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Karibu elimu yote ulimwenguni huwa imeandikwa vitabuni. Hata hivyo, lugha zote hazina usitawi sawa kuhusu fasihi. Kwa bahati mbaya lugha nyingine hazijastawi sana na hazina vitabu vingi. Fauka ya hayp, karibu mambo yote yanayohusiana na elimu huweza kupatikana katika vitabu kwenye lugha nyingine.

Inabidi mwanafunzi asome vitabu au majarida juu ya sayansi au siasa au historia, lakini haimbidi kusoma tu juu taaluma fulani anayojifunza. Inafaa asome juu ya michezo, mambo, ya mashairi na juu ya mahali mbalimbali ili kupata ujuzi wa mambo mengi.

a) Fupisha aya za kwanza mbili kwa kutumia maneno 65 (alama 10, 1 ya utiririko)

Matayarisho

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b) Kwa kuzingatisha habari zote muhimu na bila kupoteza maana asilia, fupisha aya ya mwisho (Maneno 30) (alama 5 , 1 ya utiririko)

Matayarisho

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SEHEMU C: MATUMIZI YA LUGHA NA SARUFI (alama 40)

(A) Andika sauti yenye sifa zifuatazo

(I) Sauti mwambatano ya midomo **(alama 2)**

(II) Andika neno lenye muundo ufuatao **(alama 2)**

Konsonanti+konsonanti+nusu irabu +konsonanti+irabu

B)Bainisha vishazi katika sentensi **(alama 2)**

Mwanafunzi huyo angelisoma sana, angelifaulu katika mtihani.

C)Tunga sentensi yenye muundo huu: **(alama 2)**

Nomino ya wingi, kivumishi kiradidi, kitenzi kishirikishi kikamilifu, chagizo cha Mahali

D)Tunga sentensi ukitumia neno ‘zawadi’ kama kitenzi **(alama 2)**

E)Andika upya katika wakati ujao hali ya mazoea **(alama 2)**

F)Taja vigezo viwili vya kuanisha viambishi **(alama 2)**

G)Changanua sentensi hii kwa kielelezo cha mstari

Gazeti hilo litasomwa na mwanafunzi **(alama 2)**

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H)Ainisha viambishi **(alama 2)**

Wasoila

I)Tunga sentensi yenye vijenzi **hivi** **(alama 1)**

KN(RH+ S)+KT(t+V)

J)Eleza matumizi ya ‘A’ anganifu katika sentensi **(Alama 3)**

(I) Mlango wa chuma umenunuliwa.

(II) Msumeno wa kukatia ubao ni huu.

(III) Mwimbaji wa kwanza yu jukwaani sasa.

K)Andika katika udogo

Kiti hiki cha mwanamke huyu kimevunjika **(alama 2)**

L)Eleza matumizi ya koloni na koma katika sentensi **(alama 1)**

Nyanya alinunua vitu hivi: pilipili, parachichi, pipi na papai.

M)Geuza katika hali ya wingi

Seremala aliunda kasha kwa ubao na kumpa mtume **(alama 2)**

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N)Taja dhana za kimaana mbili zilizo katika sentensi **(alama 1)**

Ningekuwa na hela ningenunua shamba.

O)Tunga sentensi venye kishazi tegemezi ambacho ni**;** **(alama 2)**

(I) Kielezi cha namna

ii)Kielelezi cha Mahali

(P) Ainisha sentensi hii kwa kuzingatia dhamira **(alama 1)**

Komesha mchezo huu kuanzia leo!

(Q) Onyesha kwa kutoa mifano miundo miwili ya nomino katika ngeli ya U-_Zi **(alama 2)**

(R) Ainisha yambwa katika sentensi hii

Yaya alitumia kijiko kumpatia mtoto huyo mdogo chakula kitam**u** **(alamu 3)**

(S) Andika kitenzi katika kauli ulizopewa kisha ukitungie sentensi **(alama 2)**

(i) Kauli tendata

(ii) Kauli tendama

(T) Eleza maana mbili katika utungo huu **(alama 2)**

Fundi alimkatia Makaa utepe huo.

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SEHEMU D: ISIMU JAMII(alama 10)

Soma makala haya kisha ujibu maswali;

Rafiki yako amezongwa na mambo magumu na anafikiria suluhu ni kujiua umepewa jukumu la kumshauri.

(a) Utatumia Lugha ya sajili gani? **(Alama 2)**

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(b) Fafanua sifa nane za kimtindo utakazomatumia ili kufanikisha mazungumuzo yako **(alama 8)**

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MWISHO.

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KCSE 2023 PREDICTION EXAMS

SERIES 2 EXAMS

102/3

KISWAHILI

PAPER 3

TIME: 2½ HOURS

NAME…… ADM NO; ……

CLASS…… DATE……

Kenya Certificate of Secondary Education.

MAAGIZO

- ***a)*** *Jibu maswali manne* ***pekee****.*
- ***b)*** *Swali la* ***kwanza*** *ni la* ***lazima***
- ***c)*** *Maswali hayo mengine matatu yachaguliwe kutoka sehemu nne zilizobaki yaani; Riwaya Hadithi fupi,Tamthilia na Ushairi.*
- ***d)*** *Usijibu maswali* ***mawili*** *kutoka* ***sehemu moja****.*
- ***e)*** *Majibu yote yaandikwe kwa lugha ya Kiswahili*

KWA MATUMIZI YA MTAHINI PEKEE

Swali	Upeo	Alama
1	20	
	20	
	20	
	20	
	Jumla	

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SEHEMU A:

"Mapambazuko ya Machweo na hadithi nyingine" **Swali la lazima**

1. Swala la Elimu limepewa kipaumbele katika hadithi ya sabina. Jadili **alama 20**

SEHEMU B:
Chozi la heri

Chagua swali la 2 au 3

2. "…….. wanahofia kusema wasije wakavikata viganja vinavyowalisha……..

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

(b) Taja maudhui yanayojitokeza katika dondoo hili na ueleze **(ala. 2)**

(c) Kwa kutoa hoja kumi, eleza namna maudhui uliyotaja hapo juu (2b) yanavyojitokeza katika riwaya **(ala. 10)**

(d) Eleza sifa nne za msemaji **(ala. 4)**

3. (a) Migogoro ni maudhui muhimu katika riwaya hii. Fafanua **(ala. 10)**

(b) Uozo umetamalaki katika jamii ya *Chozi la Heri*. Tetea kauli hii kwa kutolea hija kumi zilizoelezwa (ala. 10)

SEHEMU C: TAMTHILIA

Jibu swali la 4 au 5

4.Fafanua mabadiliko yanayojitokeza katika tamthilia ya **Bembea ya maisha** **(alama20)**

5.*Naam, bembea! Hata ikiwa ya kamba au chuma hatimaye hulika. Wanasema papo kwa papo kamba hukata jiwe. Bembea inapolika na kukatika haiwi mwisho wa mchezo. Huungwa na mchezo kuanza tena.*

a) Jadili dhana 'bembea inapolika na kukatika haiwi mwisho wa mchezo. ' Ukirejelea tamthilia **(alama10)**

b) Jadili namna wahusika tofauti wanavyounga bembea **(alama10)**

SEHEMU D: USHAIRI
Jibu swali la 6 au la 7

6. Shairi

La adhabu hili wingu, lataka kutunyeea
Himahima kwalo vungu, pasi nako kuchelea, Kujikinga hili wingu, sije katunyeshea.

Wengineo hawajali, wasinayo wasiwasi, Tahadhari hawabali, wajiunge nasi

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Aidha watafakali, mengine yalo hasi.

Vua hili halibagui, jinsia wala umri, Na kama hawajui, tuwajuze vizuri, Kwani siso adui, kuwao msumari.

Tangazo haliwapiku, wahimizwa kujikinge, Wingu hili la usiku, ukicheza likuringe, Latutia usumaku, daima likunyonge.

Vumilia kwalo vungu, nje kuna dhoruba,
Yavuma kwa machungu, bila lolote huba, Tunza chako kijungu, fungia kwalo juba.

Japo nafika tamati, nawaacha tafakari,
Madhara linalo wananti, wingu hili sukari,
Daima mwape kujiseti, mjitunze kujijari

Maswali

1. Eleza ujumbe wa mwandishi katika ubeti wa nne **(ala. 2)**
2. Onyesha ufundi wa kimuundo wa mwandishi katika utunzi wa shairi hili **(ala. 4)**
3. Eleza namna jazanda imetumika katika utungo huu. **(ala. 2)**
4. Kwa kuzingatia idadi ya mishororo katika beti tambua aina ya ushairi huu **(ala. 1)**
5. Tamthini ustadi wa mshairi katika matumizi yaidhini ya kishairi **(ala. 3)**
6. Litie shairi hili katika bahari tatu tofauti **(ala. 3)**
7. Andika ubeti wa **nne** kwa lugha ya tutumbi **(ala. 4)**
8. Eleza sifa moja ya nafsi neni katika shairi hili **(ala. 1)**

7. Ushairi

Soma shairi lifuatalo kasha ujibu maswali yanayofuata

1. Maendeleo ya umma Sio vitu maghalani
Kama tele vimesaki
Lakini havishikiki Ama havikamatiki
Ni kama jinga la moto
Bei juu

2. Maendeleo ya umma
Sio vitu gulioni
Kuviona madukani
Kuvishika mikononi

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Na huku wavitamani Kama tama ya fisi
Kuvipata ng'o

3. Maendeleo ya umma
Sio vitu shubakani
Dhiki ni kwa mafakiri
Nafuu kwa matajiri
Ni wao tu washitiri

Huo ni ustiimari
lo! Warudia

4. Maendeleo ya umma Ni vitu kumilikiwa
Na wanyonge kupatiwa
Kwa bei kuzingatiwa
Bila ya kudhulumiwa
Na hata kuhadaiwa
Hiyo ni haki

5. Maendeleo ya umma Dola kudhibiti vitu
Vijapo nchini mwetu
Na kuwauzia watu
Toka nguo na sapatu
Pasibakishiwe na kitu
Huo usawa

6. Maendeleo ya umma
Watu kuwa na kauli Katika zao shughuli
Vikaoni kujadili
Na mwisho kuyakubali
Maamuzi halali
Udikteta la

7. Maendeleo ya umma
Watu kuwa waungwana
Vijakazi na watwana
Nchini kuwa hakuna
Wote kuheshimiana
Wazee hata vijana

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Maswali

(a) Toa anwani mwafaka ya shairi hili (**ala. 1)**

(b) Shairi hili ni la aina gani? Toa sababu zako **(ala. 2)**

(c) Eleza dhamira ya mwandishi kuandika shairi hili **(ala. 3)**

(d) Toa mifano miwili ya urudiaji katika shairi hili, Je urudiaji huu una kazi/majukumu gani? **(ala. 4)**

(e) Onyesha matumizi mawili ya tamathali za usemi katika shairi hili **(ala. 4)**

(f) Eleza toni ya mshairi. Toa sababu **(ala. 2)**

(g) Nafsineni ni nani? **(ala. 1)**

(h) Toa mfano mmoja wa twasira katika hili. Je, twasira hiyo inajengwa na nani? **(ala. 3)**

SEHEMU E: FASIHI SIMULIZI

8. (a) Fafanua sifa za matambiko katika jamii **(ala. 4)**

(b) Eleza tofauti kati ya maigizo ya kawaida na maonyesho ya sanaa **(ala. 10)**

(c) Taja shughuli zozote mbili zinazoonyesha matumizi ya Ulumbi katika jamii ya kisasa **(ala. 2)**

(d) Tofautisha dhana zifuatazo

(i) Miviga na maapizo **(ala. 2)**

(ii) Ngoma na ngomezi **(ala. 2)**

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KCSE 2023 PREDICTION EXAMS

SERIES 2 EXAMS

121/1

MATHEMATICS

PAPER 1

TIME: 2½ HOURS

NAME…… ADM NO; ……

CLASS…… DATE……

Kenya Certificate of Secondary Education.

INSTRUCTIONS TO CANDIDATES

(a) *Write your name and index number in the spaces provided at the top of this page.*

(b) *Write your school name, sign and write the date of the examination in the spaces provided above.*

(c) *This paper consists of **Two** sections: **Section I** and **Section II***

(d) *Answer **ALL** questions in Section I and **any five questions** from Section II*

(e) *Show all the steps in your calculations, giving your answers at each stage in the spaces provided below each question.*

(f) *Marks may be given for correct working even if the answer is wrong.*

(g) *Non-Programmable silent electronic calculators and KNEC Mathematical Tables may be used.*

FOR EXAMINERS' USE ONLY

SECTION I

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	Total

SECTION II

								Total		Grand Total	
17	18	19	20	21	22	23	24				

For Marking Schemes Contact 0746-222-000 / 0742-999-000

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SECTION I (50 Marks)

*Answer **all** the questions in this section*

1. Without using mathematical tables or a calculator, evaluate: **(3 marks)**

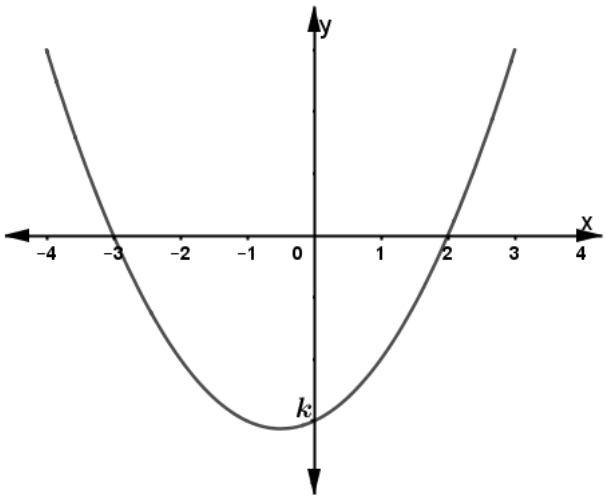
$$\sqrt[3]{\frac{0.4 \times 1.28}{0.0608 + 0.0032}}$$

2. Find the exact value of $2.\dot{3}\dot{4} - 1.\dot{9}\dot{1}$ **(4 marks)**

3. The HCF and GCD of three numbers are 7920 and 12 respectively. Two of the numbers are 48 and 264. Using factor notation, find the third number if one of its factors is 3^2. **(3 marks)**

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4. The graph below (not drawn to scale) is a plot for the function $y = ax^2 + bx + k$ where a, b and k are constants.



Determine the values of a, b and k. **(3 marks)**

5. Three camps, P, Q and R shared 875 bags of beans donated by a charitable organization such that the ratio of P to Q was 2: 3 and that of R to Q was 5: 4. Find the number of bags of beans received by camp Q. **(3 marks)**

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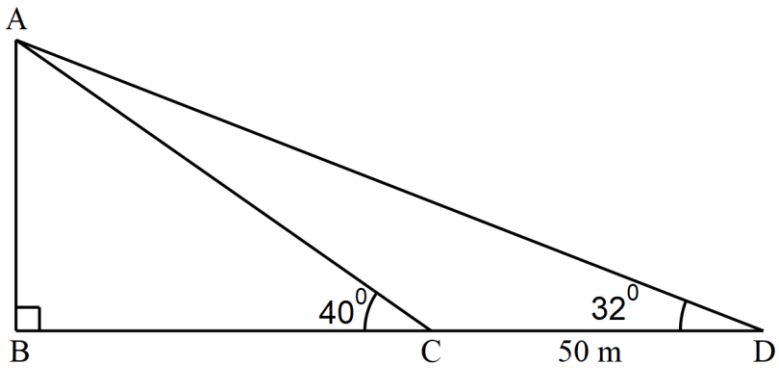
6. Find the number of revolutions made by cylindrical roller of diameter 1.02 m and thickness 1.3 m if it rolls over a surface area of 291.72 m^2. Use $\pi = \frac{22}{7}$ **(3 marks)**

7. Dr. June needs to import a car from Japan that costs US dollars (USD) 5 000 outside Kenya. He intends to buy the car through an agent who deals in Japanese Yen (JPY). The agent charges a 20% commission on the price of the car and a further 80 325 JPY for shipping the car to Kenya. Find the amount in Kenya shillings that Dr. June will need to send to the agent to get the car given that: **(3 marks)**

1 USD = Ksh 120

1 USD = 135 JPY

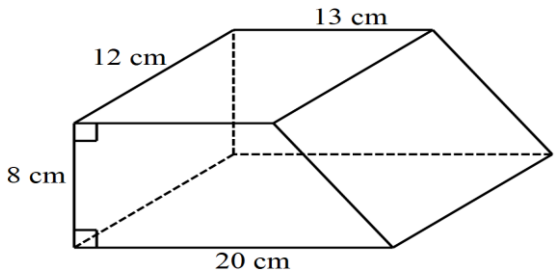
8. The figure below shows a vertical mast AB. The angles of elevation of the top of the mast from two points C and D on the level ground are 40^0 and 32^0 respectively. The distance CD is 50 metres.



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Calculate the distance BC, of the tower correct to 1 decimal place **(3 marks)**

9. The figure below shows a solid with the given dimensions.



Calculate the mass of the solid to in kilograms given that its density is 3.5 g/cm^3. **(3 marks)**

10. Solve for x in the equation **(3 marks)**

$9^{x+1} + 3^{2x} = 810$

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11. A lampshade is in the shape of a frustum of a cone such that its slanting height is 30 cm while the top and bottom radii of the lampshade are 10 cm and 17.5 cm respectively. Calculate the surface area of the material used to make the lampshade. **(4 marks)**

12. (a) Find the range of values of x which satisfies the following inequalities simultaneously **(2 marks)**

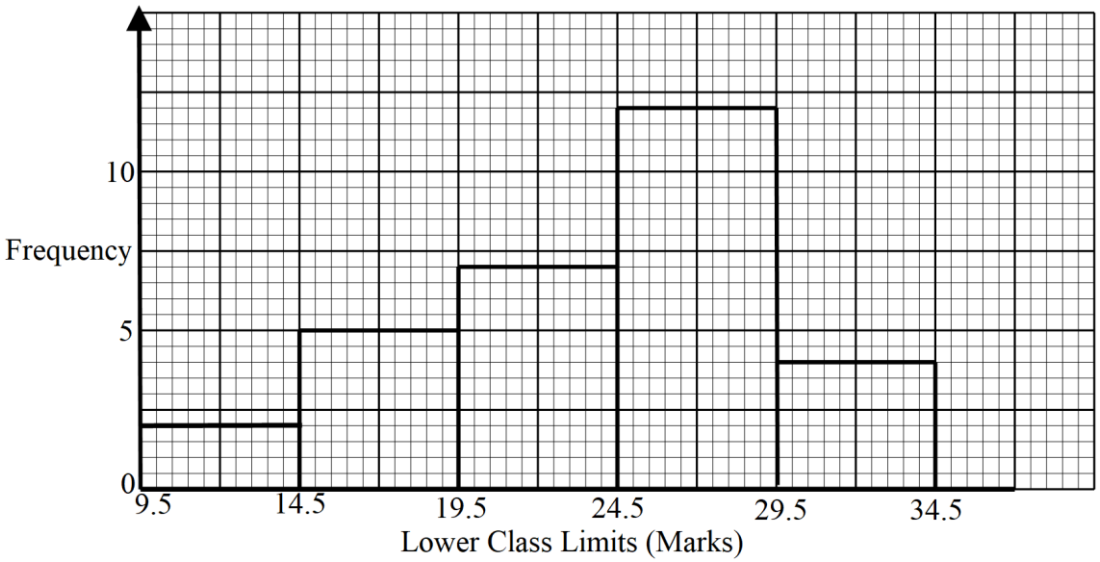
$4x - 9 \leq x + 6$

$4 + x \geq 8 - 3x$

(b) Represent the range of values of x in (a) above on a number line. **(1 mark)**

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13. The graph below is a histogram showing the marks scored by students in a Mathematics contest.



Prepare a frequency distribution table for the above data, hence determine the total number of students who did the contest. **(3 marks)**

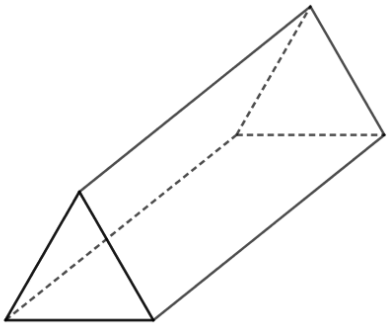
14. Use logarithms only to evaluate **(4 marks)**

$$\left(\frac{7.089 \times 124.5}{(86.73)^2}\right)^{\frac{1}{3}}$$

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15. A sales lady earns a basic salary of Ksh 12 400 per month. In addition, she gets a 2% commission on the first Ksh 80 000 worth of good and a further 3% commission on goods worth over Ksh 80 000. In a certain month, she earned a total of Ksh 20 000. Calculate the value of the goods sold that month. **(3 marks)**

16. The figure below shows a triangular prism whose cross-section is an equilateral triangle



(a) On the prism, show the positions of the lines of symmetry. **(1 mark)**

(b) Draw the net of the prism. **(1 mark)**

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SECTION II (50 Marks)

Answer any five questions in this section

17. A straight line l_1 has a gradient $-\frac{1}{2}$ and passes through the point $P(-1, 3)$. Another line l_2 passes through the points $Q(1, -3)$ and $R(4, 5)$

Find:

(a) (i)The equation of $l_1$in the form $y = mx + c$, where m and c are constants **(2 marks)**

(ii) Hence find k given that $S(0, k)$ **(1 mark)**

(b) (i) The gradient of l_2 **(1 mark)**

(ii) The equation of l_2 in the form $ax + by = c$, where a, b and c are integral values.**(2 marks)**

(c) The equation of a line l_3 passing through a point $T(0, 5)$ and perpendicular to l_2.(**3 marks)**

(d) Calculate the acute angle that l_3 makes with the x-axis. **(1 mark)**

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18. Water flows through a cylindrical pipe of diameter 7 cm at a rate of 15 m per minute.

(a) Calculate the capacity of water delivered by the pipe in one minute in litres. Use $\pi = \frac{22}{7}$.

(3 marks)

(b) A storage tank that has a circular base and depth 12 m is filled with water from this pipe and at the same rate of flow. Water begins flowing into the empty storage tank at 6.30 a.m. and is full at 1310 hours. Calculate the area of the cross-section of this tank in square metres. **(4 marks)**

(c) A school consumes the capacity of this tank in one month. The cost of water is Ksh. 100 for every 1 000 litres and a standing charge of Ksh 1 950. Calculate the cost of the school's water bill for one month. **(3 marks)**

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19. (a) Find $\mathbf{A^{-1}}$ given that $\mathbf{A} = \begin{pmatrix} 8 & 12 \\ 9 & 15 \end{pmatrix}$ **(1 mark)**

(b) An ICT firm bought 8 printers and 12 copiers for a total of Ksh 294 000. Had the firm bought 1 more printer and 3 more copiers, it would have spent Ksh 43 500 more.

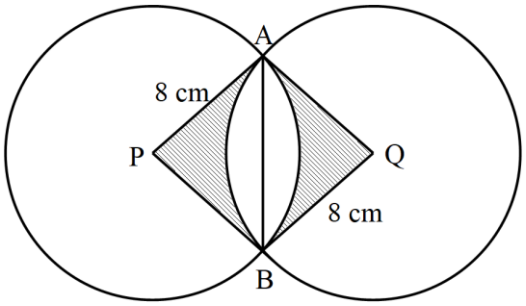
(i) Form two equations to represent the information above. **(2 marks)**

(ii) Hence, using $\mathbf{A^{-1}}$ in (a) above, calculate the cost of each item. **(4 marks)**

(c) **A** two-digit number is such the that difference between tens and ones digit is 1. If the digits are reversed, the sum of the two numbers is 165. Find the original number **(3 marks)**

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20. Two equal circles with centres P and Q and radius 8 cm intersect at points A and B as shown below.



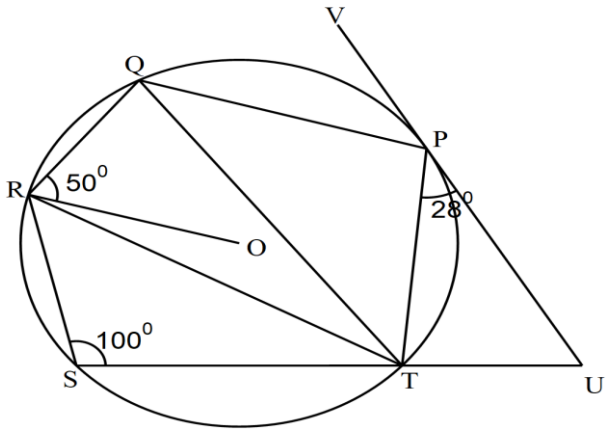
Given that the distance between their centres is 12 cm, find, correct to 4 significant figures;

(a) The length of chord AB **(2 marks)**

(b) The area of the shaded region . Use $\pi = 3.142$ **(8 marks)**

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21. In the figure below, P, Q, R, S and T lie on the circumference of a circle centre O. Line UPV is a tangent to the circle at P. Chord ST of the circle is produced to intersect with the tangent at U. Angles UPT, RST and ORQ are 28^0, 100^0 and 50^0 respectively.



(a) Determine the sizes of the following angles;

(i) RTP **(3 marks)**

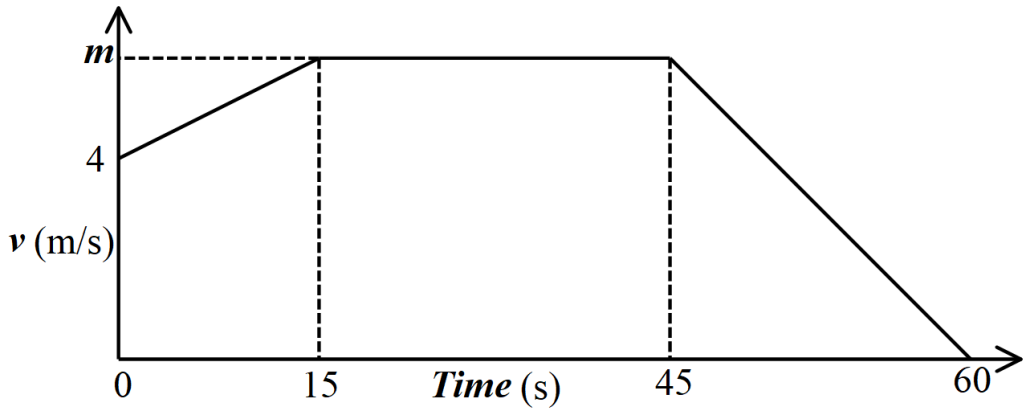
(ii) QTP **(3 marks)**

(b) Given that PQ = 6 cm, calculate correct to 1 decimal place, the radius of the circle.**(4 marks)**

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22. (a) Two trains, A and B are such that they are 40 m long and 160 m long respectively. Their speeds are 60 km/hr and 40 km/hr respectively. The two trains are 100 m apart and moving towards the same direction in a pair of parallel tracks. Calculate the time in seconds it takes train B to completely overtake train A. **(4 marks)**

(b) The figure below (not drawn to scale) shows a velocity time graph for a robot in a robotic challenge.



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(i) If the distance covered by the robot in the first 15 seconds was 180 metres, calculate the value of ***m*** **(3 marks)**

(ii) Describe the movement of the robot between the 15^{th} and 45^{th} seconds. **(1 mark)**

(iii) Calculate the deceleration of the particle in the last 20 seconds. **(2 mark)**

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23. A farmer wanted to make a trough for cows to drink water. He had a metal sheet of dimensions 240 cm by 120 cm and 1 cm thick. The density of the metal sheet is 2.5 g/cm^3. A square of sides x cm is removed from each corner of the rectangle and the remaining part folded to form an open cuboid.

(a) Sketch the sheet after removing the squares from the four corners, showing all the dimensions.

(2 marks)

(b) Calculate

(i) the value of x, to the nearest whole number, that maximizes the volume of the cuboid **(5 marks)**

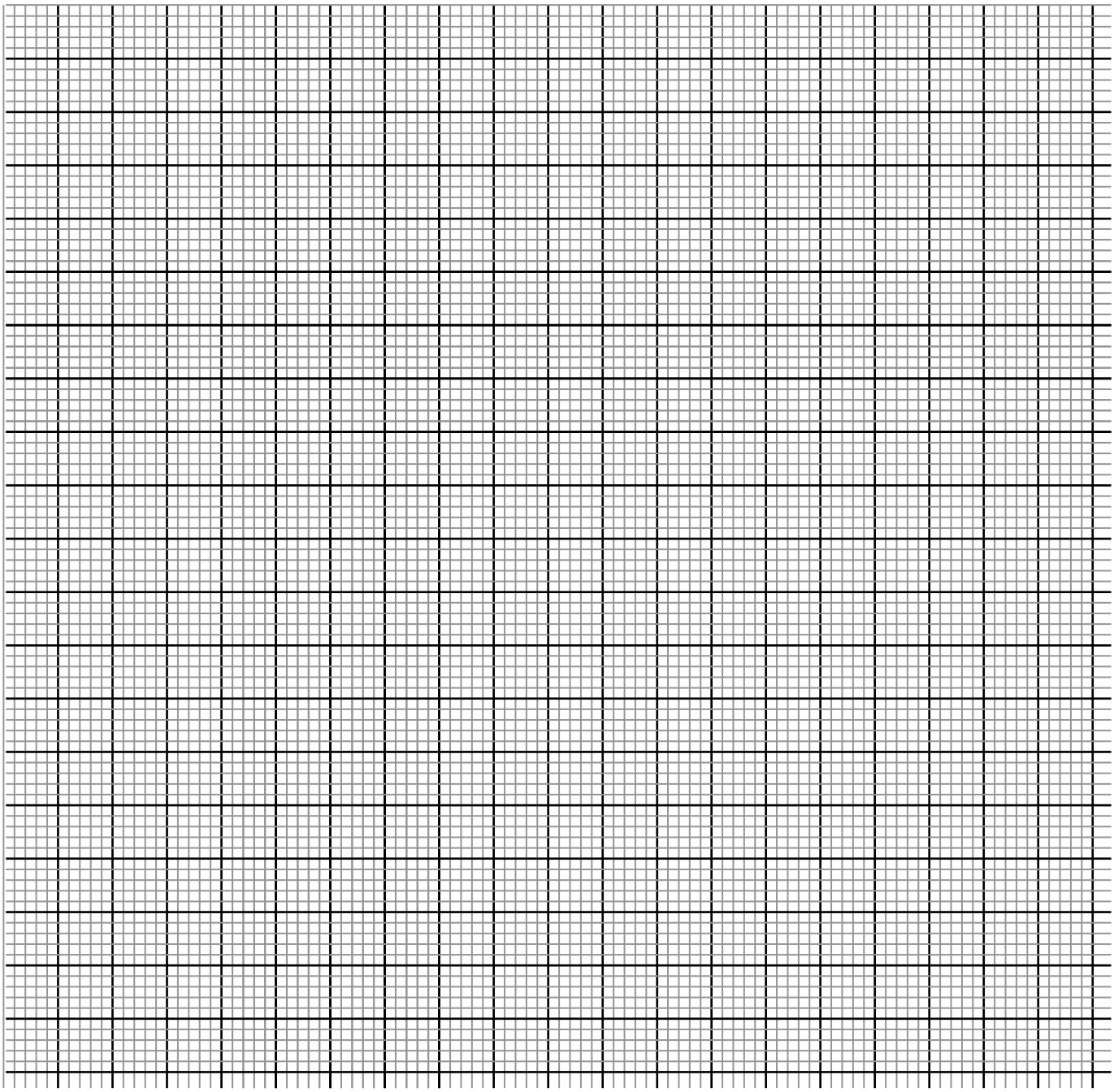
(ii) hence calculate the maximum volume of the box . **(3 marks)**

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24. (a) Complete the table below for the curve $y = x^3 - 5x^2 + 2x + 9$ for $-2 \leq x \leq 5$.**(2 mks)**

x	-2	-1	0	1	2	3	4	5
y			9					

(b) On the grid provided, draw the graph of $y = x^3 - 5x^2 + 2x + 9$ for $-2 \leq x \leq 5$.(**3 marks)**



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(c) Use the graph in (b) above to find the roots to the following equations:

(i) $x^3 - 5x^2 + 2x + 9 = 0$ **(2 marks)**

(ii) $x^3 - 5x^2 + 6x = -5$ **(3 marks)**

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KCSE 2023 PREDICTION EXAMS

SERIES 2 EXAMS

121/2

MATHEMATICS

PAPER 2

TIME: 2½ HOURS

NAME…… ADM NO; ……

CLASS…… DATE……

Kenya Certificate of Secondary Education.

INSTRUCTIONS TO CANDIDATES

(h) *Write your name and index number in the spaces provided at the top of this page.*
(i) *Write your school name, sign and write the date of the examination in the spaces provided above.*
(j) *This paper consists of **Two** sections: **Section I** and **Section II***
(k) *Answer **ALL** questions in Section I and **any five questions** from Section II*
(l) *Show all the steps in your calculations, giving your answers at each stage in the spaces provided below each question.*
(m) *Marks may be given for correct working even if the answer is wrong.*
(n) *Non-Programmable silent electronic calculators and KNEC Mathematical Tables may be used.*

For Examiners' Use Only

SECTION I

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	Total

SECTION II

17	18	19	20	21	22	23	24	Total

Grand Total	

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SECTION I (50 Marks)

*Answer **all** the questions in this section*

1. Solve for x in the equation below without using a mathematical table or calculator. **(4 marks)**

$(\log_{10} x)^2 = 3 - \log_{10} x^2$

2. The base of a right angled triangle is 4.1 cm and the height is 5.0 cm. Calculate the percentage error in the area of the triangle. **(3 marks)**

3. Given that $\tan\theta = \frac{1}{\sqrt{5}}$, θ is an acute angle, without using a calculator or mathematical tables, find $\sin(90 - \theta)$, leaving your answer in simplified surd form. **(2 marks)**

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4. Find the interest on Ksh. 200,000 for 2 years at 14% per annum compounded semi-annually.

(3 marks)

5. Make v the subject of the formula **(3 marks)**

$$S = \frac{dv}{\sqrt{cv^2 - f}}$$

6. A coffee trader buys two grades of coffee at Kshs. 80 and Kshs. 100 per packet. Find the ratio in which she should mix the two brands so that by selling the mixture at Kshs. 120 per packet, a 25% profit realized? **(3 marks)**

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7. A bakery prepares cakes for sale. It has 80 eggs and 10 cups of sugar for use. It bakes two cake types: P and Q. Type P cake requires 6 eggs and 2 cups of sugar while type Q cake requires 12 eggs and three-quarters cup of sugar. By letting type P cakes to be x and type Q cakes to be y, form all the inequalities that represent the above information. **(3 marks)**

8. Find the radius and the centre of a circle whose equation is given by $3x^2 + 3y^2 + 6x - 12y - 12 = 0$. **(3 marks)**

9. The equation of a trigonometric function is $y = 2\cos(bx - 60)^0$. The period of the function is 120^0.

(a) Determine the value of b **(1 mark)**

(b) Deduce the phase angle of the function. **(1 mark)**

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10. A point R is 2100 nautical miles to the east of another point Q (60^0N, 0^0), find the position of P.

(3 marks)

11. An arithmetic progression is such that its first term is 200 and common difference 500. Given that $S_n = 80{,}100$, find the value of n **(4 marks)**

12. (a) Expand $(3 + x)^5$ in ascending powers of x up to the term in x^3. **(1 mark)**

(b) Use the expansion in (a) above to approximate the value of $\left(3\frac{1}{50}\right)^5$ correct to 4 decimal places.

(2 marks)

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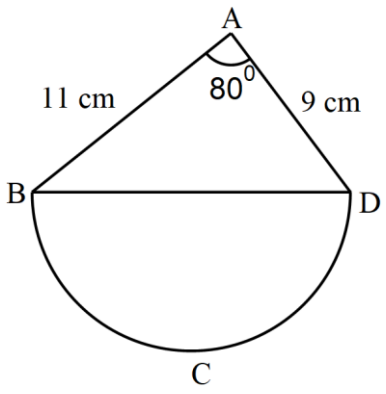
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13. **P** varies as the cube of **Q** and inversely as the square root of **R**. If **Q** is reduced by 20% and **R** increased by 21%, find the percentage change in **P**. **(3 marks)**

14. Use tables of squares, reciprocals and square roots only to evaluate **(4 marks)**

$$\frac{1}{2.345^2} + \sqrt{0.6789}$$

15. In the figure below, AD = 9 cm, AB = 11cm and angle BAD = 80^0. BD is the diameter of the semi-circle BCD.



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Calculate the area of the semi-circle, correct to 2 decimal places. Use $\pi = 3.142$ **(4 marks)**

16. Two regular polygons have sides n and $n + 3$. Given that the ratio of the sum of their interior angles is 1: 2, calculate the value of n. **(3 marks)**

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SECTION II (50 Marks)

*Answer any **five** question in this section*

17. The table below shows income tax rates in a certain year.

Taxable Income(Ksh per month)	Tax Rate(%)
0 – 13 450	10
13 451 – 26 350	15
26 351 – 39 250	20
39 251 – 52 150	25
52 151 and above	30

In that year, the monthly earnings for Amilo were as follows: basic salary Ksh 35 500, house allowance – Ksh 12 600 and other allowances that amount to Ksh. 5 872 were exempted from taxation.Amilo contributes 12.5% of her basic salary to a pension scheme. She is entitled to a personal tax relief of Ksh 1 845 per month.Calculate:

(a) Amilo's taxable income in Ksh per month. **(2 marks)**

(b) Amilo's P.A.Y.E that month. **(5 marks)**

(c) Amilo's net pay that month, given that the following are deducted monthly from her salary; NHIF – Ksh 1 000, Union dues – Kshs 455 and BBF – Ksh 200. **(3 marks)**

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18. A mode is in the shape of a polygon with vertices A, B, C, D and E such that; AB=4.4 cm, AE=10 cm, ED=5.2 cm and BC=7.9 cm. The bearing of B from A is 030^0 and A is due east of E, while D is due north of E and angle EDC=120^0

(a) Using a ruler and a pair of compasses only,

(i) Construct the accurate plan of the model. **(4 marks)**

(ii) Measure DC. **(1 mark)**

(b) A foundation plaque is to be placed closer to CD than CB, nearer to D than to E and not more than 6 cm from A.

(i) Construct the locus of points equidistant from CB and CD. **(1 mark)**

(ii) Construct the locus of points equidistant from E and D. **(1 mark)**

(iii) Construct the locus of points 6 cm from A. **(1 mark)**

(c) Shade and label as R, the region within which the foundation plaque could be placed in the garden. **(2 marks)**

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19. The probability that it rains on a certain day is 0.8. If it rains the probability that a school bus will be stuck in a traffic jam is 0.7 but otherwise it is 0.4. If the bus is stuck in the jam, the probability that students using it to school will arrive late is 0.6, otherwise the probability of students using the bus to arrive late is 0.3.

(a) Draw a tree diagram to represent this information. Use the letters R, J and L to represent the events of rain, jam and late respectively **(2 marks)**

(b) Determine:

(i) The probability that it rains, the bus isn't held in the jam but the students arrive late in school. **(1 mark)**

(ii) The probability that students arrive in school on time. **(3 marks)**

(iii) The probability that the students arrive in school late. **(2 marks)**

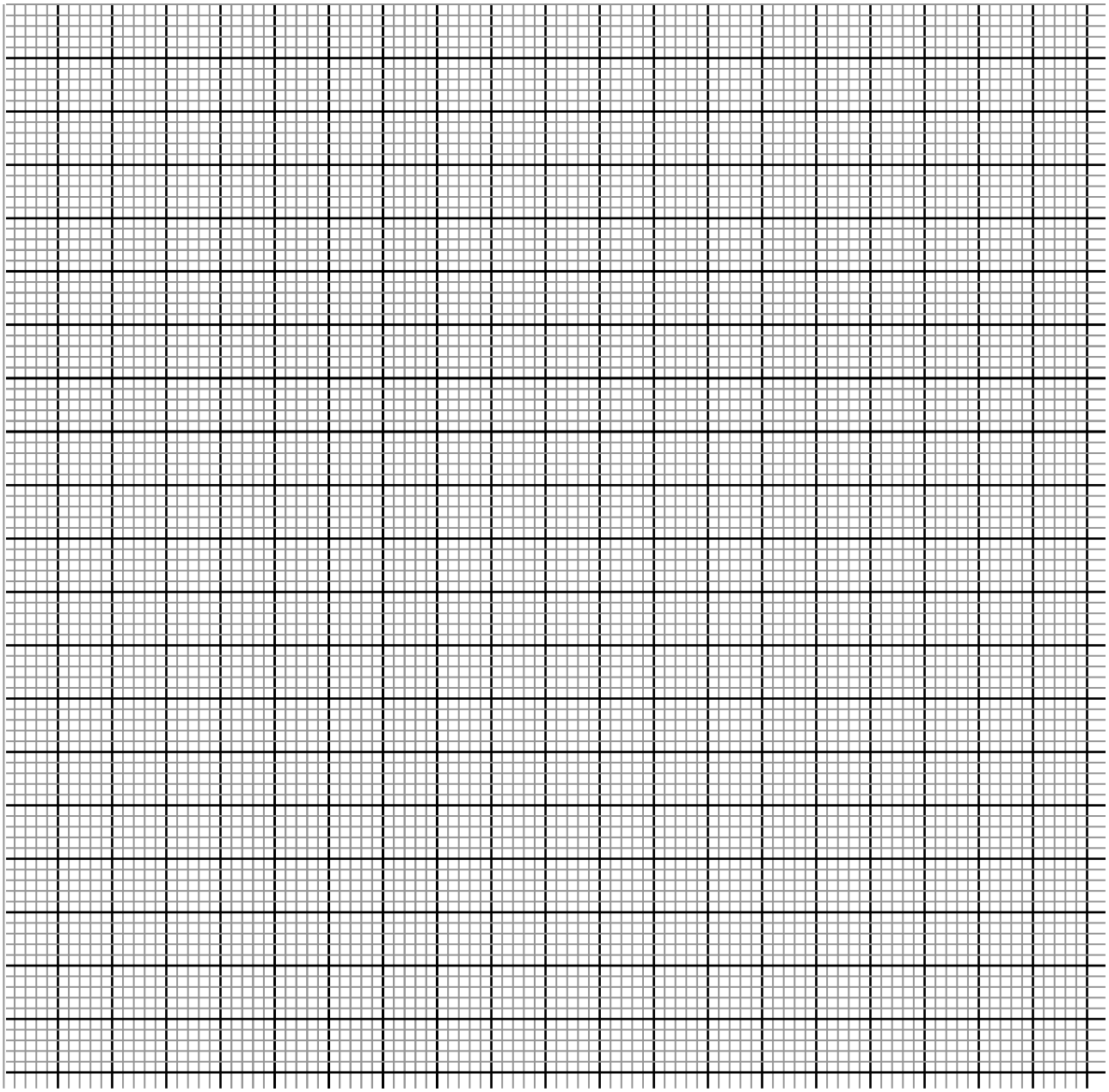
(iv) The probability that the bus is held in the jam. **(2 marks)**

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20. The vertices of a triangle ABC are $P'(-1,1)$, $B'(-5,4)$ and $C'(-1,2)$ under a transformation whose matrix is $\begin{pmatrix} -2 & 1 \\ 1 & 0 \end{pmatrix}$

(a) Find the coordinates of ABC **(3 marks)**

(b) On the grid provided, draw triangles ABC and $A'B'C'$. **(2 marks)**



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(c) Triangle $A''B''C''$ is the image of triangle $A'B'C'$ under a transformation represented by the matrix $\begin{pmatrix} -1 & 0 \\ 0 & -2 \end{pmatrix}$

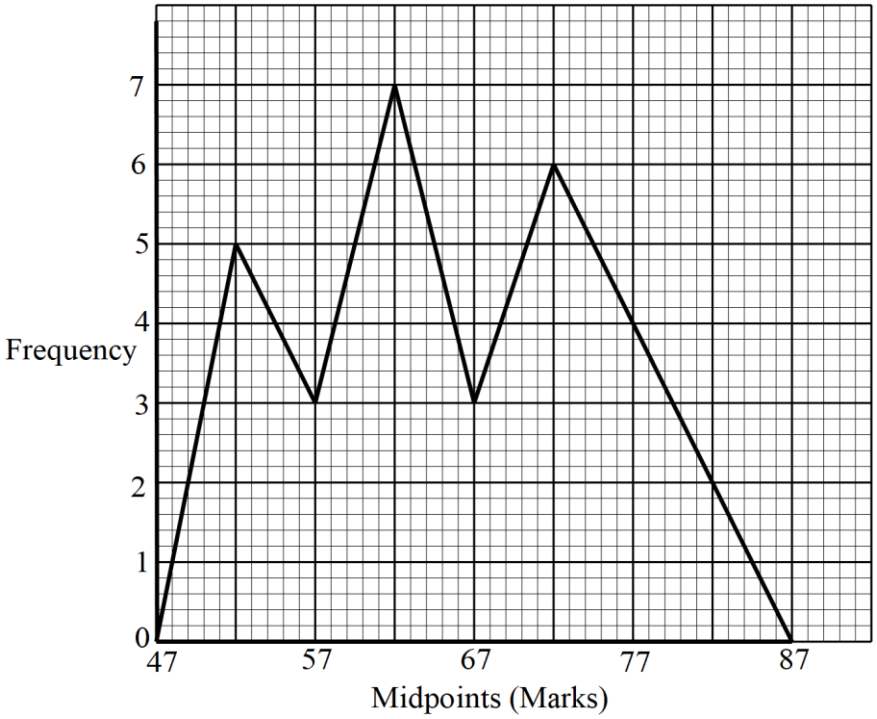
(i) Determine the coordinates of $\Delta A''B''C''$. **(2 marks)**

(ii) On the same grid, draw $\Delta A''B''C''$. **(1 mark)**

(d) Another transformation $\boldsymbol{T}$ maps $\Delta A''B''C''$ on to $\Delta A'''B'''C'''$ such that $A'''(-1,-2)$, $B'''(-5,-8)$ and $C'''(-1,-4)$. Describe $\boldsymbol{T}$ fully. **(2 marks)**

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21. The figure below shows a frequency polygon representing the scores of Form 4 Green students in a History contest.



(a) Generate the frequency distribution table for the data under the headings given in the table below. **(5 marks)**

x	f	$d = \frac{x - 67}{5}$	fd	fd^2
	$\Sigma f =$		$\Sigma fd =$	$\Sigma fd^2 =$

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(b) Calculate the standard deviation of the marks. **(3 marks)**

(c) The mean weight of 11 babies in a clinic is 4.5 kg. If one more baby comes to the clinic, the total mass of the babies becomes 60 kg. Find the mass of the additional baby. **(2 marks)**

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22. In a triangle OAB, $\boldsymbol{OA} = 12\boldsymbol{a}$, and $\boldsymbol{OB} = 12\boldsymbol{b}$. P and Q are points on OA and OB respectively such that $\boldsymbol{3OP} = \boldsymbol{OA}$ and $\boldsymbol{OQ} = \frac{1}{3}\boldsymbol{OB}$. M is the midpoint of AB.

(a) Express the following in terms of $\boldsymbol{a}$ and $\boldsymbol{b}$

(i) $\boldsymbol{OM}$ **(1 mark)**

(ii) $\boldsymbol{PM}$ **(1 mark)**

(b) $\boldsymbol{OM}$ and $\boldsymbol{BP}$ intersect at R such that $\boldsymbol{PR} = k\boldsymbol{PB}$ and $\boldsymbol{OR} = h\boldsymbol{OM}$.

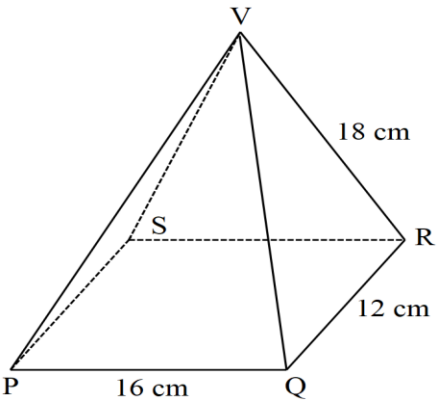
(i) Express $\boldsymbol{PR}$ in two ways **(2 marks)**

(ii) Hence find the values of h and k (**3 marks)**

(c) Show that A, R and Q are collinear. **(3 marks)**

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23. The figure below represents a right pyramid with a vertex V and a rectangular base PQRS. VP=VQ=VR=VS=18 cm. PQ=16 cm and QR=12 cm. M and O are the midpoints of QR and PR respectively.



Calculate, correct to 2 decimal places;

(a) The length of the projection of the line VP on the plane PQRS **(2 marks)**

(b) The angle between the lines VP and the plane PQRS. **(2 marks)**

(c) the angle between planes VQR and VPS. **(4 marks)**

(d) The angle between the planes VQR and PQRS **(2 marks)**

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24. Two functions, $x + y = 4$ and $y = x^2 + 2$, intersec at C and D

(a) Determine the coordinates of C and D **(4 marks)**

(b) Using the trapezium rule with 6 trapezia, estimate the area bound by $y = x^2 + 2$, the x-axis and the vertical lines through C and D. **(4 marks)**

(c) Find the exact area in (b) above. **(2 marks)**

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KCSE 2023 PREDICTION EXAMS

SERIES 2 EXAMS

451/1

COMPUTER STUDIES

PAPER 1

TIME: 2½ HOURS

NAME…… ADM NO; ……

CLASS…… DATE……

Kenya Certificate of Secondary Education.

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.*

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SECTION	QUESTION	CANDIDATE'S SCORE
A	1 – 15	
B	16	
	17	
	18	
	19	
	20	
	Total Score	

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SECTION A

Answer all the questions

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)**

……

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5. Using examples, distinguished between:

(i) Primary and secondary storage **(1mk)**

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……

(ii) Fixed and removable disks **(1mk)**

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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

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(ii) Portability

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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

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11. i. Explain the meaning of the following as used in computer programming. **(2mks)**

a. Syntax

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b. Semantic

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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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13. List two disadvantages of fiber optic cable over twisted wires. **(2mks)**

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14. Describe any two types of data processing methods. **(2mks)**

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15. State two advantages of USB port over the parallel port **(2mks)**

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16. Differentiate between the terms signal Attenuation and Noise as used in data communication.

(2mks)

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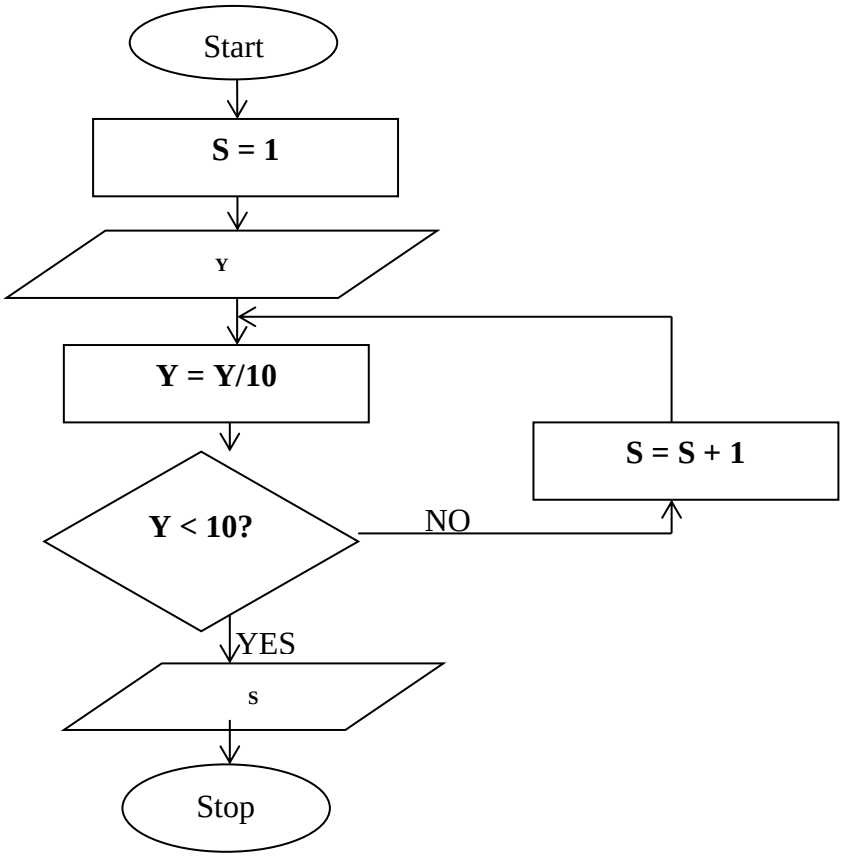
SECTION B

Answer question 16 and any other three questions in this section

17. a) State three advantages of low -level languages **(3mks)**

b) Give two differences between a compiler and an interpreter. **(2mks)**

c) i) Study this flowchart and use it to answer the questions that follow.



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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)**

19. a) Explain why a computer is able to display the correct time and date when it has just been switched on. **(2mks)**

b) Discuss two types of special memories found in a Computer System. **(4mks)**

c) i) Define a Bus with reference to a computer system. **(1mk)**

ii) List two examples of buses. **(2mks)**

d) Distinguish between a power cable and interface cable. **(2mks)**

e) Differentiate between the different types of RAM. **(4mks)**

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)**

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)**

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KCSE 2023 PREDICTION EXAMS

SERIES 2 EXAMS

451/2

COMPUTER STUDIES

PAPER 2

TIME: 2½ HOURS

NAME…… ADM NO; ……

CLASS…… DATE……

Kenya Certificate of Secondary Education.

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.*

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QUESTIONS

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

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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

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DOS				
Admission Number	**S Name**	**Other Names**	**KCPE Mark**	**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

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(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	KCPE Mark	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 thereport as administration **(5Marks)**

(g) Print, administration and admin **(2Marks)**

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KCSE 2023 PREDICTION EXAMS

SERIES 2 EXAMS

441/1

HOME SCIENCE

PAPER 1 (THEORY)

TIME: 2½ HOURS

NAME…… ADM NO; ……

CLASS…… DATE……

Kenya Certificate of Secondary Education.

INSTRUCTIONS TO STUDENTS

a) *Write your name, admission number and class in the spaces provided*

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

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

d) *Answer* ***all*** *the questions in sections* ***A*** *and* ***B*** *and any two questions in section* ***C***

e) *Answers to all the questions must be written in the spaces provided in the paper*

FOR EXAMINER'S USE ONLY

Section	Question	Maximum Score	Student's Score
A	1- 19	40	
B	20	20	
C		20	
		20	
TOTAL SCORE		100	

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SECTION A: (40 marks)

1. Identify **two** functions of lipids in the body. **(2marks)**

……

……

2. What vitamins have the following scientific names? **(2marks)**

Tocopherols ……..

Cholecalciferol ……..

Thiamine ……..

Phylloquinone ……..

3. Mention **two** reasons why a classroom should be well lit. **(2marks)**

……

……

4. Outline **three** reasons why charcoal should be well lit before starting cooking. **(3marks)**

……

……

……

5. List **four** soft furnishings used in the bedroom. **(2marks)**

……

……

……

……

6. Mention the function of each of the following parts of a sewing machine. **(2marks)**

Feed dog ……

Tension disc ……

Take up lever ……

Stop motion screw ……

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7. Identify **two** qualities of a good dish cloth. **(2marks)**

……

……

8. List **four** items that can be starched in the home. **(2marks)**

……

……

……

……

9. Mention **two** advantages of tacking before stitching. **(2marks)**

……

……

10. Suggest **four** areas where diagonal tacking/basting can be done during stitching**(2marks)**

……

……

……

……

11. Complete the table on classification of fibres. **(2marks)**

Fibre	Class
Linen	
Acetate rayon	
Wool	
Elastofibre	

12. Highlight **three** ways of preventing falls in the home. **(3marks)**

……

……

……

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13. Mention **two** uses of tomatoes in cooking. **(2marks)**

……

……

14. Identify **three** advantages of shopping in a big supermarket/hypermarket. **(3marks)**

……

……

……

15. Suggest **two** reasons why iron should be increased in a pregnant woman's diet.**(2marks)**

……

……

16. Give **two** limitations of burning as a method of disposing refuse. **(2marks)**

……

……

17. Mention **two** advantages of cash buying. **(2marks)**

……

……

18. Give **two** causes off thread breaking when using a sewing machine. **(1mark)**

……

……

19. Mention **four** reasons for blanching vegetables. **(2marks)**

……

……

……

……

……

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SECTION B: (20 marks)

COMPULSORY

Answer question 20 in the spaces provided after the question

20. You are holding your 18th birthday party and have invited a number of friends.

a) Outline the procedure you will follow when laundering the sheer silk blouse you intend to wear to the party. **(9marks)**

b) Describe how you will clean the polished dining table to be used that day. **(6marks)**

c) Outline how you will clean the tarnished silver spoons to be used by the guests. **(5marks)**

SECTION C: (40 marks)

*Answer any **two** questions from this section in the spaces provided at the end of the section.*

21.

a) Outline **five** reasons for including fruits and vegetables in a meal. **(5marks)**

b) Explain **five** factors to consider when buying a clothes drying rack. **(5marks)**

c) Highlight **four** factors to consider when buying cabbages. **(4marks)**

d) Discuss **three** problems a student may face when buying body lotion. **(6marks)**

22.

a) Explain **three** principles of food preservation. **(6marks)**

b) Outline **five** rules to observe when removing stains from garments. **(5marks)**

c) Suggest **five** causes of malnutrition in pregnancy. **(5marks)**

d) Mention **four** reasons why it is not advisable to buy a cooker on hire purchase. **(4marks)**

23.

a) Suggest **four** qualities of a well-made patch on a bedsheet. **(4marks)**

b) Discuss **four** factors to consider when choosing a seam in garment construction. **(8marks)**

c) Highlight **four** benefits of breastfeeding to a nation. **(4marks)**

d) Mention **four** qualities of fabric for making a baby's clothes. **(4marks)**

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KCSE 2023 PREDICTION EXAMS

SERIES 2 EXAMS

441/2

HOME SCIENCE

PAPER 2 (PRACTICAL)

TIME: 2½ HOURS

NAME…… ADM NO; ……

CLASS…… DATE……

SIGN: ……

Kenya Certificate of Secondary Education.

441/2

HOMESCIENCE

PRACTICAL– Paper 2
(CLOTHING CONSTRUCTION)

INSTRUCTIONS TO CANDIDATES

a) *This paper consists of 3 printed pages*

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

c) *Candidates must use machine stitches appropriately in the construction of the garment*

d) ***Hand stitches*** *used instead of machine stitches will not be marked*

e) ***Hand stitches*** *will only be allowed for the making of* ***hemming*** *and* ***tacking stitches****.*

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

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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.

i) **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.

a) Working of a bust dart.

b) Gathering of the front bodice ready for attaching the yoke Do not remove gathering stitches

c) The attachment of the back yoke to the back bodice using overlaid/lapped seam.

Do not neaten

a) The working of a machine fell seam at the shoulder.

b) The working of an open seam at the side of the bodice.

c) The joining of the back and the front neck facings at the shoulder.

d) The preparation of the collar and attaching it to the bodice.

e) Under stitching the facing and the free edge.

f) 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***

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KCSE 2023 PREDICTION EXAMS

SERIES 2 EXAMS

441/3

HOME SCIENCE

PAPER 3

TIME: 1¼ HOURS

NAME…… ADM NO; ……

CLASS…… DATE……

Kenya Certificate of Secondary Education.

HOME SCIENCE (FOODS AND NUTRITION)

PAPER 3 - PRACTICAL (441/3)

PLANNING; 30 MINUTES

PRACTICAL TEST SESSION; 1 ¼ HOURS

INSTRUCTION TO CANDIDATES

a) *Read the test carefully*

b) *Write your name and admission number on every sheet of paper used*

c) *Textbooks and recipes may be used during the planning session as reference materials*

d) *You will be expected to keep to your order of work during the practical session*

e) *You are allowed to take away ONLY your reference materials at the end of the planning session*

f) *You are not allowed to bring additional noted to the practical session.*

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THE TEST

You are staying with your sister who has recently delivered through caesarean section. Using all the ingredients listed blow, prepare cook and serve suitable lunch for the two of you. In addition prepare a suitable nutritious drink.

INGREDIENTS

Milk

Sugar

Irish potatoes/Green bananas/Rice

Green grams/Lentils/Liver

Salt

Oil/Cooking fat

Coriander

Tomatoes

Carrots

Onions

Cabbage/Green leafy vegetables

Fruit in season

PLANNING SESSION- 30 MINUTES

Use separate sheets of paper for each tasks listed below and a carbon paper to make duplicate copies. Then proceed as follows:

1. Identify the food items and write down their recipes.
2. Write down your order of work
3. Make a list of foodstuff, materials and equipment you will require.

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KCSE 2023 PREDICTION EXAMS

SERIES 2 EXAMS

501/1

FRENCH

PAPER 1

TIME: 2¼ HOURS

NAME…… ADM NO; ……

CLASS…… DATE……

SIGN: ……

Kenya Certificate of Secondary Education.

Instructions to Candidates

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

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

*(c) This paper has **three** sections*

*(d) Answer **all** the questions in the spaces provided.*

(e) Candidates should answer the questions in French

For Examiner's use only

Section	Maximum Score	Candidates score
I	15	
II	05	
III	15	
	Total Score	

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Listening comprehensions (15 mks)

Passage 1

a) comment s'appellent les deux personnes qui parlent?

b) pourquoi est-ce que l'homme ne pourrait pas 'lui envoyer un message?

c) Ils ont été voisins pour combien de temps ?

d) Pourquoi est l'homme dit qu'il a de la chance?

e)De quoi est-ce qu'il voulait i 'informer ?

Passage 2

Complétez là fiche suivante avec les informations du texte.

a) concours.....professionnel et musique.....

b) membre de pays qui ont participé.....

c) Quand le concours s'est-t-il terminé ?

d) pays gagnants a).....

b).....

Passage 3

a) Dans cette annonce, on a besoin d'un.....parce qu'il y a un..... qui est.....(1.5 pts)

b) la personne qu'on cherche doit se présenter au..... d'information du magasin. (0.5 points)

Passage 4

a) Amasa avait.....pendant le cours d'.....(1 point)

b) Quand l'incident s'est-il passé ?.....(½)

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Quel temps faisait-il ?.....(½)

c) pourquoi est-ce que le professeur l'a puni?

.....(½)

Passage 5

a) Cette conversation passe entre une…….....et une.....(1mk)

b) Identifier deux similitudes entre les produits ?(2mks)

c) Quel produit veut-elle ?(½mk)

Section II

Dictation (5 points)

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.....

.....

.....

Section III

Composition writing.-15 points

In 150-180 words, write in French, a composition on,

Either:

a)En cours de votre voyage pendant les vacances passées vous avez été victime d 'un accident de route. Racontez ce qui s ' est passé. (15 points)

Or :

b) Ce soir –là, à ma grande surprise, quand je suis arrivé(e) chez moi, la porte était fermée……..(15 pts)

.....

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KCSE 2023 PREDICTION EXAMS

SERIES 2 EXAMS

501/2

FRENCH

PAPER 2

TIME: 2¼ HOURS

SIGN: ……

Kenya Certificate of Secondary Education.

FRENCH (501/1)

PAPER 1

FORM FOUR (4)

Time: 2 Hours

FRENCH PAPER 1 AUDIO

https://drive.google.com/file/d/1nHhHousxaf21IN7x3A-WTH1wpUzrGJ46/view?usp=sharing

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KCSE 2023 PREDICTION EXAMS

SERIES 2 EXAMS

501/2

FRENCH

PAPER 2

TIME: 2¼ HOURS

NAME…… ADM NO; ……

CLASS…… DATE……

Kenya Certificate of Secondary Education.

(Reading Comprehension, Grammar and Composition)

Instructions to Candidates

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

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

*(c) This paper has **three** sections*

*(d) Answer **all** the questions in the spaces provided.*

(e) Candidates should answer the questions in French

For Examiner's use only

Section	Maximum Score	Candidates score
I	15	
II	15	
III	10	
	Total Score	

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PASSAGE I

LES BOISSONS ÉNERGISANTES **(4 points)**

Avez-vous déjà consommé des boissons énergisantes ?

Oui, vous savez de quoi on parle, des marques comme Red Bull, Monster et autres Gorilla. Eh bien, si vous en avez déjà consommé, qu'avez-vous ressenti ? Un regain d'énergie après quelques gorgées ? Des battements de cœur plus rapides ? Peut-être rien du tout ?

En fait, aujourd'hui, nous allons nous intéresser à la question des boissons énergisantes et à leur impact sur les jeunes en général en Suisse et plus particulièrement en 2011, année d'enregistrement de cette émission. Ce pays est assez représentatif de la consommation de ces boissons dans les pays riches et vous apprendrez les raisons qu'ont les jeunes d'en boire, à quelles occasions ils en boivent et l'impact potentiel sur leur santé.

Tristan Senny-Palany

1. Qu'est-qu'une boisson énergissante?

_____

2. Citez quelques boissons énergissantes, du texte.

(a)_____

(b)_____

(c)_____

3. Quel type de population consomme ces boissons le plus? En Suisse?

_____

4. Qui est l'auteur de ce txte-ci?

_____

PASSAGE II **(3 points)**

Lettre à ma meilleure amie

Bonjour Lola,

Comment vas-tu ? Je t'écris de France, où je vis avec ma famille depuis deux mois. Nous allons bien, nous habitons dans une petite maison ancienne avec un très beau jardin. Nous avons de nouveaux amis et nous avons rencontré nos voisins lors d'une soirée festive la semaine dernière.

J'ai fait de gros progrès en français, je le comprends et je sais le parler et l'écrire bien mieux maintenant. Je suis dentiste dans un nouveau cabinet depuis une semaine et j'aime mon travail. Mes collègues sont gentils et m'ont bien accueillie. Comme c'est proche de la maison, je peux y

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aller à pied, c'est très agréable. Mon mari a enfin trouvé une place d'architecte et travaille sur un important projet d'immeuble avec son équipe.

Les enfants travaillent bien à l'école, même si ma fille a quelques difficultés en mathématiques. Mon fils a de bonnes notes en français, c'est sa matière préférée. Il aime beaucoup lire, surtout le soir avant de dormir. Ils se sont fait des copains et sont heureux de vivre en France. Ils parlent encore mieux le français que nous.

Est-ce que ton mari et tes enfants vont bien ? Est-ce que tu travailles toujours à l'agence de voyages ? Donne-moi de tes nouvelles plus souvent !

Je suis heureuse de vous revoir le mois prochain. Nous passerons les fêtes de Noël ensemble.

A bientôt, je t'embrasse.

Sarah

1._____ c'est le déstinataire de cette lettre.

2. Comment va Sarah au travail? Pourquoi?

_____

3. Donnez la raison pourquoi les enfants parlent mieux le français que leurs parents?

_____

PASSAGE III **(4 points)**

Les vêtements

Pour aller au travail, Marc porte une veste, un pantalon, une chemise et une belle cravate rouge. Ses amis trouvent qu'il est très élégant avec son bracelet-montre doré et ses chaussures noires.

Quand il doit rencontrer un client important, Marc n'hésite pas à s'habiller sobrement. Il met son plus beau costume et son chapeau. Il se sent plus à l'aise avec une tenue vestimentaire classique.

Sa secrétaire Lili porte des lunettes. Elle adore mettre sa jupe à fleurs et un chemisier assorti lorsqu'il fait beau. En hiver, elle ne sort jamais sans son parapluie et son écharpe. Elle préfère aussi mettre un pull, des chaussettes en laine, des bottes et ses gants pour ne pas avoir froid aux doigts. Parfois, elle exhibe un joli collier en perles autour du cou qui lui donne une allure très attrayante.

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En été, lorsqu'il fait chaud, Lili et Marc vont à la plage pendant le weekend. Ils mettent des lunettes de soleil, une belle casquette, un T-shirt, des shorts et des sandales. Ils aiment passer des journées ensemble au bord de la mer.

1.La montre de Marc est faite en _____

2.Comment décrire la tenue de Marc?

_____

3. Que fait Lili pour ne pas avoir des doigts froids?

_____

4. _____ c'est le synonyme du mot **plage**.

PASSAGE VI **(4 points)**

La météo - Quel temps fait-il ?

Avec les prévisions météo, on peut savoir quel temps il fera le soir, le lendemain ou dans la semaine. Quand il y a un grand soleil sur la carte, il fera chaud sur la région.

Quand la météo indique un soleil avec des nuages, il y aura peu de soleil et il y aura souvent du vent. Le temps sera gris. S'il y a des nuages avec de la pluie sur la carte, c'est qu'il va pleuvoir et qu'il y a des risques de tempête ou de grêle. Si de la pluie tombe alors qu'il y a du soleil, vous pourrez sans doute observer un arc-en-ciel.

Quand il y a des nuages avec de la neige qui tombe, c'est qu'il va neiger et qu'il peut y avoir du brouillard, des risques de congélation, de la glace et que la température sera très basse. Lorsqu'il y a un éclair avec des nuages et de la pluie, il risque d'y avoir de la foudre et du tonnerre.

1.Comment peut-on savoir s'il va faire très chaud?

_____

2. Du texte, trouvez le synonyme du mot:

- Il y a du vent _____
- Voir _____

3. Quand est-ce qu'on peut observer l'arc-en-ciel?

_____

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4. Donnez deux conséquences de présence du brouillard:

(a) _____

(b) _____

SECTION II: LA GRAMMAIRE

a)Réécrivez les phrases suivantes . **(10 points)**

Exemple: Tu manges la boullie maintenant?

Mais non, je viens _____

Mais non, je viens de la manger.

1.Simula chante. Son Papa entre dans la maison

Hier, quand Simulina chantait, _____

2.Pars!

Il faut que tu _____

3.Avez-vous vu le chat quelque part?

Non, nous _____

4.D'abord ils terminent leurs études et puis ils se marient.

Alors, Ils se marieront quand _____

5.Kintalel n'a pas assez d'argent. Il ne s'achète pas à manger.

Si Kintalel avait assez d'argent, _____

6.Elles disent: "Nous nous amusons à la plage".

Qu'est-ce qu'elles ont dit?

Elles ont dit _____

7.Je parle et je grignote des bonbons en même temps.

Je grignote des _____

8.Qui a ramassé les cahiers?

C'est moi _____

9.Est-ce qu'ils ont déjà pris les photos de marriage?

Oui bien sûr. Ils _____

10. Il n'ayait pas de pluie. Les plantes ont poussé.

Malgré le _____

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b)Remplissez les trous par un SEUL mot. **(3 points)**

Mon oncle a _____ une belle maison _____ se trouve _____ la mer.

_____ les vacances, j'aime _____ aller car _____ m'intéresse trop

_____ passer _____ bons moments à la plage. _____, j'y vais

_____ ma petite sœur qui _____ une vingtaine _____ années.

_____ elle _____ distrait avec ses cousins car ils sont encore jeunes

_____ elle.

c)Rédigez des phrases correspondant aux situations proposées . **(2 points)**

1. Indiquez le chemin d'aller au musée Central

_____

2. Chez le médecin, vous ne vous sentez pas bien. Que dites-vous?

_____

3. Vous vous trompez de numéro de téléphone de votre ami.Excusez-vous.

_____

4. Au restaurant, vous voulez quelque chose à boire. Commandez.

_____

SECTION III: LA RÉDACTION **(10 points)**

In 120 – 150 words, write a composition in French on;

Either,

a)Vous recevez 5 visiteurs chez vous le soir. Faites une recette de ragoût du poulet au riz pour eux.

Or

b) Vous voulez prendre un déjeuner copieux en famille. Faites une recette du poisson à l'ougali.

.....

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KCSE 2023 PREDICTION EXAMS

SERIES 2 EXAMS

501/3

FRENCH

PAPER 3

TIME: 2¼ HOURS

NAME…… ADM NO; ……

CLASS…… DATE……

SIGN: ……

Kenya Certificate of Secondary Education.

SECTION I

Reading Aloud/5

Instructions to Candidates

(a) You will read the text given overleaf.

CARTE A

J'ai vecu une vie très intéressante. Mon enfance était pleine d'histoires amusantes car je vivais chez mes grand-parents, au village et ce village était situé à l'Est du pays. Chaque jour, nous allions à la forêt chercher des fruits indigènes comme les goyaves, les bananes rouges et les cherimoyas. Après, nous rentrions à la maison pour prendre le petit déjeuner y compris des œufs, du pain et de la confiture. De temps en temps, grand-mère nous servait la soupe de poulet mais l'après-midi, nous jouions aux cartes et, bien sûr, c'est grand-père qui gagnait! C'est en juillet que mes grand-parents nous emmenaient à la plage où nous trouvions les héros de natation.

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SECTION I

Reading Aloud/5

Instructions to Candidates

(a) You will read the text given overleaf.

CARTE B

J'ai eu une vie très animée pendant mon enfance. J'habitais avec mes grand-parents qui se trouvaient à la campagne, vers l'Ouest du pays. Le matin, nous faisions de la marche dans la forêt a fin de chercher les fruits rares tels que les goyaves, les cherimoyas et les bananes rouges. Durant quelques instants, nous mangions la soupe de bœuf, faite par Nina notre cousine, moins âgée que moi-même. Donc, pendant le jour, on jouait aux echecs, le sport favori de mon grand-père. Alors, il gagnait tous les matchs! En juillet, mes grand-parents organisaient les tours vers la mer où nous devions jouer au handball avec de vrais champions.

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SECTION II

Exposé/5

Instructions to Candidates

(a) You will talk on the topic given overleaf.

(b) You will have ***ten*** minutes to prepare the tasks.

(c) You will have ***two*** minutes to talk about the topic

EXPOSE

CARTE A

La pollution est la cause majeure du réchauffement climatique. Qu'en pensez-vous?

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SECTION II

Exposé/5

Instructions to Candidates

(a) You will talk on the topic given overleaf.

(b) You will have ***ten*** minutes to prepare the tasks.

(c) You will have ***two*** minutes to talk about the topic

EXPOSE

CARTE B

Le tourisme est la colonne vertébrale du pays. Quel est votre avis?

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SECTION II

Exposé/5

Instructions to Candidates

(a) You will talk on the topic given overleaf.

(b) You will have ***ten*** minutes to prepare the tasks.

(c) You will have ***two*** minutes to talk about the topic

EXPOSE

CARTE C

L'école interne est meilleure que l'école externe. Qu'en pensez-vous?

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SECTION II

Exposé/5

Instructions to Candidates

(a) You will talk on the topic given overleaf.

(b) You will have ***ten*** minutes to prepare the tasks.

(c) You will have ***two*** minutes to talk about the topic

CARTE D

Les réseaux sociaux sont indispensables de nos jours. Donnez votre avis.

SECTION III

CONVERSATION/15

Instructions to Candidates

(a) You will have a dialogue with the examiner.

(b) The examiner will ask you questions on various topics, at least 5 questions.

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(c) You are expected to respond to the questions asked without changing the topic.

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KCSE 2023 PREDICTION EXAMS

SERIES 2 EXAMS

314/1

ISLAMIC RELIGIOUS EDUCATION

PAPER 1

TIME: 2½ HOURS

NAME…… ADM NO; ……

CLASS…… DATE……

Kenya Certificate of Secondary Education.

314/1

ISLAMIC RELIGIOUS EDUCATION

PAPER 1

TIME: 2½ HOURS

INSTRUCTIONS TO CANDIDATES

- ***a)*** *Write your name, school and index number in the spaces provided above.*
- ***b)*** *Write the date of examination and sign in the spaces provided above.*
- ***c)*** *This paper consists of **six** questions.*
- ***d)*** *Answer any **five** questions in the answer booklet provided.*

FOR EXAMINER'S USE ONLY

Question	1	2	3	4	5	6	TOTAL SCORE
Candidates Score							

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*Answer any **five** questions*

1 a. Explain the relevance of narrating stories of the prophet in the Holy Quran**.** **(6marks)**

b. Discuss the factors that will strength peace and cohesion in the society according to suratul hujurat **(8marks)**

c. State six reasons why the Quran was revealed in **bits** **(6 marks)**

2a. Outline ways through which the Qur'an has been protected from interpolation**.** **(8marks)**

b. Why was Zaid bin Thabit placed in charge for the compilation of the Qur'an. **(5 marks)**

c. State where the surah was revealed. **(7 marks)**

i) Suratul Alaq –

ii) Suratul Asr –

iii) Suratul Nasr –

iv) Suratul Fiil –

v) Suratul Baqara –

vi) Suratul Nur –

vii) Suratul Hujurat –

3a. Discuss the contribution of Hadith to the Development of Islamic culture. **(7marks)**

b. Enumerate Methods used by Imam Bukhari in the compitation of Sahih Bukhari. **(7marks)**

c. The prophet said seeking knowledge is an obligation on every Muslim. In what ways muslims in Kenya have practiced the saying about the acquisition of knowledge. **(6marks)**

4a.Differentiate between hadith Qudsi and hadith an Nabawwi**.** **(6 marks)**

b. The prophet saw said "whoever is merciful even to a sparrow that he slaughter Allah will be merciful to him on the day of judgment. In light of this hadith and other on caring of animals. Explain the Islamic teaching of the Hadith on the care for animals**.** **(8marks)**

c. Explain the four forms of hadith **(4marks)**

5a.Discuss the factors that led to the development of school of thought (madhahibs**).(8 marks)**

b. Describe the performance of swalatul musafir**.** **(8marks)**

c. Significance of the concept of Tawba in Islam. (**4 marks)**

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6 a. Explain the three times of Tawheed**.** **(6 marks)**

b. Gives the reasons for the revelation of Divine books of Allah**.** **(7 marks)**

c. Outline the significance of Qadha and Qadar to a muslim. **(7 marks)**

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KCSE 2023 PREDICTION EXAMS

SERIES 2 EXAMS

314/2

ISLAMIC RELIGIOUS EDUCATION

PAPER 2

TIME: 2½ HOURS

NAME…… ADM NO; ……

CLASS…… DATE……

Kenya Certificate of Secondary Education.

314/2

ISLAMIC RELIGIOUS EDUCATION

PAPER 2

TIME: 2½ HOURS

INSTRUCTIONS TO CANDIDATES

a) *Write your name, school and index number in the spaces provided above.*
b) *Write the date of examination and sign in the spaces provided above.*
c) *This paper consists of **six** questions.*
d) *Answer any **five** questions in the answer booklet provided.*

FOR EXAMINER'S USE ONLY

Question	1	2	3	4	5	6	TOTAL SCORE
Candidates Score							

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*Answer any **five** questions*

1. (a). Discuss the measures put by Islam to guard the society against zinaa. (**10 marks)**

(b) State the manners of visiting the toilet according to Islam. **(5 marks)**

(c) What is the rationale for the prohibition of *Israf*? **(5 marks)**

2. (a) State the conditions for *nikah*. **(5 marks)**

(b) Identify reasons that may force a husband and wife to divorce each other **(7 marks)**

(c) Explain the different types of eddat in Islam **(8marks)**

3. (a) Identify **five** illegal ways of earning money according to Islam. **(5marks).**

(b) Give the conditions that an agreement has to fulfill for it to be binding to two Parties according to Islam**.** **(8mks)**

(c) Describe the Islamic teachings on co-existence with non-Muslims. **(7 marks)**

4. (a) Explain **five** challenges Kenyan Muslims face in education. **(10mks)**

(b) Give reasons why Sayyidina Uthman Ibn Affan was elected Caliph **(5marks)**

(c) Mention **five** contributions of Caliph Umar bin Khattab to the development of Islam**.(5marks)**

5. (a) Mention the contribution made by the Abbasids to education. **(6marks).**

(b) Explain ways through which Prophet Muhammad (p.b.u.h) eliminated racism. **(7marks)**

(c) Discuss the factors that led to the fall of the Ummayads **(7marks)**

6. (a) Discuss four ways in which Islamic culture has influenced the Kenya society**.(8 marks)**

(b) State Ibn Khaldun's views in education. **(7marks)**

(c) Identify five contributions of Ibn Sina to medicine. **(5 marks)**

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THE END

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For Marking Schemes,

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