KCSE 2024 PREDICTION

ALL SUBJECTS

SERIES 1

Series 1 of Possible Questions and Testable Areas likely to be examined in the forthcoming Final Exams.This provides a framework and means of illumination to guide our candidates in preparation for the KCSE Examinations scheduled for November 2024

SUBJECTS PREDICTED;

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

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CONFIDENTIAL

For Marking Schemes

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

SUCCESS TO ALL CANDIDATES

KCSE 2024 PREDICTION EXAM

POSSIBLE SERIES 1

231/1

BIOLOGY

PAPER 1 (THEORY)

TIME: 2 HOURS

NAME……

SCHOOL…… SIGN……

INDEX NO…… ADM NO……

(Kenya Certificate of Secondary Education)

INSTRUCTIONS TO CANDIDATES:

(a) *Write your name and Index Number in the spaces provided.*

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

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

(d) *Wrong spelling especially of technical terms will be penalized.*

FOR EXAMINER'S USE ONLY

QUESTION	MAX. SCORE	CANDIDATE SCORE
1 – 33	80	

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1. Name the hormone that is responsible for the development of a deep voice in humans. **(1 mark)**

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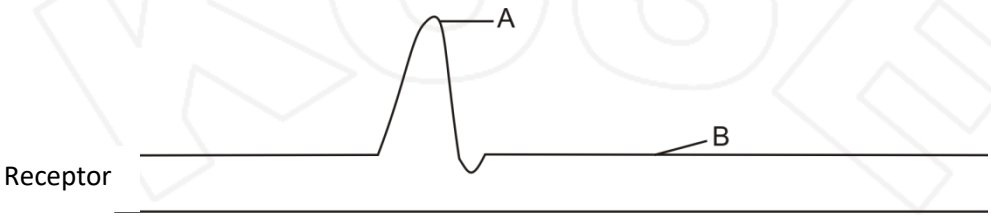
2. a) Name the bacteria found in the root nodules of leguminous plants. **(1 mark)**

……

b) What relationship is shown by the bacteria and the leguminous plant. **(1 mark)**

……

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



(a) On the diagram show the direction of impulse transmission **(1mark)**

(b) State the potential at which parts A and B are: **(2marks)**

A……

B……

4. Fats produce high amount of energy on oxidation yet they are not the main respiratory substrate. Explain. **(2marks)**

……

……

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5. Distinguish between members of class Monocotyledonae and Dicotyledonae under the following headings

(i) Leaf petiole **(1mark)**

……

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(ii) Floral parts **(1mark)**

……

……

6. (a) Define continental drift as used in evolution **(2marks)**

……

……

……

(b) What is meant by the term homologous structure **(1mark)**

……

……

7. Name the gamete cells that are produced by ovaries. **(1 mark)**

……

8. Give the importance of mosaic leaf arrangement. **(1 mark)**

……

……

9. Identify the genetic disorders in man, characterized by the symptoms described in (a) and (b) below.

(a) Inability to distinguish between blue and green colour and various shades of red. **(1 mark)**

……

(b) Blood takes an abnormally long time to clot **(1 mark)**

……

10. Name the fins that prevent the following movements of fish during swimming. **(3marks)**

i) Yawing……

ii) Pitching……

iii) Rolling……

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

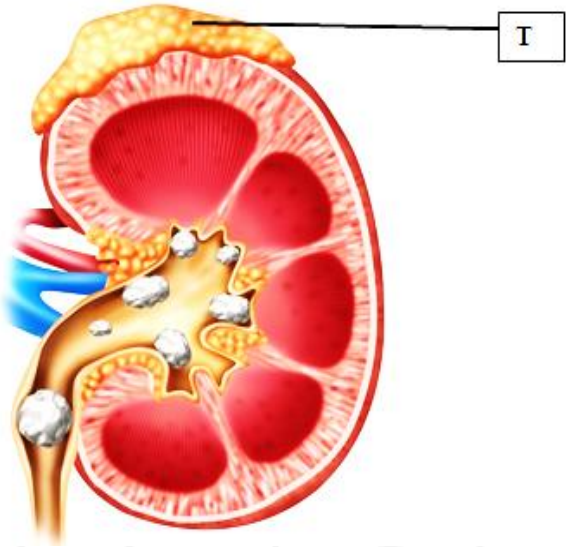
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12. An investigation was carried out on a mammalian kidney.



i. Name the structure labeled **T.** **(1mark)**

……

ii. What is the function of the structure named in (i) above in the kidney? **(1mark)**

……

……

iii. Identify the disease shown in the kidney above. **(1mark)**

……

13. .a) Name the part of the eye where image is formed**.** **(1mark)**

……

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b) State **two** characteristics of the image formed on the retina. **(2marks)**

……

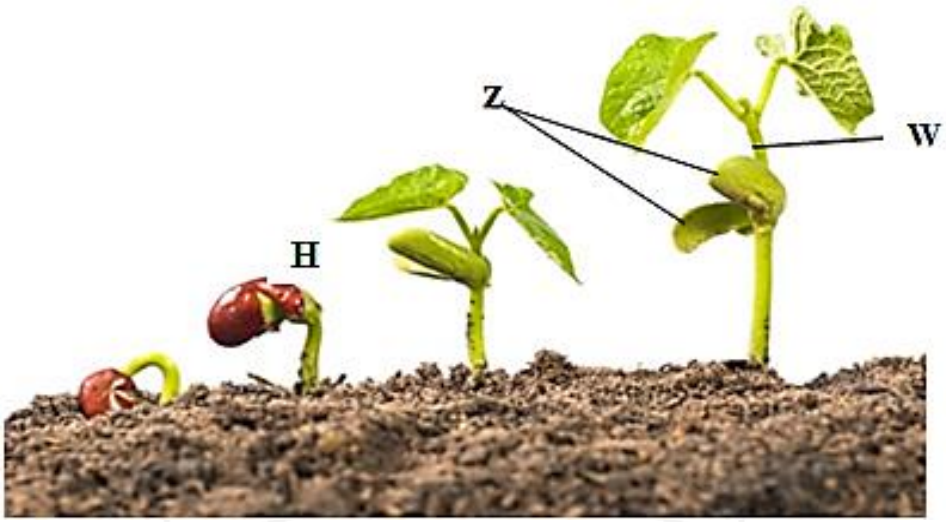
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14. Name:

a) A cell in the human body that lacks mitochondria……**(1mark)**

b) A kingdom whose members lack mitochondria……**(1mark)**

15. Below is a photograph illustrating a germinating seedling.



a) Identify the type of germination. **(1mark)**

……

b) Give **two** functions of the structure labeled **Z?** **(2marks)**

……

……

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c) What name is given to the part labeled **W**? **(1mark)**

……

16. Name the cell structures that synthesize the following cell organelles

(i) Ribosomes…… **(1mark)**

(ii) Lysosomes…… **(1mark)**

17. A solution of sugarcane was boiled with hydrochloric acid then cooled. Sodium carbonate was added then Benedict's solution. The solution was boiled and an orange precipitate was formed.

(a) Why was the solution boiled with hydrochloric acid? **(1mark)**

……

(b) To which class of carbohydrates does sugarcane belong? **(1mark)**

……

(c) Name the type of reaction that takes place when:

(i) Simple sugars combine to form complex sugars **(1mark)**

……

(ii) A complex sugar is broken down into simple sugars **(1mark)**

……

18. Name the most appropriate apparatus used to collect the following organisms **(2 marks)**

a) Mosquitoes……

b) Millipede……

19. a) Name a chemical that can be used to preserve specimens in the laboratory. **(1mark)**

……

b) Identify two scientific skill acquired through the study of biology **(2mark)**

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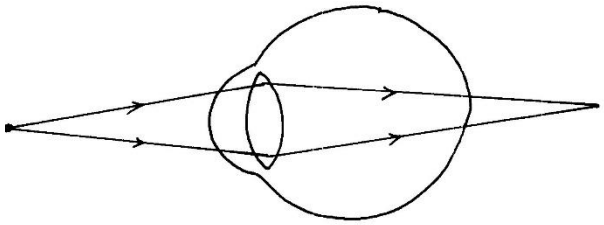
20. Explain why petals and sepals are referred to as the accessory parts of a flower **(1marks)**

……

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21. The diagram below shows the position of an image formed in a defective eye.



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

……

(b) Explain how the defect named in (a) above can be corrected. **(2marks)**

……

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22. Describe photolysis **(2marks)**

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……

23. Name **two** instruments used in the laboratory for magnification. **(2marks)**

……

……

24. Give reasons why microscopic sections require to be: **(2marks)**

(a) Very thin ……

(b) Kept wet during processing……

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25. State **two** sites for gaseous exchange in submerged aquatic plants **(2marks)**

……

……

26. Explain why a person can catch a cold several times in an year but only catches measles once in his/her lifetime**.** **(3marks)**

……

……

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27. (a) Name the structure for gaseous exchange in insects **(1mark)**

……

(b) Explain the role of chitin ring found in the tracheal system of insects **(1mark)**

……

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(c) Why does the blood of insects lack haemoglobin? **(1mark)**

……

……

……

28. Under what conditions do animals use tissue proteins for respiration? **(1mark)**

……

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29. Name **three** processes in the human body in which homeostasis is involved **(3marks)**

……

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……

30. Name **two** classes of animals that excrete their nitrogenous waste products mainly in the form of uric acid. **(2marks)**

……

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31. State **three** adaptations of the gazelle that prevents them from being preyed upon **(3marks)**

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32. In rice field, weeds are normally removed by hand when rice plants are still young. One common weed in rice fields is a species of barnyard grass which has a close resemblance to young rice plants. Unlike most other weeds, this species spreads very fast wherever it is newly introduced.

(a) What adaptive variation confers a selective advantage to this species of barnyard grass?**(1mark)**

……

……

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(b) Explain why the weed spreads very fast. **(2marks)**

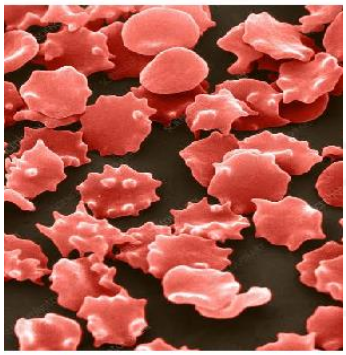
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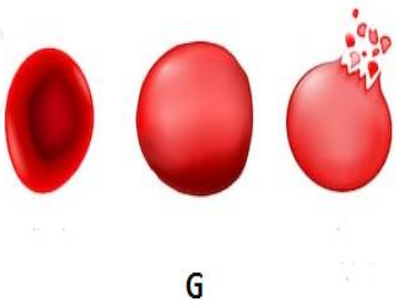
33. The photograph below shows red blood cells that have been put in different solutions. Examine them and answer the questions that follow.



E



F



G

(a) (i) Identify the type of solution in which F was placed. **(1mark)**

……

ii) State the process which the red blood cells underwent in illustration G. **(1mark)**

……

(b) Account for the appearance of the red blood cells in illustration E. **(3marks)**

……

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KCSE 2024 PREDICTION EXAM

POSSIBLE SERIES 1

231/2

BIOLOGY

PAPER 2 (THEORY)

TIME: 2 HOURS

NAME……

SCHOOL…… **SIGN**……

INDEX NO…… **ADM NO**……

(Kenya Certificate of Secondary Education)

INSTRUCTIONS TO STUDENTS

- *Write your name and admission number in the spaces provided above*
- *Sign and write the date of examination in the spaces provided above*
- *This paper consists of **TWO** sections **A** and **B.***
- *Answer **ALL** questions in section **A** in the spaces provided*
- *In section **B** answer **question 6 (compulsory)** and either question **7** or **8** in the spaces provided after question 8*

FOR EXAMINERS USE ONLY

Section	Question	Maximum score	Candidate score
A	1	8	
	2	8	
	3	8	
	4	8	
	5	8	
B	6	20	
	7	20	
	8	20	
	TOTAL	**80**	

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SECTION A (40 MARKS)

1. In a breeding experiment a pure breed black mouse was crossed with a pure white one. All F_1 off springs were grey in color. Using letter **B** to represent the gene for black color and **W** to represent the gene for white color:

a) Give the parental genotypes. **(1mark)**

……

……

b) If F1 offsprings were selfed, use a genetic cross to show the phenotypic ratio of F_2 generation. **(5marks)**

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c) Explain the presence of the grey color from the cross between a black and white mouse. **(1marks)**

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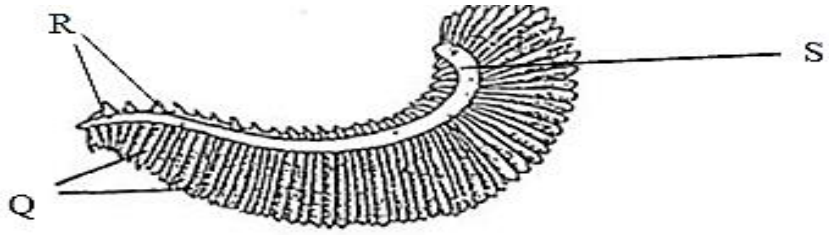
d) Give **one** disadvantage of inbreeding in animal breeding. **(1 mark)**

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2. The diagram below represents an organ from a bony fish. Study it and answer the questions that follow.



a) Identify the organ. **(1 mark)**

……

b) Name the part labelled **R** and **S**. **(2 marks)**

……

……

c) State **two** ways in which the structures labelled **Q** are adapted to their function. **(2 marks)**

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d) Name the structure that is found covering the organ shown above. **(1 mark)**

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e) Blood in the capillaries of the gill filaments and water flow in opposite direction. Explain the significance of this. **(2marks)**

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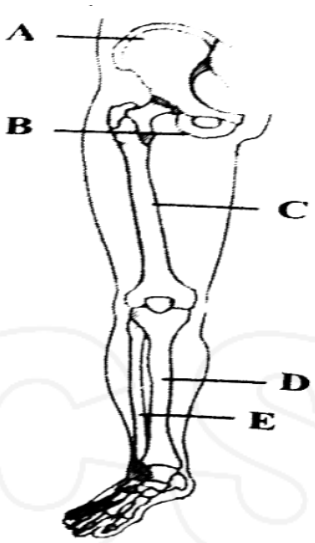
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3. The diagram below shows the bones in a human leg. Study it and answer the questions that follow.



a) Name the bone **B** and **C**. **(2 marks)**

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……

b) Name the joint that is formed at the proximal end of bone **C** **(1 mark)**

……

c) State the function of the structure labelled **A**. **(1 mark)**

……

d) Name the bones that articulates with bone **C** at its distal end. **(2 marks)**

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e) Distinguish between a tendon and a ligament. **(2 marks)**

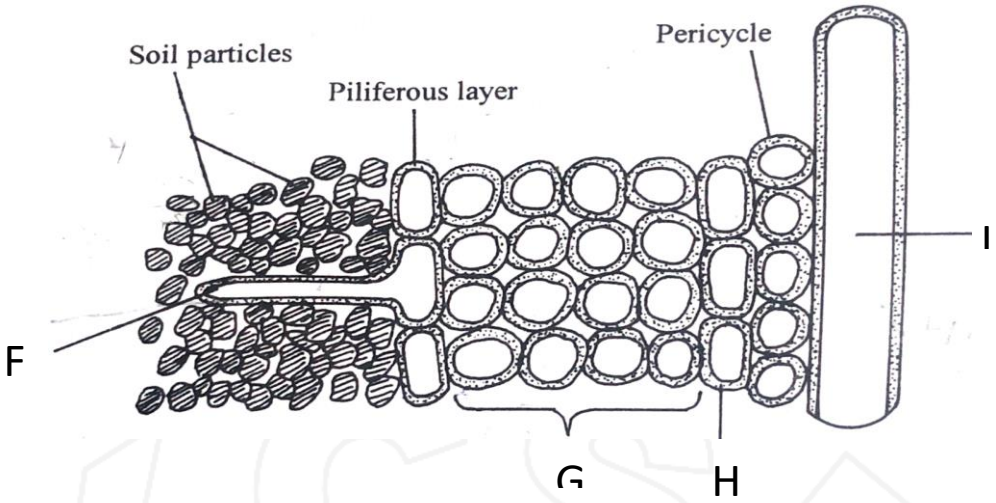
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4. The diagram below shows part of a longitudinal section of a young root.



a) Name the structure **G** and **H**. **(2 marks)**

……

……

b) State **two** ways in which structure **F** is adapted to its function. **(2 marks)**

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c) Describe how water from the soil reaches structure **J**. **(4marks)**

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5. a) A person had an accident that damaged some part of the brain. Name the part of the brain that was damaged that resulted in the following symptoms:

i) Inability to regulate body temperature **(1 mark)**

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ii) Loss of memory **(1 mark)**

……

b) State **two** differences between simple reflex and conditioned reflex **(2 marks)**

……

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c) State the role played by the following substances during nerve impulse transmission

i) Acetylcholine **(1 mark)**

……

ii) Cholinesterase **(1 mark)**

……

d) Give **two** differences between a motor neuron and relay neuron. **(2 marks)**

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SECTION B (40 MARKS)

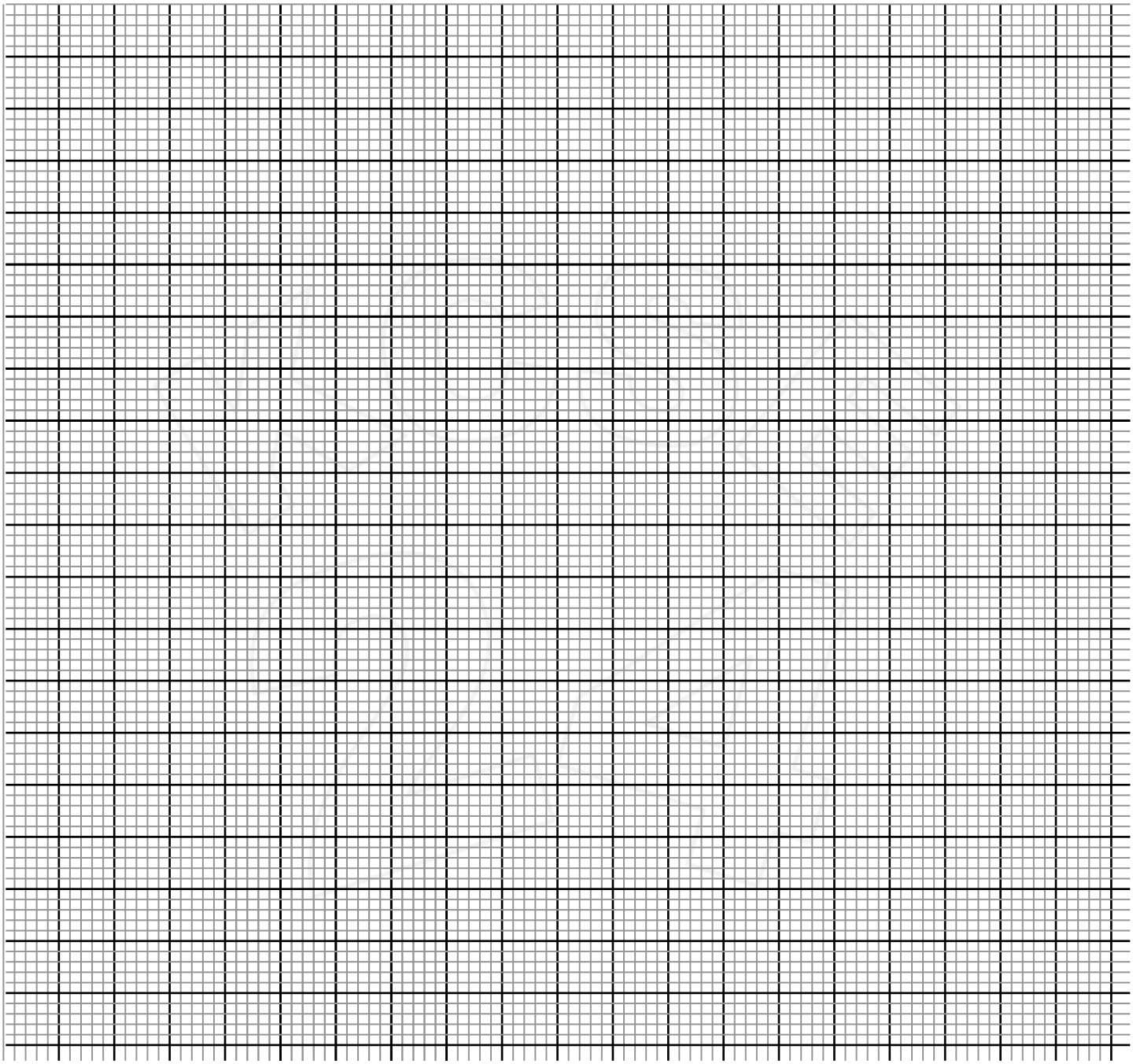
Answer question 6 (compulsory) and either question 7 or 8

6. An experiment was set up to investigate how body temperature of a student vary with different temperature conditions of the environment. The data was tabulated as shown below.

Environmental temperature (^{0}C)	0	5	10	15	20	25	30	35	40	45
Frog's body temperature (^{0}C)	5	5	10	15	20	25	30	35	40	43
Student's body temperature (^{0}C)	37	38	37	38	37	38	37	38	38	37

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a) Using the same axis, draw graphs of the body temperature of student and frog against environmental temperature. **(7 marks)**



b) At what temperature was the body temperature of the student and frog the same? **(1 mark)**

……

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c) Account for the shape of the graph for:

i) The frog **(2 marks)**

……

……

……

……

ii) The student **(2 marks)**

……

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……

……

d) State **three** changes that take place in the skin of the student as the environmental temperature rises. **(3 marks)**

……

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e) State **two** ways in which the frog regulates its body temperature when the environmental temperature is low. **(2 marks)**

……

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f) Give **two** advantages the student has over the frog. **(2 marks)**

……

……

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g) Name the part of the body that detects the internal temperature of the body. **(1 mark)**

.....

7. a) Describe the digestion and absorption of a starchy food **(15 marks)**

b) Describe adaptations of hydrophytes to their habitats. **(5 marks)**

8. a) Describe the structure and function of the male reproductive system. **(15 marks)**

b) Explain the role of water in germination. **(5 marks)**

KCSE 24

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KCSE 2024 PREDICTION EXAM

POSSIBLE SERIES 1

231/3

BIOLOGY

PAPER 3 (PRACTICAL)

TIME: 1¾ HOURS

SCHOOL…… SIGN……

INSTRUCTIONS TO SCHOOL (CONFIDENTIAL)

Each student shall be provided with the following

- Specimen P: A quarter piece of ripe medium size pineapple
- 10ml of Solution Y: Commercially prepared pineapple juice diluted with water at the ratio of 1:2 (e.g. quencher, highlands or any other)
- Specimen D and E: Are from the same Dicotyledonous plant with herbaceous stem and roots ;Specimen D is fresh while E should have been uprooted and exposed to sunlight for at least 24hrs to wilt.
- 10ml measuring cylinder
- A filter paper
- A filter funnel
- 5 test tubes in a rack
- A 50ml empty beaker
- 3 droppers
- Test tube holder

Access to the following:

- Benedict's solution
- 1% copper (II) Sulphate solution with dropper
- 10% Sodium Hydroxide solution with dropper
- 0.01% DCPIP solution with dropper
- 0.1 % Ascorbic acid
- Distilled water in a wash bottle
- Source of heat

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KCSE 2024 PREDICTION EXAM

POSSIBLE SERIES 1

231/3

BIOLOGY

PAPER 3 (PRACTICAL)

TIME: 1¾ HOURS

NAME……

SCHOOL…… SIGN……

INDEX NO…… ADM NO……

(Kenya Certificate of Secondary Education)

INSTRUCTIONS TO CANDIDATES

- *Write your name and index number in the spaces provided*
- *Sign and write the date of examination in the spaces provided above.*
- *Answer all questions in the spaces provided in the question paper.*
- *You are required to spend the first 15 minutes of the time allowed for this paper reading the whole paper before commencing your work.*
- *Answers **MUST** be written on the spaces provided after each question.*
- *Candidates may be penalized for recording irrelevant information and incorrect spelling especially of technical terms.*

FOR EXAMINERS USE ONLY

QUESTION	Max Score	Candidate Score
1	20	
2	11	
3	09	
TOTAL SCORE	40	

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1. (a) You are provided with:

- Specimen **P**,
- Solution **Y**,
- DCPIP,
- 0.1 percent Ascorbic acid.

i) To 1 cm^3 of DCPIP in a test tube, add 0.1 percent solution of Ascorbic acid dropwise; shake the test tube after addition of each drop until color of DCPIP disappears. Record the number of drops used in the table below.

ii) Repeat the procedure using solution **Y** and record the number of drops used in the table below.

iii) Squeeze out the juice from specimen **P** into a beaker, decant, and discard the residue.To another 1cm^3 of DCPIP, add the juice from specimen **P** drop by drop until the color of DCPIP disappears. Record the number of drops used. Spare the remaining juice of Specimen **P** for procedure (c) below.

Substance	**Number of drops**
Ascorbic acid	
Solution Y	
Specimen P	

(3marks)

iv) From the results obtained in a (i) and (iii) above, calculate the percentage of ascorbic acid in the juice obtained from specimen P. Show your working. **(2 marks)**

……

……

……

……

v) State two factors that would influence the accuracy of the results **(2 marks)**

……

……

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vi) Suggest the expected results if the juice from specimen P was boiled for 40 min, cooled and added drop by drop to DCPIP solution. **(1 mark)**

vii) Explain the expected results in (vi) above **(2 marks)**

(b). Between Specimen P and solution Y, which do you recommend for treatment of scurvy. Give a reason for your answer. **(2marks)**

(c). i) Using the reagents provided carry out food test to determine other food present in juice of **P** besides Ascorbic acid. **(6marks)**

Food substances	**Procedure**	**Observations**	**Conclusion**
Proteins			
Reducing sugars			

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ii) In which regions of alimentary canal will juice of specimen P be absorbed. **(2marks)**

……

……

……

2. You are provided with specimen **D** and **E** that are specimens of the same plant

a) Using observable features group the specimen into

i) Division…….……. (1mark)

Reason…….…….(1mark)

ii)Class……(1mark)

Reason……..…… (1mark)

b) Press the stem of specimen **D** hard with a finger repeatedly until the stem is crushed. Record the observation.

i) Observation **(1mark)**

ii) Name the type of stem in specimen D **(1mark)**

c) Specimen **D** is the same plant as specimen **E**. E has been exposed to sunlight for 24hrs.

i) Name the phenomenon in exhibited by **E** **(1mark)**

ii) Explain how the phenomenon occurred. **(2marks)**

iii) Name the support tissue in the specimens D and E **(1mark)**

iv) Other than the support tissue mentioned in (iii) above, how else do plants with this type of stem obtain mechanical support. **(1mark)**

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3.Below are images of parasite that infest human body. Use it to answer the question that follow.



i) Name the parasite and give a reason. **(2marks)**

ii) Which part of alimentary canal does the mature parasite infest? **(1mark)**

iii) State two effects of the above parasite infestation to humans. **(2marks)**

iv) How is the parasite adapted to the parasitic mode of nutrition? **(3marks)**

v) Name any other parasitic worm in human beings **(1mark)**

END

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KCSE 2024 PREDICTION EXAM

POSSIBLE SERIES 1

233/1

CHEMISTRY

PAPER 1 (THEORY)

TIME: 2 HOURS

NAME……

SCHOOL…… SIGN……

INDEX NO…… ADM NO……

(Kenya Certificate of Secondary Education)

INSTRUCTIONS TO CANDIDATES

- *Write your name, admission number in the spaces provided above*
- *Answer all the questions in the spaces provided*
- ***KNEC** Mathematical tables and silent electronic calculator may be used.*
- *All the working must be shown clearly where necessary*
- *Candidates should answer questions in English.*

FOR EXAMINER'S USE ONLY

Question	Maximum Score	Candidate's Score
1-29	80	

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1. a) Bauxite is the chief ore found in the extraction of Aluminium. **Name** two impurities found in bauxite **(2mks)**

……

……

b) **Name** the chief ores of both zinc and copper **(1mk)**

i.zinc ……

ii.copper ……

2. a) Identify the products formed when dinitrogen tetra oxide is dissolved in water **(2mks)**

……

……

b) Write the balanced **equation** for the reaction above **(1mk)**

……

……

3. State one use of the following substances **(3mks)**

i. $AgBr$……..

ii. $CaSO_4.XH_2O$……

iii. Tincture of iodine……..

4. The grid below represents part of the periodic table .**Study it** and answer the questions that follow .The letters given do not represent the actual symbols of the elements.

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

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i. **Select** the element that can form a divalent anion **(½mk).**

……

ii. **Name** type of **structure** would the oxide of C have? **(½mk).**

……

iii. How does the **melting point** of A compare with that of E? **(½mk).**

……

……

iv. **2.6 g** of B reacts completely when heated with 2.42 litres of chlorine gas (Cl_2) at s.t.p, **calculate** the relative atomic mass of B.(1 mole of gas occupies 22.4 litres at s.t.p.) **($1\frac{1}{2}$mk).**

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5. **Explain** the differences in bleaching properties of chlorine and sulphur (use equations where necessary) **(3mks)**

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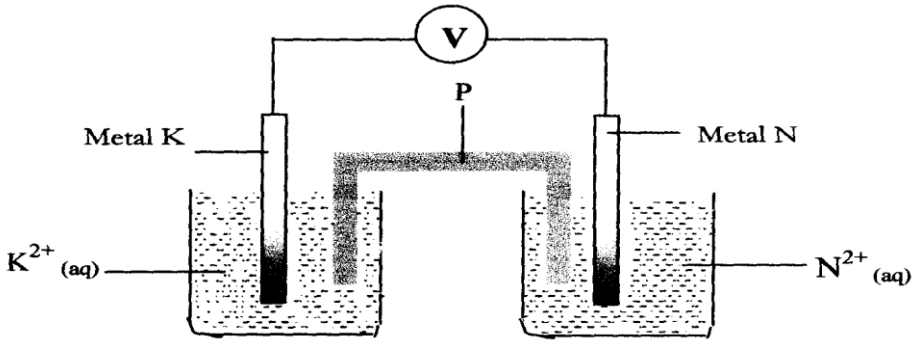
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6. Metals **K** and **N** were connected to form a cell as shown in the diagram below. Their reduction potentials are as shown below:

$K^+_{(aq)} / K_{(s)} \equiv - 0.17V$

$N^+_{(aq)} / N_{(s)} = + 1.1\ 6V$



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i. **P** is made by dipping a filter paper in a solution of sodium nitrate, on the salt bridge **show** the direction of flow of ions **(1mk)**

ii. On the diagram, **show** the flow of electrons **(1mk)**

iii. **Write** the equation for the half-cell reaction that occurs at **(1mk)**

Metal **K** electrode.....

Metal **N** electrode.....

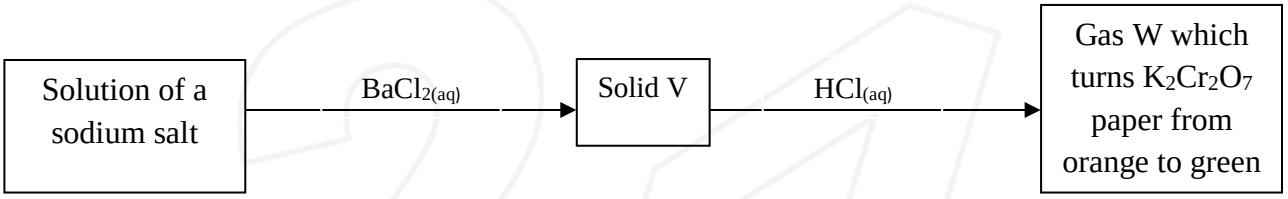
7. Write equations for the reactions between the following metals and steam. **(3mks)**

Iron……

Zinc……

Copper……

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



a. Name **(1mk)**

i. Solid V …….....

ii. Gas W ……

b. **Describe** a chemical test for chloride ions **(2mks)**

……

……

……

9. Starting with ethanol, describe how a sample of tetrachloroethane can be prepared **(3mks)**

……

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10. A solution of bromine in water is a chemical reaction in equilibrium. The reaction involved is represented by the equation below;

$Br_{2(aq)} + H_2O_{(l)} \longleftrightarrow 2H^{+(aq)} + Br^{-}_{(aq)} + OBr^{-}_{(aq)}$

Yellow **Colourless**

i. **State** and explain the observation made when dilute sulphuric (VI) acid is added to the mixture at equilibrium. **(2mks)**

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……

……

ii. **Define** the term dynamic equilibrium **(1mk)**

……

……

11. Apart from downward delivery **name** another method that can be used to collect the following gases **(2mks)**

Nitrogen (IV) oxide ……..

Sulphur(VI) oxide …….

ii) **Name one** gas that can be dried using anhydrous calcium oxide **(1mk)**

……

12. Starting with magnesium metal **describe** how a sample of magnesium carbonate can be prepared. **(3mks)**

……

……

……

……

……

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13. With aid of **well labelled diagrams** show how a sample of sodium chloride, iodine and sand can be separated **(3mks)**

14. Explain the following **(3mks)**

i. Why number of protons and electrons are equal in an atom

……

……

ii. The role of neutrons in the nucleus of an atom

……

……

iii. Cations are positively charged

……

……

15. (a)In an experiment 10.6g of a mixture of a anhydrous Sodium Carbonate and Sodium chloride were dissolved in water to make 100cm^3 of solution .25cm^{3}of this solution required 20cm^3 of 1M Hydrochloric acid solution for complete neutralization.

(i) Calculate the number of moles of Hydrochloric acid used **(1mk)**

……

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(ii) **Write** a balanced equation for the above reaction. **(1mk)**

……

……

(iii) **Calculate** the mass of Sodium Carbonate in 25 cm^3 of this mixture. **(1mk)**

……

……

……

16. Briefly **describe** how caffeine can be extracted from tea leaves. **(3mks)**

……

……

……

……

17. State the two roles of platinised-platinum in a standard hydrogen electrode **(2mks)**

……

……

……

……

18. Explain the following **(3mks)**

i. Yellow phosphorus is stored under water

……

……

ii. Sodium is stored under paraffin oil

……

……

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iii Lime water and not potassium hydroxide is used to test for carbon(iv) oxide

……

……

18. Study the information below and use it to answer the questions that follow

ΔH^{θ}lattice $=MgCl_2$ $-2477 kjmol^{-1}$

ΔH^{θ} hydration Cl^{-1} (aq) $-363 kjmol^{-1}$

ΔH^{θ} hydration Mg^{+2} (aq) $-1891 jmol^{-1}$

i. Differentiate between hydration energy and lattice energy? **(1mks)**

……

……

……

ii Calculate the heat of solution of Magnesium Chloride **(2mks)**

……

……

……

……

19. Nylon 6,6 is formed from two monomers, hexan-1,6-dioic acid(adipic acid) and hexan-1,6-diamine (hexamethylene diamine) through condensation polymerisation as shown in the diagrams below .



adipic acid hexamethylene diamine

a. Define condensation polymerisation **(1mk)**

……

……

……

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b. Write the equation for the formation of Nylon 6,6 **(2mks)**

……

……

……

20. According to Bronsteäd-Lowry theory**, define** an acid **(1mk)**

……

……

$NH_{3(aq)} + H_2O_{(l)} \longrightarrow NH_4^+{}_{(aq)} + OH^-{}_{(aq)}$

Identify the species that acts as;

i) A base.……

Explain

……..**(1mks)**

ii) An acid. …….

Explain……..**(1mk)**

21. a) **Explain** how painting prevents iron from rusting **(1mk)**

……

……

b. Apart from protection from rusting **state** another reason for electroplating **(1mk)**

……

……

c. What is sacrificial protection , use an example to **explain** your answer. **(2mks)**

……

……

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22. The structure of $RCOO^-Na^+$ below represents a type of cleansing agent. **Describe** how the cleansing agent removes grease from a piece of cloth. **(3mks)**

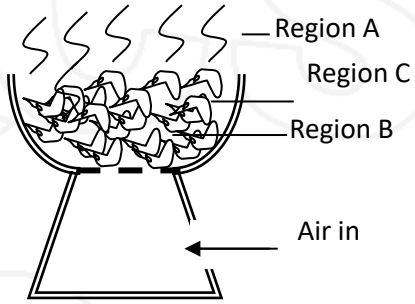
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23. The diagram below represents a 'jiko' when in use .Study it and answer the questions that follow.



(i)**Write** equations for the reactions that occur in region

I: B **(1 mk)**

……

II: C **(1 mk)**

……

(ii) Explain what happens in region A. **(1 mks)**

……

……

24. A compound contains 82.75% carbon and the rest is Hydrogen. (C=12, H=1)

(a) Determine its empirical formula. **(2 Mrks)**

……

……

……

……

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(b) Determine the molecular formula if its molecular mass is 58. **(1 Mks)**

……

……

……

……

25. Determine the oxidation state of ***manganese*** in the following; **(3mks)**

$KMnO_4$

……

Mn_2O_3

……

26. Explain why the melting point of magnesium oxide is 3080°C while that of carbon IV oxide is -79°C. **(2mks)**

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KCSE 2024 PREDICTION EXAM

POSSIBLE SERIES 1

233/2

CHEMISTRY

PAPER 2 (THEORY)

TIME: 2 HOURS

NAME……

SCHOOL…… **SIGN**……

INDEX NO…… **ADM NO**……

(Kenya Certificate of Secondary Education)

INSTRUCTIONS

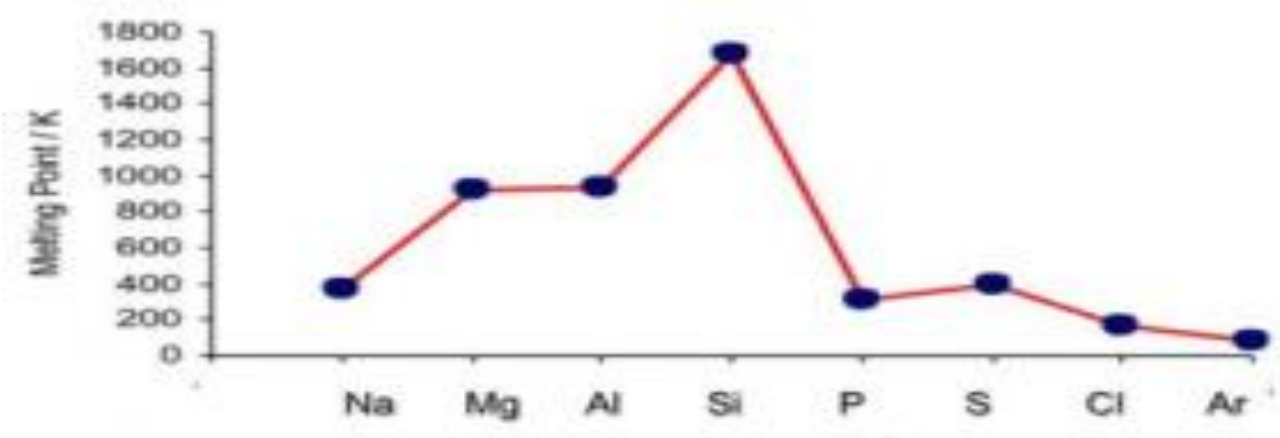
1. *Write your name and index number in the space provided*
2. *Answer all the questions in English*
3. *Sign and write the date of examination in the space provided above*
4. *Answer all questions in the space provided after each question*
5. *Mathematical tables and electronic calculators may be used*
6. *All working must be clearly shown where necessary*

QUESTION	MAXIMUM SCORE	CANDIDATE'S SCORE
1	11	
2	12	
3	11	
4	12	
5	11	
6	12	
7	11	
TOTAL SCORE	**80**	

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1. a) The graph below represents the trend in melting points of elements in period 3.

Study it and use it to answer the questions that follow



i. **Explain** the trend in melting point between Aluminum and Phosphorous. **(2 marks)**

……

……

……

……

ii. Give a reason why Argon has the lowest melting point **(1 mark)**

……

……

b) The table below shows the properties of several elements. **Study it** and use it to answer the questions that follow.

Element	Atomic radius (nm)	Ionic radius (nm)
P	0.136	0.065
Q	0.174	0.099
R	0.099	0.181
S	0.203	0.133

i. Giving a reason, identify the non metal **(2 marks)**

……

……

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ii. Given that, element P and S belong to the same period of the periodic table, identify the element with a lower ionization energy. **Explain.** **(2 marks)**

……

……

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……

c) An element X forms an ion with the formula X^{2+}. The electronic configuration of the ion is 2.8

i. State the group and period to which element X belongs. **(1mark)**

Group ……

Period ……

ii. Draw dot and cross diagram showing bonding when X combines with chlorine **(1 mark)**

d) **Explain** the following observations;

i. Carbon has more than one melting point **(1 mark)**

……

……

……

ii. Silicon and phosphorous are in the same period but at room temperature, the oxide of silicon is a solid, while the oxide of sulphur is gaseous **(1 mark)**

……

……

……

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2. a) Determine the oxidation state of the element indicated in brackets **(3 marks)**

i. MnO_4^- (Mn)

……

……

ii. $K_2Cr_2O_7$ (Cr)

……

……

iii. H_3PO_4 (P)

……

……

b) Below is a list of standard reduction potentials of some elements. Use it to answer the questions that follow.

$A^{2+}(aq) + 2e^- \rightarrow A(s)$ + 0.34 V
$N^{2+}(aq) + 2e^- \rightarrow N(s)$ – 0.76 V
$G^{+}(aq) + 2e^- \rightarrow \frac{1}{2} G(s)$ 0.00 V
$Y^{2+}(aq) + 2e^- \rightarrow Y(s)$ + 0.88 V
$L^{2+}(aq) + 2e^- \rightarrow L(s)$ – 2.16 V

i. Identify the strongest reducing agent **(1 mark)**

……

ii. Explain why a solution containing A^{2+} ions cannot be stored in a container made of metal N **(1 mark)**

……

……

iii. The half cells of Y and L were combined to form an electrochemical cell.

I Draw a well labelled diagram of the cell formed **(3 marks)**

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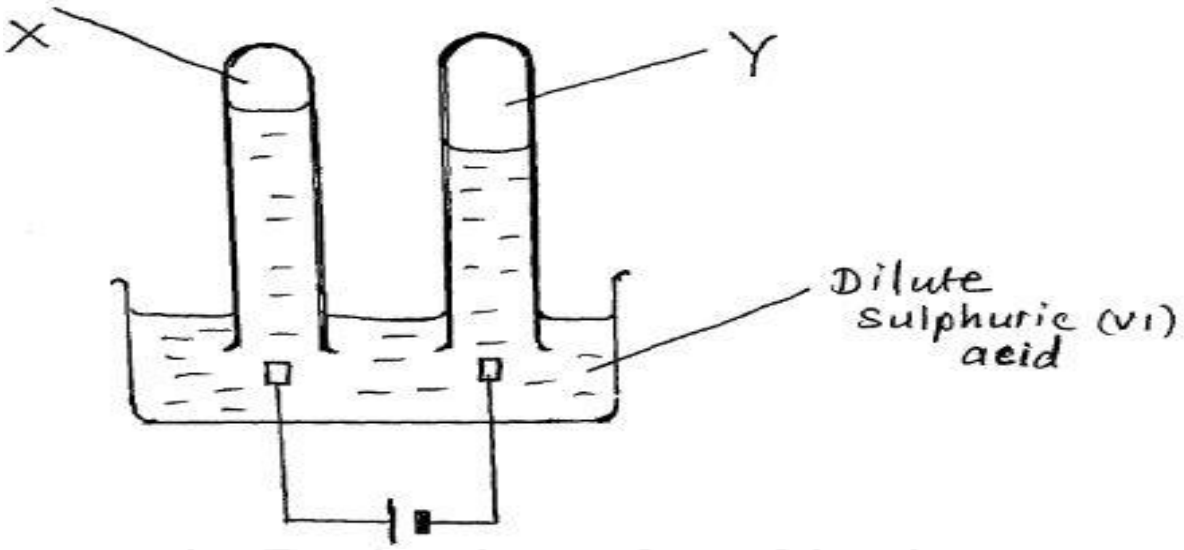
II Calculate the e.m.f of the cell formed above **(1 mark)**

……

……

……

c) The diagram below shows the set up used to investigate electrolysis of dilute sulphuric (VI) acid solution



i. Identify product X and Y **(1 mark)**

X ……

Y ……

ii. Write an equation for the reaction at the anode **(1 mark)**

……

……

……

iii. Explain what happens to the solution after 2 hrs sometime **(1 mark)**

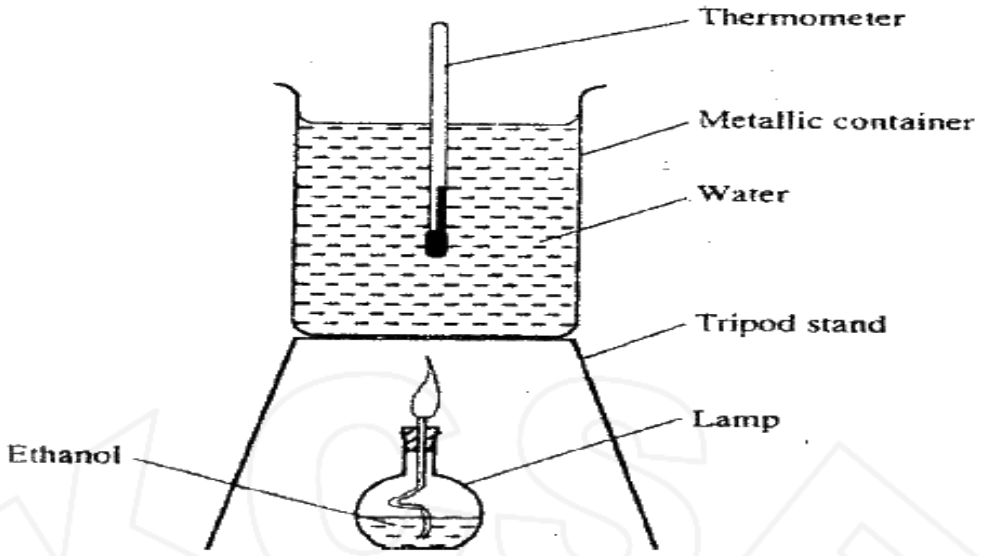
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3. Study the diagram below and use it to answer the questions that follow



a. During the experiment, the following data was collected

Volume of water	=	400 cm^3
Initial temperature of water	=	23.0^0 C
Final temperature of water	=	35.0^0 C
Initial mass of lamp and ethanol	=	99.07 g
Final mass of lamp and ethanol	=	98.23 g
Specific heat capacity	=	4.2 kJ Kg^{-1} K^-

Calculate the;

i. Temperature change **(1 mark)**

……

……

……

ii. Heat change for the reaction **(2 marks)**

……

……

……

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iii. Mass of ethanol that reacted **(1 mark)**

……

……

……

iv. Molar enthalpy of combustion of ethanol (C=12, H=1.0, O=16.0) **(2 marks)**

……

……

……

……

b. Use the information in the table below to answer the questions that follow

$Na^+(g) + Cl^-(g) \rightarrow NaCl(s)$ $\Delta H_1 = -776$ kJ/ Mol

$Na^+(g) + aq \rightarrow Na^+(aq)$ $\Delta H_2 = -390$ kJ/ Mol

$Cl^-(g) + aq \rightarrow Cl^-(aq)$ $\Delta H_3 = -384$ kJ/ Mol

i. Give the name of **(2 marks)**

ΔH_1 ……..

ΔH_3 ……..

ii. Using an energy cycle diagram, calculate the molar enthalpy of solution of sodium chloride **(3 marks)**

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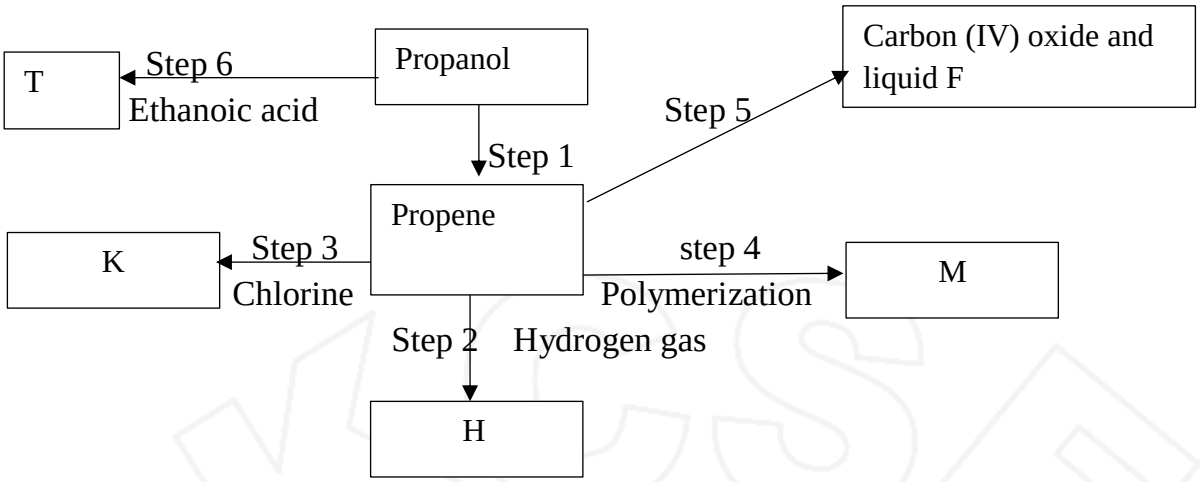
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4. Study the flow diagram below and use it to answer the questions that follow



a. Name substance; **(3 marks)**

i. H ……

ii. T ……

iii. F ……

b. State the conditions for **(2 marks)**

i. Step 1

……

ii. Step 2

……

c. Write an equation for the reaction in **(2 marks)**

i. Step 6

……

ii. Step 5

……

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d. Draw the structural formula of substance M **(1 mark)**

e. A sample of substance M was found to have a molar mass of 47,208. Calculate the number of monomers in the sample. **(2 marks)**

……

……

……

……

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

……

g. Identify the reagent used in step 5 **(1 mark)**

……

5. a) Define the following terms

i. radioactivity **(1 mark)**

……

……

ii. Define half-life **(1 mark)**

……

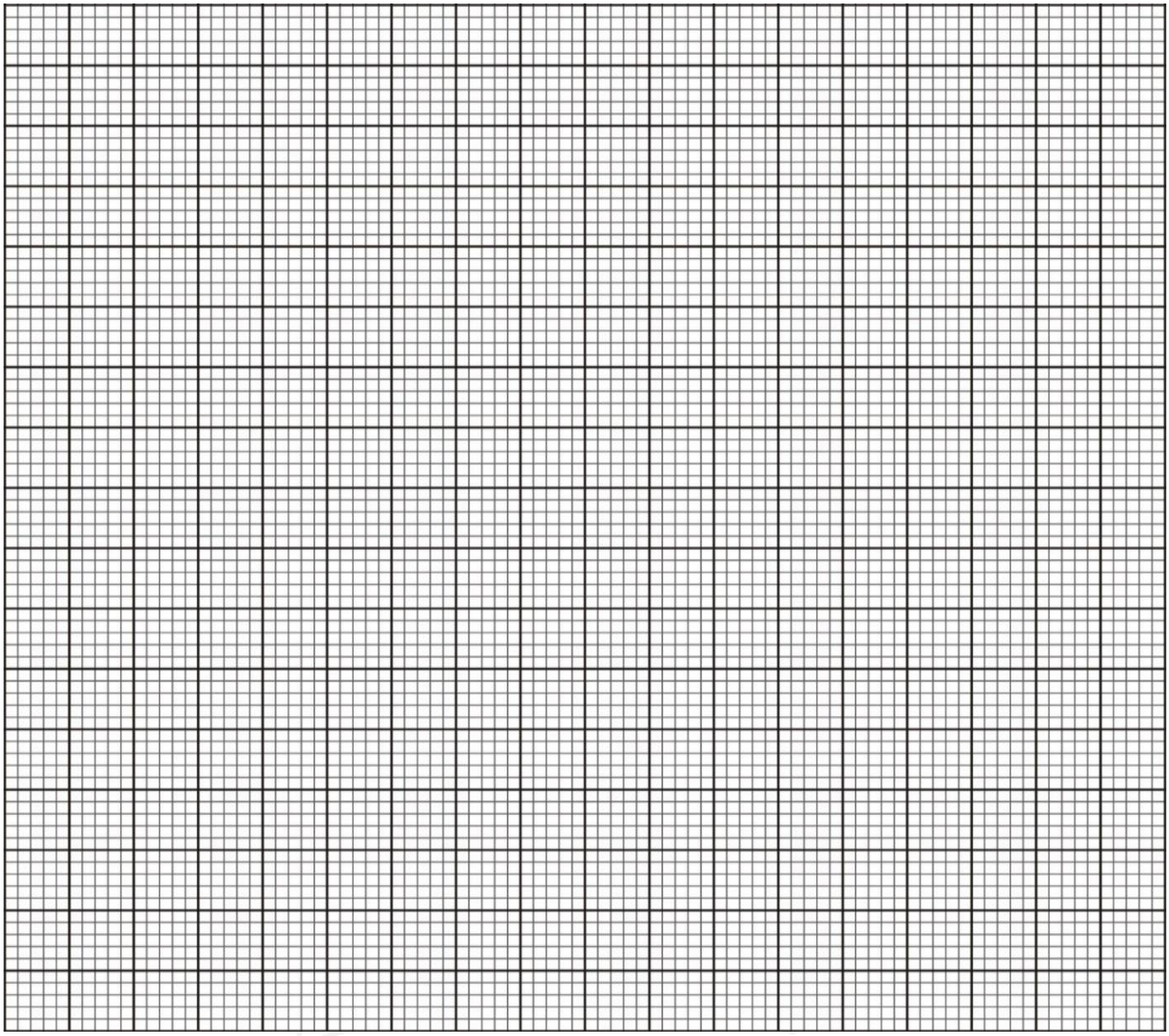
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b) In an experiment to determine the half life of Radon – 220, the following results were obtained.

Time (seconds)	0	10	20	30	40	50	60	70
Count rate per second	30	26	23	21	18	16	14	12

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i) On the grid provided, draw a graph of count rate against time **(3 marks)**



ii) from the graph, determine the half-life of radon – 220 **(1 mark)**

……

iii) State one application of radioactivity in; **(2 marks)**

Agriculture

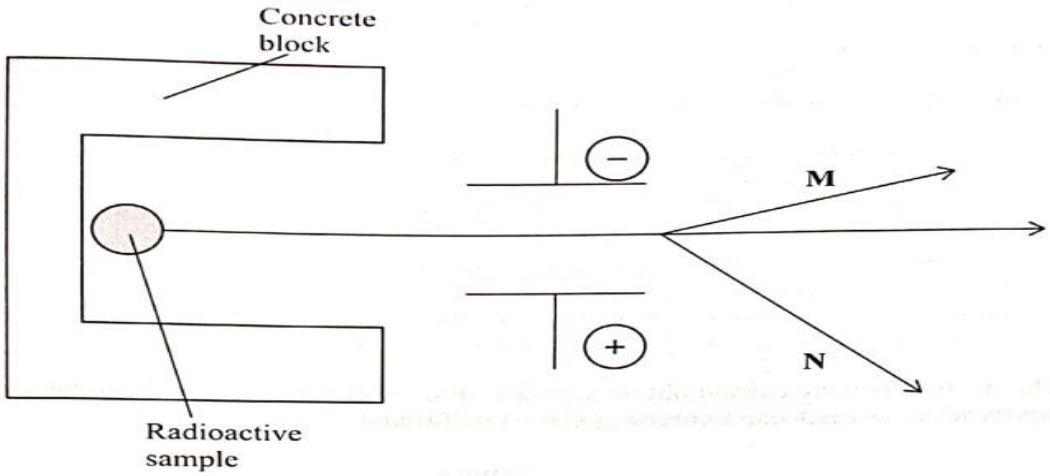
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Medicine

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c) The diagram below shows the radiations emitted by a radioactive sample.



i) Identify radiation **(2 marks)**

M ……

N ……

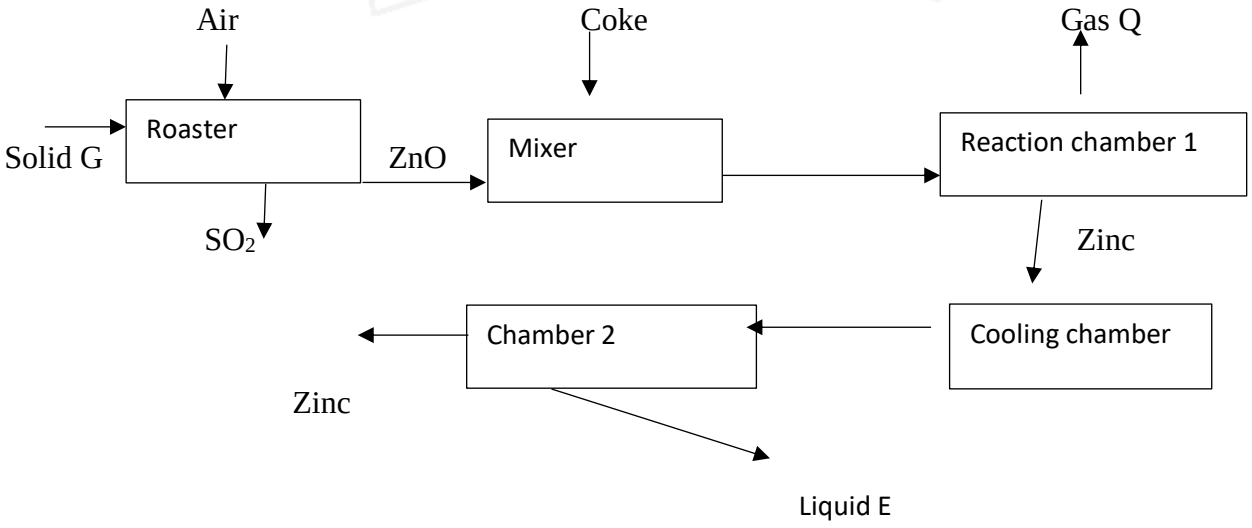
ii) Explain the difference in the deflection of M and N **(1 mark)**

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6. The flow chart below shows the process of extraction of zinc. Study it and answer the questions that follow.



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a. Identify **(1 mark)**

i. Solid G ……

ii. Gas Q ……

b. Name the other substance introduced into the mixer and state its role **(2 marks)**

……

……

……

c. write an equation for the reaction in; **(2 marks)**

i. Roaster

……

ii. Reaction chamber 1

……

d. Describe the process that takes place in the cooling chamber **(2 marks)**

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e. Name the main impurity found in the zinc ore **(1 mark)**

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……

f. Explain one danger caused by this process **(1 mark)**

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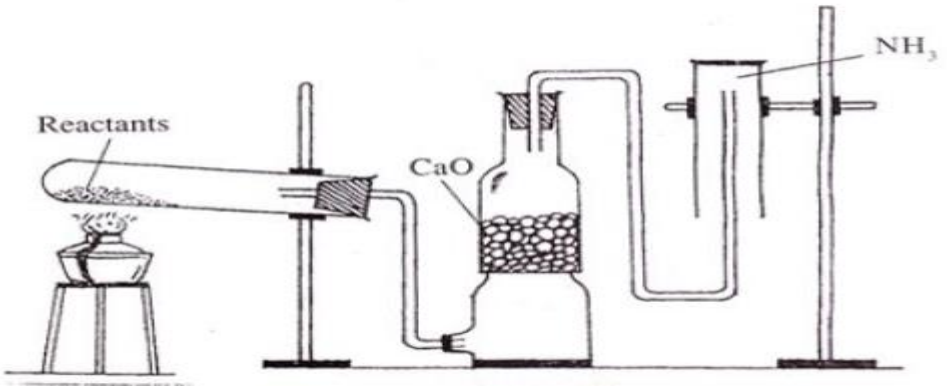
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g. A student found a piece of metal that he suspected could be zinc (II) ions. Describe **three successive tests** he would carry out to confirm the solid is zinc and give the observations expected in each test. **(3marks)**

Test	Procedure	Expected observation
1		
2		
3		

7. The diagram below shows the laboratory preparation of ammonia gas. Study it and use it to answer the questions that follow.



a. Name the reactants used **(1 mark)**

……

b. Give the role of calcium oxide **(1 mark)**

……

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c. State 2 physical properties of ammonia gas **(1 mark)**

……

……

d. Write an equation for the reaction **(1 mark)**

……

e. Ammonia reacts with oxygen in the presence of a catalyst to produce nitric (V) acid industrially.

i. Name the catalyst used **(1 mark)**

……

ii. Describe how the product in e above is converted to nitric (V) acid **(2 marks)**

……

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f. Ammonia and sulphuric (VI) acid are reacted to form a fertilizer.

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

……

ii. Calculate the volume of ammonia required at STP to manufacture 1500kg of the fertilizer at STP (N= 14.0, H= 1.0, S= 32, O= 16.0, MGV at STP = 22.4L) **(3 marks)**

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KCSE 2024 PREDICTION EXAM

POSSIBLE SERIES 1

233/3

CHEMISTRY

PAPER 3 (PRACTICAL)

TIME: 2¼ HOURS

SCHOOL…… SIGN……

(Kenya Certificate of Secondary Education)

CONFIDENTIAL

INSTRUCTIONS TO SCHOOLS

In addition to the fittings and apparatus found in a chemistry laboratory each candidate should have:

1. About 150 cm^3 of Solution **Q**
2. About 150 $cm^3$of solution **P.**
3. About 80$cm^3$of solution **R.**
4. Burette 50ml
5. Filter funnel
6. 25 cm^3 pipette
7. Clamp and stand
8. White tile
9. 2 conical flasks
10. 10ml Measuring cylinder
11. 6 test tubes
12. Boiling tube
13. Distilled water
14. Thermometer -10-110^{0}c
15. A stop watch
16. About 1g solid **V**
17. About 1.5g of solid **T**
18. Metallic spatula
19. About 1g of sodium hydrogen carbonate
20. Water bath
21. Pipette filter

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Access to

1. Phenolphthalein indicator
2. Source of heat
3. 2M $Pb(NO_3)_{2(aq)}$
4. 2M $HNO_{3\ (aq)}$
5. 0.5M $Ba(NO_3)_{2\ (aq)}$
6. 2M Ammonia solution
7. 2M NaOH
8. Acidified $KMnO_4$ solution
9. 2M $HCl_{\ (aq)}$

NOTES

1. Solution Q is 0.05M oxalic acid
2. Solution P is 0.01M potassium manganate (vii) solution.
3. Solution R is 0.1M sodium hydroxide solution.
4. A hot Water bath prepared by placing about 200 $cm^3$of water in a 250ml beaker.
5. Solid **V** mixture $(NH_4)_2SO_4$ and $Al_2(SO_4)_3$ in the ratio 1: 1
6. Solid **T** is maleic acid crystals.
7. Acidified $KMnO_4$ is made by dissolving 3.169 of the solid $KMnO_4$ in about 500 $cm^3$of 2M H_2S0_4 acid and diluting to one litre of solution.

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KCSE 2024 PREDICTION EXAM

POSSIBLE SERIES 1

233/3

CHEMISTRY

PAPER 3 (PRACTICAL)

TIME: 2¼ HOURS

NAME……

SCHOOL…… SIGN……

INDEX NO…… ADM NO……

(Kenya Certificate of Secondary Education)

INSTRUCTIONS TO THE CANDIDATES:-

- ***Write your name and Admission number in the spaces provided• Sign*** *and write the* ***date*** *of examination in the spaces provided*
- ***Answer all the questions in the spaces provided.***
- *Mathematical tables and electronic calculators may be used.*
- *All working* ***MUST*** *be clearly shown where necessary.*
- *Use the first 15minutes of the 2 ¼ hours to ascertain you have all the chemicals and apparatus that you may need.*

For Examiners use Only

QUESTION	MAX. SCORE	SCORE
1	22	
2	11	
3	7	
TOTAL	**40**	

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1. You are provided with;

- solution P, potassium manganate (VII)
- solution Q, containing 6.3 g/litre of dibasic acid $H_2X.nH_2O$
- Solution R, containing 4.0 g/litre of Sodium hydroxide solution.

You are required to determine:

a) The value of n in $H_2X.nH_2O$

b) How the rate of reaction of solution P with solution Q varies with change in temperature.

Procedure 1

- Fill the burette with solution Q.
- Pipette 25cm^3 of solution R into a conical flask and titrate solution Q with solution R using phenolphthalein indicator.
- Record your results in table I below and repeat the titration two more times and complete the table:

Table I. **(4mks)**

	I	II	II
Final burette readings (cm^3)			
Initial burette readings ($cm^{3)}$)			
Volume of solution Q used (cm^3)			

a) Determine the average volume of solution Q used**.** **(1mk)**

b) Calculate the concentration of solution R in moles per litre (Na = 23.0, 16.0, H= 1.0) **(1mk)**

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c) Given that the equation of the reaction taking place and R.F.M of X = 88

$$H_2X_{(aq)} + 2NaOH_{(aq)} \longrightarrow Na_2X_{(aq)} + H_2O_{(l)}$$

Calculate:

i) The number of moles of the dibasic acid solution Q that reacted **(1½mks)**

ii) The number of moles of the dibasic acid solution Q in $1000cm^3$ of solution. **(1mk)**

iii) The R.F.M of the dibasic acid, hydrated**.** **(1mk)**

iv) The value of n in the formula of the hydrated acid given that the RFM of X= 88. (O =16.0, H = 1.0) **(1½mks)**

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Procedure II

i) Using a measuring cylinder, place 10cm^3 portion of solution P into 5' test tubes placed in a test tube rack.

ii) Clean the measuring cylinder and use it to place 10.0 cm^3 of solution Q into a boiling tube.

iii) Insert a thermometer in the solution Q in the boiling tube and place the boiling tube in the water bath to attain a temperature of 50^o C.

iv) Remove the boiling tube from the water bath and place it in a test- tube rack and add the first portion of solution P. and at the same time start the stopwatch.

v) Record the time taken for the purple colour and the mixture to decolourise in table II

vi) Repeat the experiment using 10cm^3 of solution Q at 50^{o}C , 60^{o}C, 70^o C and 80^{O}C.

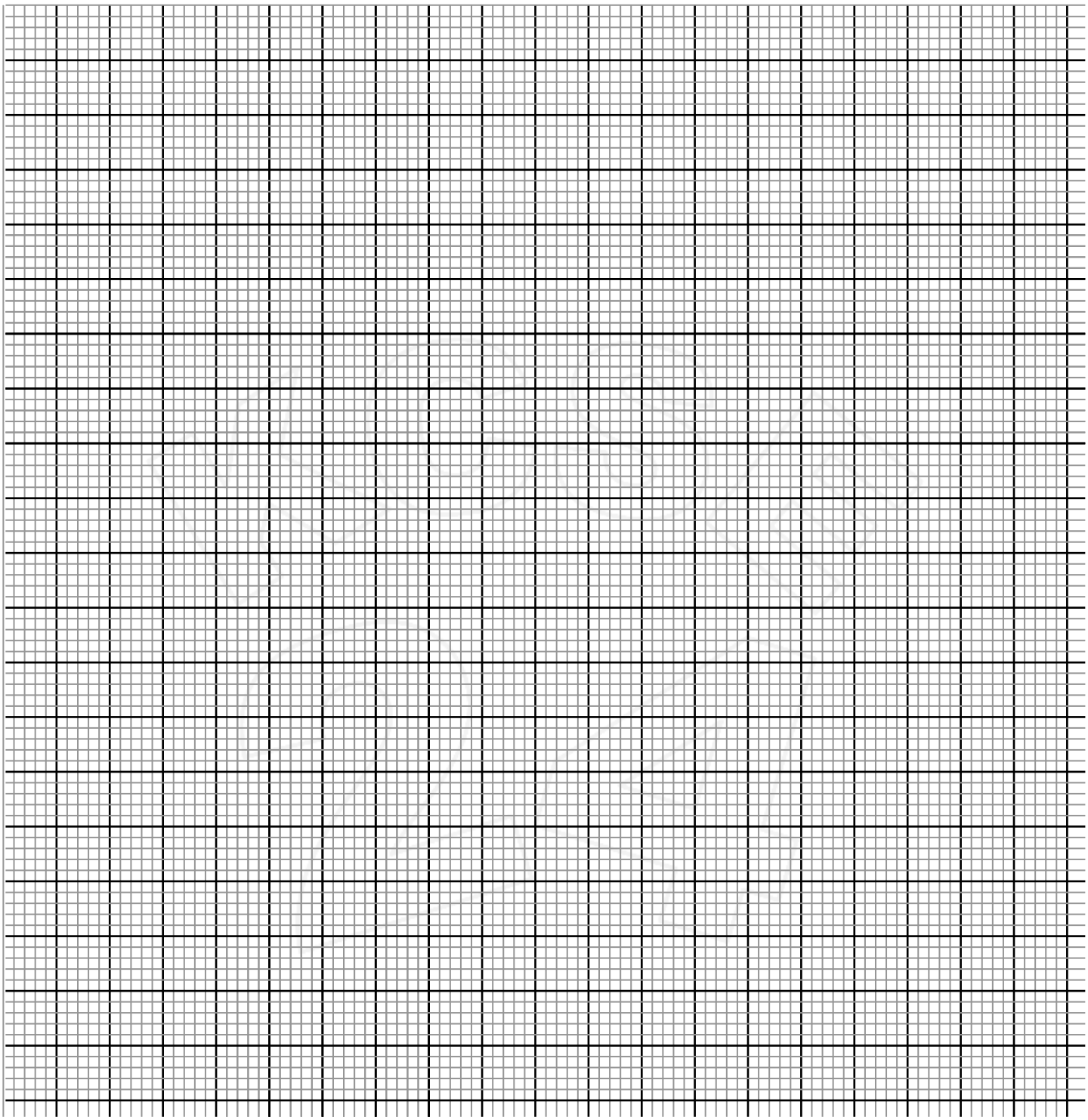
vii) Record the time in table II below. Complete the table by computing $\frac{1}{t}$ sec^{-1}.

Table II **(5marks)**

Temperature of solution Q (^{o}C)	40	50	60	70	80
Time of colour to decolourise (sec)					
1/t (sec^{-1})					

a) Plot a graph of $\frac{1}{t}$ (sec^{-1}) against temperature**.** **(3mks)**

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b) From the graph , determine the time taken for decolourisation of the mixture, if the temperature of solution B was **$65^{O}C$** **(1mk)**

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c) How does the rate of reaction of potassium manganate (VII) with oxalic acid vary with temperature? **Explain** **(2mks)**

2. You are provided with solid V. Carry out the tests below and record your observations and inference in the spaces provided.

a) Strongly heat a spatula – end full of solid V in a dry test–tube test any gases produced using both blue and red litmus papers.

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

b) i) Place the remaining solid V in a boiling tube. Add 10cm^{3}of distilled water. Divide the solution into four portions. To the first portion, add 2-3 drops of aqueous lead (II) nitrate solution and warm.

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

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ii) To the second portion add 2-3 drops of barium nitrate solution followed by about 2cm3 dilute nitric (V) acid.

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

ii) To the third portion add a few drops of sodium hydroxide until in excess.

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

iv) To the fourth portion add few drops of aqueous ammonia until in excess'

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

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v) To the five portion add few drops of hydrochloric acid and warm.

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

3. You are provided with solid T. Carry out the tests and your observations and inferences.

a) Place about a half of solid T on a metallic spatula and burn it using Bunsen burner.

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

b) Place the remaining solid T in a test tube. Add about $6cm^3$ of distilled water and shake well. Divide the solution into three portions.

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

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i) To about $2cm^3$ of the mixture add a small amount of sodium hydrogen carbonate.

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

ii) To about $2cm^3$ of the mixture add two drops acidified potassium manganate (VII)

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

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KCSE 2024 PREDICTION EXAM

POSSIBLE SERIES 1

232/1

PHYSICS

PAPER 1 (THEORY)

TIME: 2 HOURS

NAME……

SCHOOL…… SIGN……

INDEX NO…… ADM NO……

(Kenya Certificate of Secondary Education)

INSTRUCTIONS TO CANDIDATES

i) *Write your name and admission number in the spaces provided above.*
ii) *Sign and write the date of examination in the spaces provided above*
iii) *This paper consists of **TWO** sections **A** and **B.***
iv) *Answer **ALL** the questions in section **A** and **B** in the spaces provided.*
v) *All working **MUST** be clearly shown.*
vi) *Non programmable silent calculators may be used.*
vii) *Candidates should answer the questions in English. Constant: g=10N/kg or 10m/s^2*

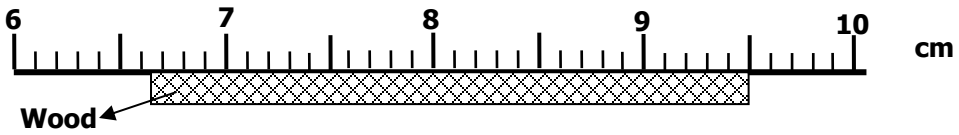
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Section	Question	Maximum Score	Candidate's Score
A	1 – 14	25	
B	15	10	
	16	12	
	17	10	
	18	13	
	19	10	
	TOTAL SCORE	80	

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SECTION A: (25 MARKS)

1. The figure below shows a section of a meter rule used to measure length of a piece of wood.



Find the length of the wood **(2marks)**

……

……

2. The diagram below shows a capillary tube immersed in water.



(a) Make a sketch on the figure alongside (b) to show the appearance of the capillary tube if it was inserted in mercury. **(1 mark)**

(b) Explain the difference if any between figure (a) and (b) above **(2 marks)**

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3. Explain why a partially inflated balloon released at sea level would become fully inflated at a higher altitude. **(1mark)**

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4. A catapult is used to project a stone of mass 40.0g vertically upwards to a height of 50.0m. Calculate the amount of elastic potential energy initially present in the catapult. **(2marks)**

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5. A turning effect of force depends on the magnitude of the force. State any other factor that determines the moment of a force **(1mark)**

……

(i) Mercury is usually preferred over water for use as a barometric liquid. Give a reason for this. **(1mark)**

……

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(ii) .State the property of Freon that makes it suitable for use as refrigerant. **(1mark)**

……

(iii) Other than the mass of ice, State another physical quantities that remain constant while pure ice is being converted to water**.** **(1mark)**

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6. Giving a reason, explain why it's advisable for luggage carrier compartment to be put under the seats than at the roof tops of the buses**.** **(1 mark)**

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7. Other than angle of banking, state any other factor that affects the critical velocity of a vehicle negotiating a bend. **(1 mark)**

……

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8. A balloon filled with argon gas of volume 200 cm^3 at the earth's surface where the temperature is 20^0C, and the pressure 760mm of mercury. If it is allowed to ascend to a height where the temperature is 0^0C and the pressure 100mm of mercury, calculate the volume of the balloon.

(2marks)

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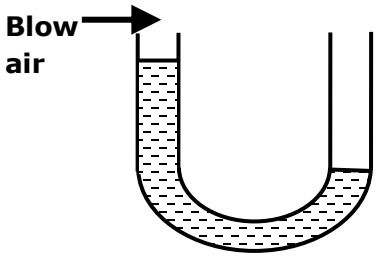
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10.It is a common behavior for a high jumper to slightly flex their knees just before landing. Explain the importance of this behavior from your knowledge of physics. **(1mark)**

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……

11. The figure below shows a manometer containing water. Air is blown across the mouth of one tube and the levels of the water changes as shown.



Explain why the level of water in the left limb of manometer is higher**.** **(2 marks)**

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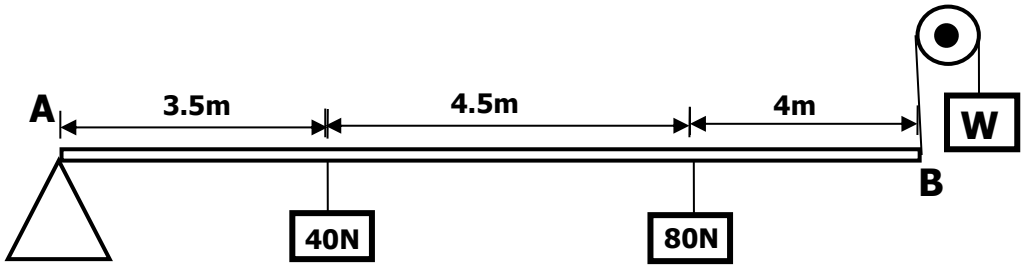
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12. The figure below shows a uniform rod AB of weight 20N pivoted at A.



If the system is in equilibrium, determine the weight W shown. **(3marks)**

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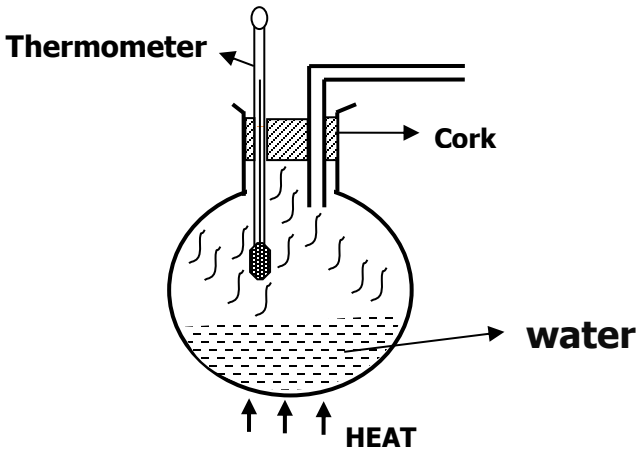
13. A cemented floor feels cold to the feet, but a woolen carpet on the same floor feels warm. Explain this. **(1mark)**

……

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14. The diagram below shows an arrangement used to determine the upper fixed point of ungraduated thermometer.



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(i) Why is the bulb of thermometer not dipped in the water? **(1mark)**

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(ii) Explain how the sensitivity of a thermometer can be improved**.** **(1mark)**

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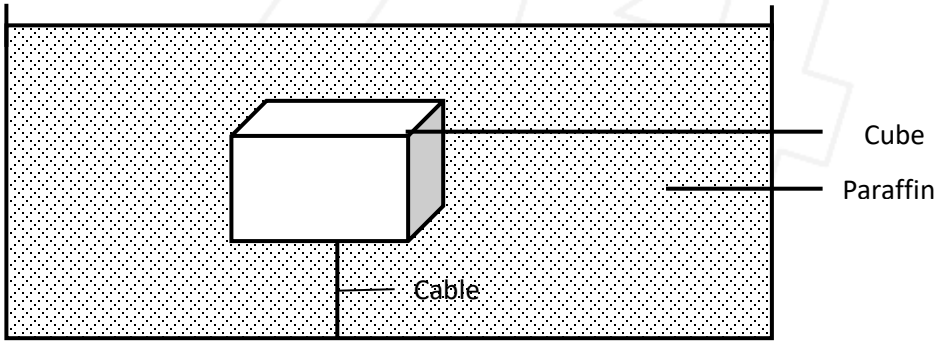
SECTION B (55 MARKS)

15.(a) State Archimedes' principle . **(1 mark)**

……

……

(b) The figure shows a cube of side 2.0 m block and of mass 4,800 kg attached to the base of a tank containing paraffin of density 800 kgm^{-3} by means of an inextensible and light weight cable.



Determine:

(i) The density of the block. **(2marks)**

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(ii) The upthrust acting on the block. **(3 marks)**

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(iii) The tension in the cable. **(2 marks)**

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(iv) The cable is then released, and the block rises to the surface where it subsequently floats.

Calculate the fraction of the block which is beneath the surface of the paraffin. **(2 marks)**

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16. (a) Give **two** ways of increasing the boiling point of a liquid. **(2 marks)**

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(c) A lagged copper calorimeter of mass 0.8 kg contains 0.6 kg of water at 22.0^0 C. A metal nut of mass 0.4 kg is transferred quickly from an oven at 300^0 C to the calorimeter and a steady temperature of 52^0 C is reached by the water after stirring. Given that the specific heat capacity of copper is 400 $Jkg^{-1}K^{-1}$ and that of water is 4200 $Jkg^{-1}K^{-1}$, calculate:

(i) Heat gained by the calorimeter and water. **(3 marks)**

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(ii) Energy lost by the metal nut. **(1 mark)**

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(iii) The specific heat capacity of the material making the nut. **(3 marks)**

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(c) An electric kettle rated 120 V, 60 W is used to melt 20 g of ice at 0^0C to water at 0^0C in 112 seconds, calculate the specific latent heat of fusion of ice. **(3 marks)**

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17. A stone is thrown vertically upwards from the top of a tower 30m high, with an initial velocity of 20m/s. Determine:

i) The time it takes to reach maximum height. **(2marks)**

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ii) The total time which elapses before it hits the ground. **(2marks)**

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(b)A string of negligible mass has a bucket tied at the end. The string is 60cm long and the bucket has a mass of 45.0g. The bucket is swung horizontally making 6 revolutions per second. Calculate

i) The angular velocity **(2marks)**

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ii) The angular acceleration **(2marks)**

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iii) The tension on the string. **(2marks)**

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18.(a)(i) During the construction of dams, the base of the dam is widened and curved. Explain**.** **(2 marks)**

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(ii) A block of density 1.60 g/cm^3 and measures 3.0cm by 5.0cm by 7.0cm was placed on the ground. Determine the difference between the maximum and minimum pressure that would be exerted on the ground by the block. **(3 marks)**

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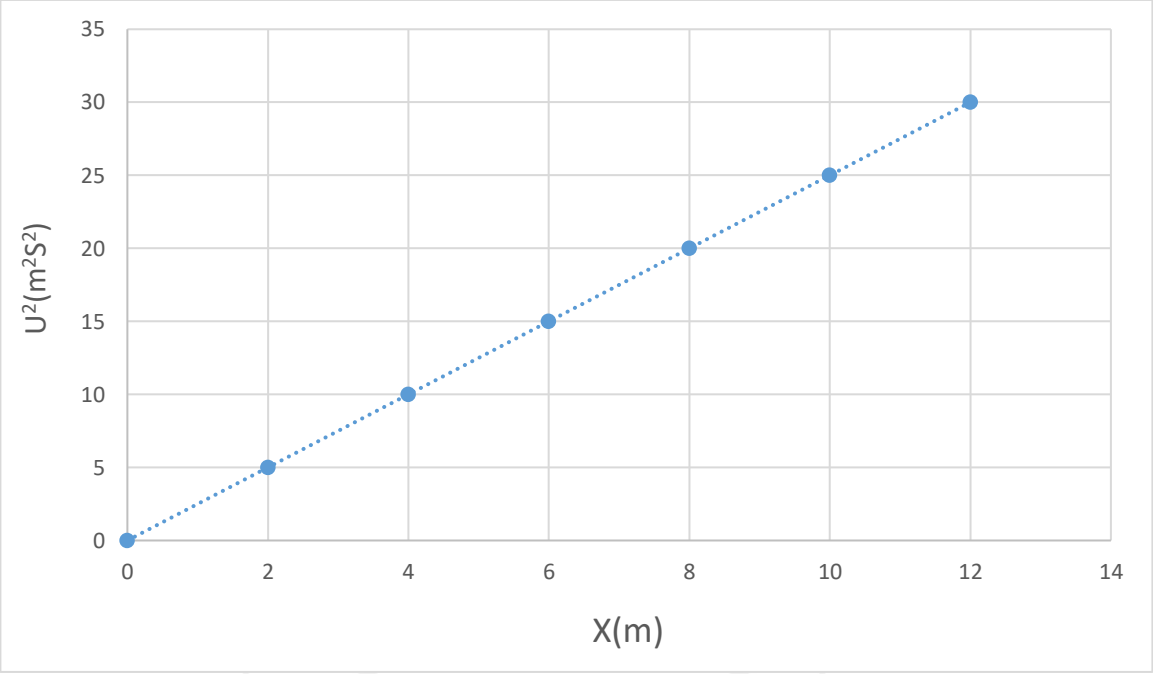
b) i)State Newton's second law of motion **(1 mark)**

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ii)A wooden block resting on a horizontal bench is given an initial velocity U so that it slides on the bench for a distance X before it stops. Various values of X are measured for different value of the initial velocity. The figure below shows a graph of U^2 against X.



i)Determine the slope S of the graph **(3 marks)**

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ii) Determine the value of k given that $U^2 = 20kX$ where k is a frictional constant for the surface

(2marks)

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iii)State with a reason what happens to the value of k when the roughness of the bench surface is reduced **(2 marks)**

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19.a)(i) State the kinetic theory of gases. **(1 mark)**

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(ii) State the reason why it is easier to separate water into drops than to separate a solid into smaller pieces. **(1mark)**

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c) (i) State Hooke's **law** **(1mark)**

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(ii) Two identical helical springs are connected in series. When a 50g mass is hang at the end of the springs, it produces an extension of 2.5 cm. Determine the extension produced by the same mass when the springs arc connected in parallel. **(3marks)**

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d) (i) State Boyle's law**.** **(1mark)**

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(ii) Draw a suitable set up that can be used to verify Charles's law**.** **(3marks)**

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KCSE 2024 PREDICTION EXAM

POSSIBLE SERIES 1

232/2

PHYSICS

PAPER 2 (THEORY)

TIME: 2 HOURS

NAME……

SCHOOL…… SIGN……

INDEX NO…… ADM NO……

(Kenya Certificate of Secondary Education)

INSTRUCTIONS TO CANDIDATES

A) This paper consists of two sections A and B.

B) Answer all the questions in sections A and B in the spaces provided.

C) Non-programmable silent electronic calculators may be used.

FOR EXAMINER'S USE ONLY.

SECTION	QUESTION	MAXIMUM SCORE	CANDIDATE'S SCORE
A	1-13	25	
B	14	12	
	15	10	
	16	11	
	17	12	
	18	10	
TOTAL		**80**	

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SECTION A: (25MARKS)

1. State one property of image formed by a pinhole camera**.** **(1mk)**

……

2. Other than density, state another factor that affect the speed of sound in a solid**.** **(1mk)**

……

……

3. A radio wave has a frequency of 3MHz and travels with a velocity of 3.0 x10^8 m/s. Calculate its wavelength**.** **(2mks)**

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4. Draw a circuit diagram to show P-N junction diode in the reverse biased mode**.** **(2mks)**

5. Explain why the walls of studio are padded with woolen materials **(1mk)**

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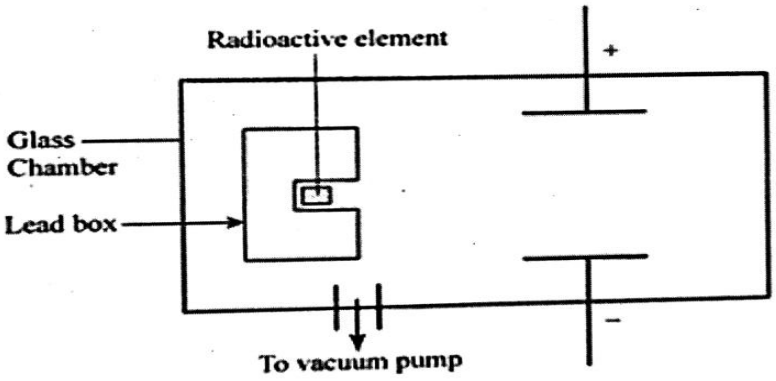
6. (a) Define the term ‘’**radioactivity**’’ **(1mk)**

……

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(b)The figure below shows a radioactive element placed in an evacuated glass chamber. The element produces alpha,beta and gamma emissions. The three emission pass through an electric field



Complete the diagram to show the path of each of the emissions. **(3mks)**

7. Explain why radio waves signals are easier to receive in a place surrounded by hills. **(2mks)**

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8. State two ways of minimizing electrical power losses during transmission of electric power.

(2mks)

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9. Give a reason why convex mirror is preferred to a plane mirror for use as a driving mirror

(1mk)

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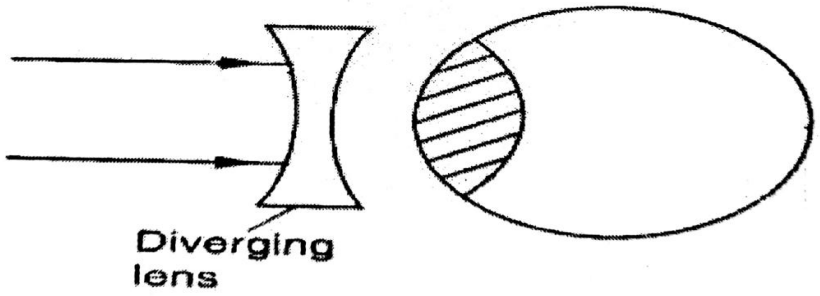
10. State two ways of minimizing local action in a simple cell. **(2mks)**

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11. The figure below shows a defect of vision being corrected by concave lens placed infront of the eye.



(i) Name the defect**.** **(1mk)**

……

(ii) Complete the rays to show the effect of the lens. **(2mks)**

12. State one use of microwaves . **(1mk)**

……

……

13. Determine the speed of light in water given that the speed of light in air is 3.0×10^8 m/s and the refractive index of water is 1.33 **(3mks)**

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SECTION B (55 MARKS)

Answer all questions in this section.

14. (a) State the Ohm's **law** **(1 mk)**

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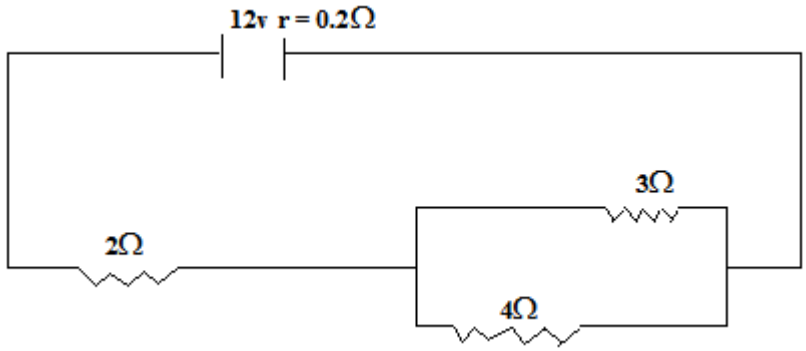
……

b) Give one factor that affect the resistance of a metallic conductor. **(1mk)**

……

……

c)The figure below shows three resistors connected to 12V supply of internal resistance of 0.2Ω.



Calculate

i) The effective resistance. **(3mks)**

……

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ii) The total current in the circuit. **(2 mks)**

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(d) (i) Define the term ‘ doping’ **(1 mk)**

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(ii) Briefly explain how silicon is used to make an p-type semi-conductor. **(3 mks)**

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(iii) State one application of a diode. **(1mk)**

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15.(a) Why is the cap of the gold leaf electroscope circular? **(1mk)**

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(b)A match stick is lit near the cap of a charged electroscope.State and explain the observation made**.** **(2mks)**

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(c) State one factor that affects the capacitance of a parallel plate capacitor. **(1mk)**

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(d)A 10μF capacitor is charged to potential difference of 300V and isolated.It is then connected in parallel to a 5μF capacitor.Calculate:

(i) The resultant potential difference. **(3mks)**

……

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(ii)The total energy in the two capacitors after connection. **(3mks)**

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16.(a) State the Faraday's law of electromagnetic induction. **(1mk)**

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(b) Give two factors that affect the magnitude of the induced em.f **(2mks)**

……

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(c)A transformer with primary coil of 400 turns and secondary coil 200 turns is connected to 240 V a.c mains.

(i) Calculate the secondary voltage . **(2mks)**

……

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(ii) If the primary current is 3.0 A and secondary is 5.0A.Calculate the efficiency of the transformer **(3mks)**

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(d) State how the following are minimized in a transformer . **(2mks)**

(i) Hysteresis loss

……

……

(ii) Eddy currents

……

……

(e) Explain why the alternating voltage is used in a transformer. **(1mk)**

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17(a) Define the term 'work function' **(1mk)**

……

……

(b) Distinguish between thermionic emission and the photoelectric emission. **(1mk)**

……

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(c) State one factor that determines the velocity of photoelectrons produced on the metal surface when light shine on it. **(1mk)**

……

(d) The threshold wavelength of a photoemissive surface is 5.55×10^{-7} m.(Take speed of light C=3.0×10^{8} m/s,plancks constant h=6.63 $\times 10^{-34}$ Js and mass of an electron Me=9.1×10^{-31}kg.) Calculate:

(i) Its threshold frequency **(3mks)**

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(ii) The workfunction of the surface **(3mks)**

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(e) The maximum speed with which a photoelectron is emitted if the frequency of the radiation is 6.2×10^{14} Hz **(3mks)**

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18.(a) State one similarity between cathode rays and X-rays. **(1mk)**

……

(b) Give two uses of X-rays in medicine **(2mks)**

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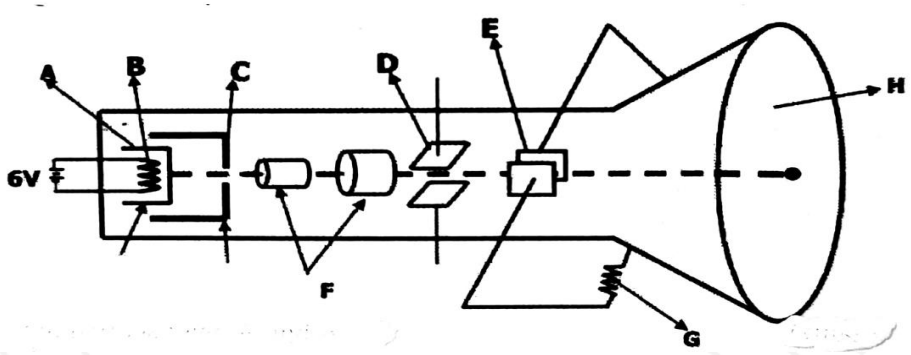
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(c)In a T.V set magnetic fields are preferred for use as deflection system instead of the electric field. Explain **(1mk)**

……

……

(d) The figure below represent a cathode ray oscilloscope (C.R.O).



i)Name the parts labelled A and C **(2mks)**

A……

C……

ii) What is the function of part labelled D **(1mk)**

……

(iii) Explain how electrons are produced in the C.R.O. **(1mk)**

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(iv) State the reason why the part labelled F has variable potential difference**.** **(1mk)**

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(v) Give a reason why the tube is evacuated. **(1mk)**

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KCSE 2024 PREDICTION EXAM

POSSIBLE SERIES 1

232/3

PHYSICS

PAPER 3 (PRACTICAL)

TIME: 2½ HOURS

SCHOOL…… SIGN……

Confidential

QUESTION 1

You are provided with the following apparatus;

- Two dry cells (**size D**) and a cell holder
- A milliammeter **(0 – 100 mA)**
- A voltmeter (**0 – 5 V**)
- A resistor wire mounted on a millimeter scale labelled **AB**
- A diode with **anode** labelled x (preferrable **6A10 MIC** or any other available)
- Jockey
- Eight connecting wires at least 6 with crocodile clips

QUESTION 2

Each student should have the following

- Four optical pins
- Plain paper (A4 size)
- Soft board
- Four thumb tucks
- Equilateral triangular glass prism
- Complete geometrical set
- Thermometer
- Retort stand
- Access to hot water (above 85°C)
- 100 ml plastic beaker
- Stop watch.

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KCSE 2024 PREDICTION EXAM

POSSIBLE SERIES 1

232/3

PHYSICS

PAPER 3 (PRACTICAL)

TIME: 2½ HOURS

NAME……

SCHOOL…… SIGN……

INDEX NO…… ADM NO……

Instructions to Candidates

(a) Write your name and admission number in the spaces provided.

*(b) Answer **ALL** questions in the spaces provided in the question paper.*

*(c) 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 commencing the work.*

(d) Marks are given for a clear record of the observations actually made, their suitability, accuracy and the use made of them.

(e) Candidates are advised to record their observation as soon as they are made.

(f) Non programmable silent electronic calculators may be used.

(g) Candidates should answer the questions in English.

For Examiner's Use Only

Question 1

	a	b	c	d	e
Maximum Score	2	6	5	3	4
Candidate's Score					

TOTAL ☐

Question 2

	A	b	c		e	g	h	i	j
Maximum Score	2	3	2	3	2	1	3	2	2
Candidate's Score									

TOTAL ☐

GRAND ☐

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TOTAL

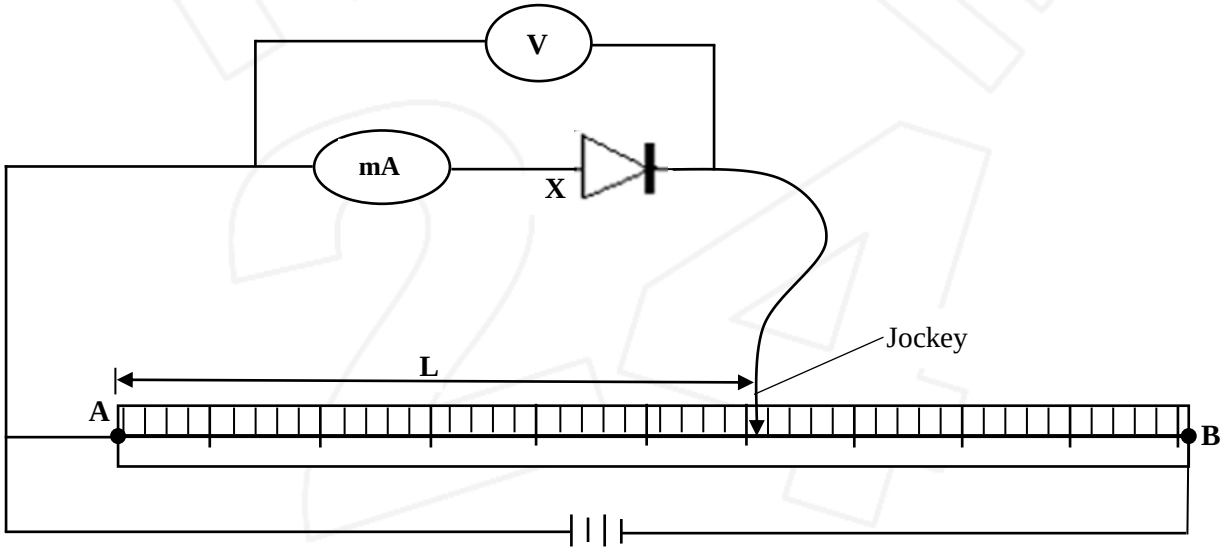
QUESTION 1 (20 marks)

You are provided with the following apparatus;

- Two dry cells (**size D**) and a cell holder
- A milliammeter **(0 – 100 mA)**
- A voltmeter (**0 – 5 V**)
- A resistor wire mounted on a millimeter scale labelled **AB**
- A diode (Anode labelled X)
- Jockey
- Eight connecting wires at least 6 with crocodile clips

Proceed as follows:

a) Set up the circuit as shown below.



b) Connect Jockey to **L = 50cm** mark. Record the value of current and its corresponding voltage.

I ……. **(1mk)**

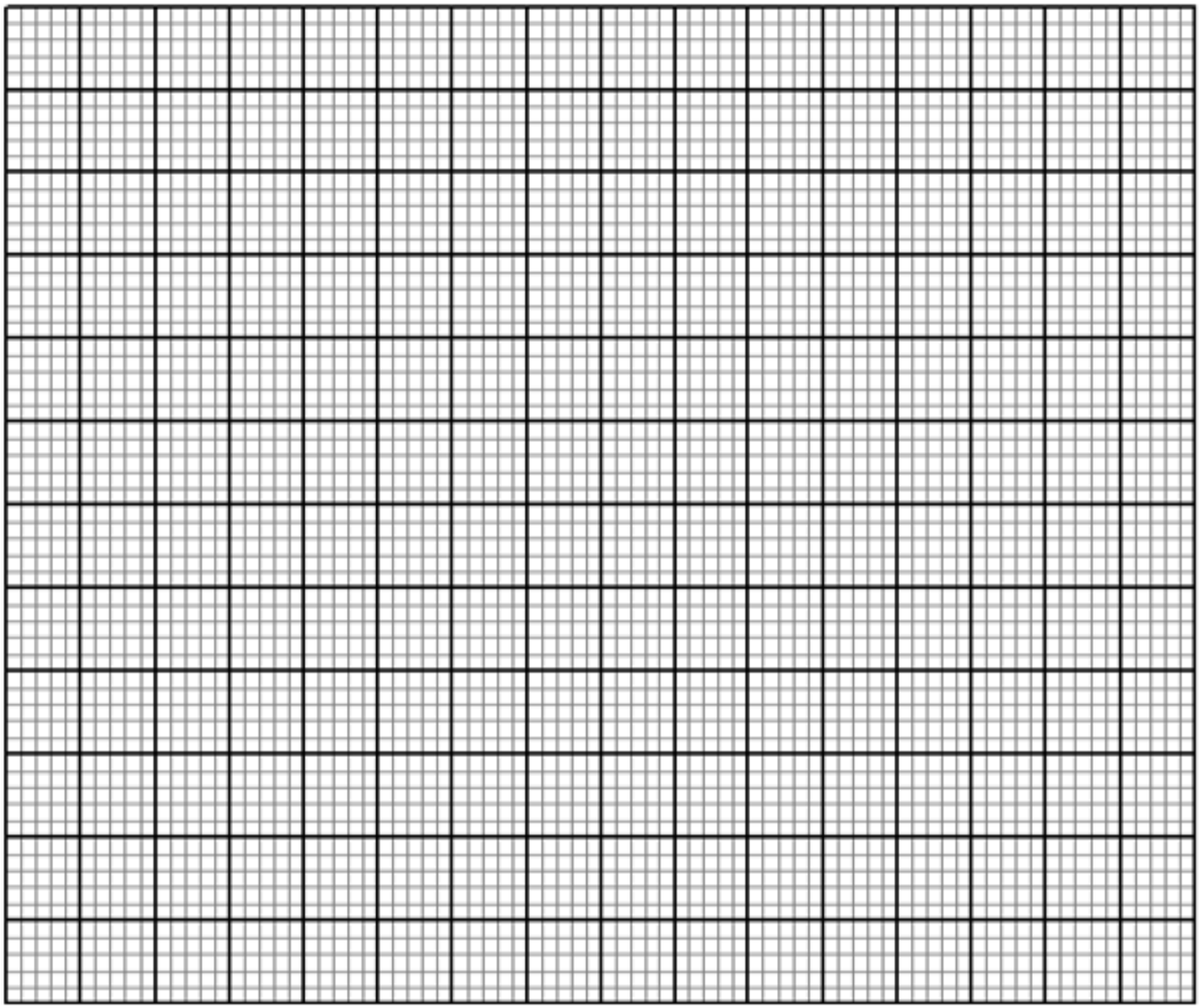
V…… **(1mk)**

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c) Now, connect the jockey to L = 0 cm, 10 cm, 20 cm, 30 cm… and fill the values of current and their corresponding values voltage in the table below. **(8mks)**

L (cm)	0	10	20	30	40	50	60	70	80
I (mA)									
V(v)									

d) Plot graph of volume, I (y-axis) against **V**. **(5mks)**



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e) From the graph, determine

(i) the slope at **V = 0.65 V.** **(3mks)**

(ii) the resistance, **R** of the diode at **V = 0.65** V in **SI unit**. **(3mks)**

QUESTION 2

PART A

You are provided with the following:

Retort stand	Geometrical set
Four optical pins	Thermometer
A 100 ml plastic beaker	Plain paper
Soft board	Stopwatch
Source of boiling water	Four thumb tucks
Equilateral triangular glass prism	

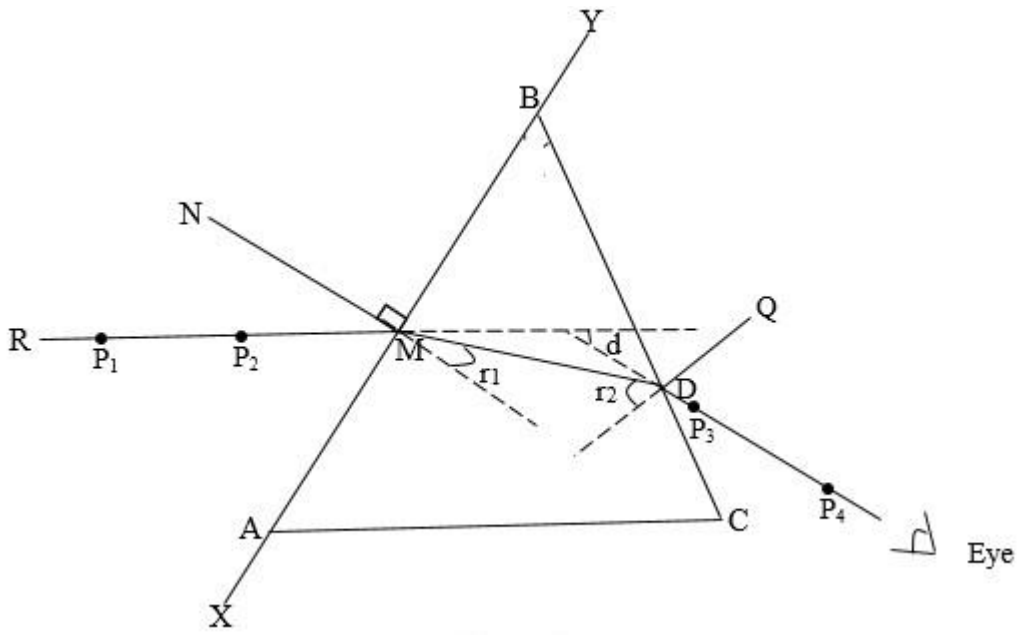
Proceed as follows

a) Fix the plain paper on the soft board using the office pins.

b) On the plain paper, draw line XY. Mark a point M on its midpoint. Draw a normal N at M to XY. Draw line RM such that angle RMN = 50°.

(This paper will be collected at the end of the experiment). **(1mk)**

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c) Place the glass prism such that one edge AB of the prism is in line with XY. Accurately draw the outline ABC of the prism

d) Place optical pins $\mathbf{P_1}$ and $\mathbf{P_2}$ on the line RM

c) Through edge BC observe the images of $\mathbf{P_1}$ and $\mathbf{P_2}$. Fix $\mathbf{P_3}$ and $\mathbf{P_4}$ so that $\mathbf{P_1}$, $\mathbf{P_2}$, $\mathbf{P_3}$ and $\mathbf{P_4}$ lie on straight line.

d) Remove the pins; construct straight line from $\mathbf{P_4}$ through $\mathbf{P_3}$ to meet side BC at D, join M to D.

i) Measure angle $\mathbf{r_1}$. **(1mk)**

r_1 = ……..

ii) Produce $\mathbf{P_4P_3}$ to meet RM produced. Measure angle **d**. **(1mk)**

d……..

iii) Draw the normal at D and measure the angle $\mathbf{r_2}$. **(1mk)**

$\mathbf{r_2}$ …….

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e) Given that R= $\mathbf{r_1}$+ $\mathbf{r_2}$. Calculate **R.** **(2mk)**

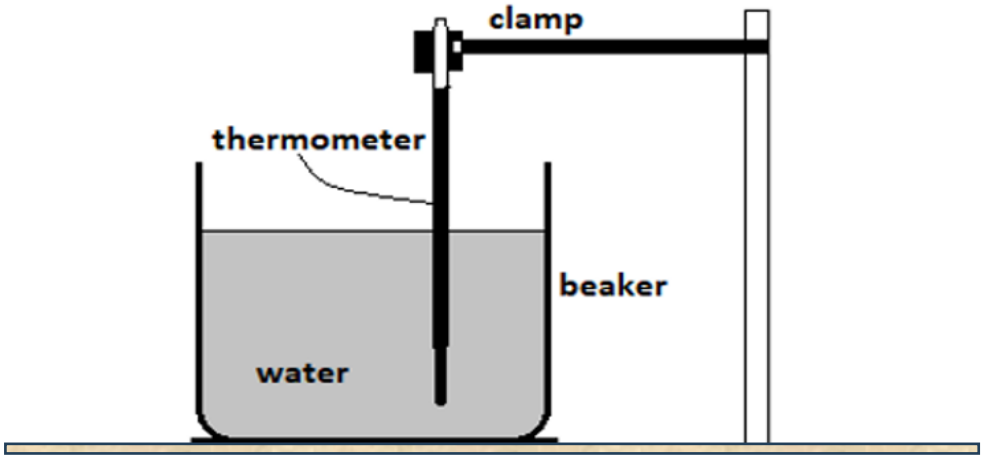
f) Given that $\mathbf{n} = \frac{\sin\left(\frac{R+d}{2}\right)}{\sin\left(\frac{R}{2}\right)}$, find the value of n. **(3mks)**

g) Given that $\boldsymbol{n \sin k = 1}$, find the value of **k.** **(2mks)**

h) What Physical property does **n** represent? **(1mk)**

PART B

g) Measure **100 ml** of hot water and pour it into the beaker. Place the beaker on the bench. Clamp the thermometer vertically and insert it into the beaker with hot water.



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h) Start the stop-watch when the temperature is **80^0 C**. Record the temperature, **θ** after 4 minutes.

(a) θ = ……^{0}C. **(1mk)**

Convert to **θ** in degrees Celsius to temperature T, in kelvin.

(b) T = ……..K. **(1mk)**

i) Find the mass, **m** (in kg) of water in the beaker given that the density of water is 1000kg/m^3. **(2mks)**

j) Given that: $\boldsymbol{\gamma = \frac{mc(353-T)}{240}}$ where; m is the mass of the water used and the specific heat capacity of water, **c = 4200J/kg/K**, determine the value of γ. **(3mks)**

k) State the significance of γ. **(1mks)**

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KCSE 2024 PREDICTION EXAM

POSSIBLE SERIES 1

443/1

AGRICULTURE

PAPER 1

TIME: 2 HOURS

NAME……

SCHOOL…… SIGN……

INDEX NO…… ADM NO……

(Kenya Certificate of Secondary Education)

INSTRUCTIONS TO CANDIADATES

1. Write your name, admission number and class
2. This paper contains **three** sections
3. Answer all question in section **A** and **B**
4. In section **C** answer any **two** questions
5. Candidates must answer all the questions in English

For examiner's use only

Section	Questions	Maximum score	Candidate score
A	**1 -16**	**30**	
B	**17 -20**	**20**	
C		**20**	
		20	
Total score		**90**	

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SECTION A 30 MARKS.ANSWER ALL QUESTION

1.Name **four** methods of farming**.** **(2marks)**

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2.State **two** crop production practices that can be carried out to maintain optimum plant population.

(1mark)

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3.What is a micro catchment? **(1mark)**

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4.State any **four** details contained in a delivery note. **(2marks)**

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5(a) What is meant by the term Agroforestry? **(1mark)**

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(b) State **four** ways in which land reform can be implemented in kenya **(2marks)**

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6. State **two** examples for each of the following types of cost incurred in poultry production

a) variable cost **(1marks)**

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b) Fixed cost **(1 mark)**

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7. Name **three** sources of underground water **(1½marks)**

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8.State **three** causes of blossom end of rot in tomatoes **(1½marks)**

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9. Give **four** qualities of a good green manuring plant **(2marks)**

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10. State **two** pests that attack cabbages **(1 mark)**

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11. Distinguish between pinching out and coppicing as used in crop production **(2marks)**

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12. State **four** advantages of growing maize in rows instead of broadcasting. **(2marks)**

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13. What is integrated pest management **(1mark)**

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14. Name **four** types of water pumps which can be used in the farm. **(2marks)**

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15. Name **four** factors that influence soil erosion. **(2marks)**

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16a). List **four** problems associated with nomadic pastoralism in Kenya. **(2marks)**

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b) Name **four** factors of production in agriculture. **(2marks)**

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SECTION B 20 MARKS (ANSWER ALL QUESTION)

17. The table below shows the population and gross domestic products of countries A and B

Country	Gross Domestic product (million Ksh)	Population (million)
A	1800	36
B	1200	15

(a) Calculate the per capita income for each country show your working **(2marks)**

(b) Which of the two countries is more developed economically **(1mark)**

……

……

(c) Give a reason for your answer in (b) above **(1mark)**

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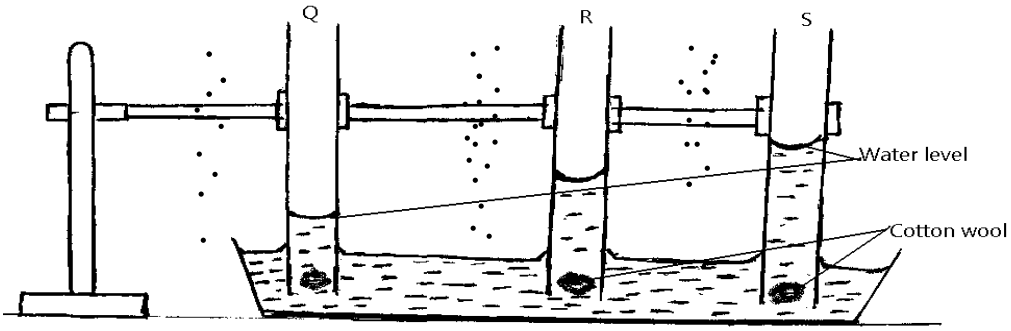
(d) How can agriculture increase the gross domestic product of a country **(1mark)**

……

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18. The diagram below shows an experiment set up using soil type Q, R and S and the observations made after 24 hours. Study the diagram below and answer the questions that follow.



(a). The experiment set up above is designed to study what? **(1mark)**

……

(b). Name the soil types S and Q **(2marks)**

S……

Q……

(c). What are the characteristic texture of soil type **R and S?**

R ……..… (1 mark)

S ……...(1 mark)

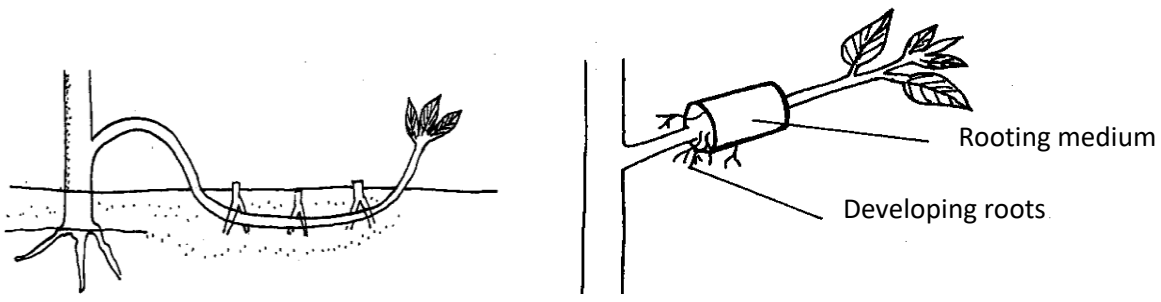
19.a) Identify two methods of plucking table formation in tea establishment **(2marks)**

……

……

b). Diagram below show crop production practices. Study and answer question that follow.

A B



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i. Identify the crop propagation methods illustrated above

A…… (1 mark)

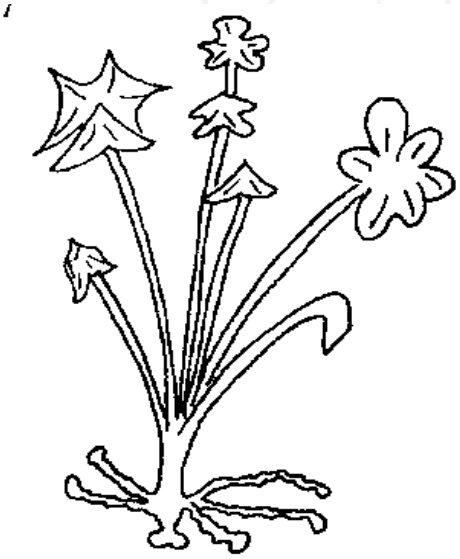
B…… (1 mark)

ii. State one factors that would promote root formation in the propagation method in a (B) above

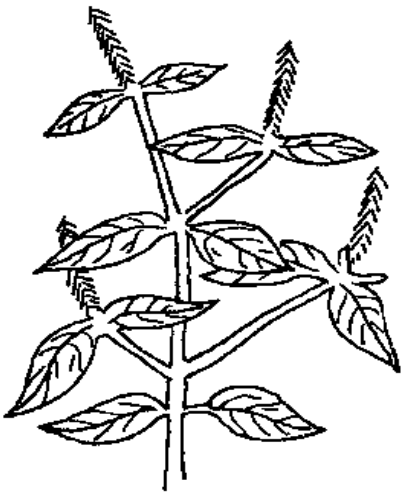
……(1mark)

20. The diagram below show weeds. Study them and answer question that follow.

A



B



a) Identify the weeds illustrated in diagrams A and B **(2marks)**

A……..

B……..

b) State one reason why the weed labeled A is difficult to control. **(1mark)**

……

……

c) State two economic importance of the weed labeled B in Agriculture. **(2marks)**

……

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SECTION C 40 MARKS. (ANSWER ONLY TWO QUESTIONS)

21.a) Explain **four** physical methods of pest control **(8 marks)**

b) Outline **five** importance of draining agricultural land. **(5 marks)**

c) Explain **seven** safety precautions observed when spraying herbicides. **(7 marks)**

22.a) Describe the characteristics of ideal agroforestry tree species **(8 marks)**

b) State **four** factors that influence the type of irrigation to be used in a farm. **(4 marks)**

c) Outline four advantages of rotational grazing **(4 marks)**

d) State four principles governing formation of cooperatives **(4 marks)**

23.(a) Describe **five** ways through which soil loses fertility **(10 marks)**

(b) Describe field production of Nappier elephant grass under the following sub heading

(i) Seed bed preparation **(6 marks)**

(ii) Utilization **(4 marks)**

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KCSE 2024 PREDICTION EXAM

POSSIBLE SERIES 1

443/2

AGRICULTURE

PAPER 2

TIME: 2 HOURS

NAME……

SCHOOL…… SIGN……

INDEX NO…… ADM NO……

(Kenya Certificate of Secondary Education)

INSTRUCTIONS TO CANDIADATES

1. *Write your name, admission number and class*
2. *This paper contains **three** sections*
3. *Answer all question in section **A** and **B***
4. *In section **C** answer any **two** questions*
5. *Candidates must answer all the questions in English*

For examiner's use only

Section	Questions	Maximum score	Candidate score
A	1 -17	30	
B	18 -21	20	
C		20	
		20	
Total score		90	

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SECTION A

1. Other than sleeping give **two** other uses of the sleeping yard of a rabbit hutch. **[1 mark]**

……

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2. State **four** characteristics of roughage. **[2 marks]**

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3. State **four** categories of livestock diseases. **[2 marks]**

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4. State **four** conditions that may reduce the quality of eggs for hatching. [2 marks]

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5. Explain **two** maintenance practices carried out on a cross cut saw. **[2 marks]**

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6. State **four** limitations of using solar power on the farm. **[2 marks]**

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7. Name **four** dairy breeds of cattle. **[2 marks]**

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8. State the origin of each of the following dual purpose cattle breeds. **[1 mark]**

a) Sahiwa

……

b) Red poll

……

9. State **four** symptoms of rinder pest disease in cattle. **[2 marks]**

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10. State **four** reasons for castrating piglets. **[2 marks]**

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11. Name **two** practices carried out in a crush. **[1 mark]**

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12. Give **two** effects of internal parasites that are harmful to livestock. **[1 mark]**

……

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13. Give **four** reasons why farmers steam up dairy cattle. **[2 marks]**

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14. Outline **four** ways of maintaining good health in livestock. **[2 marks]**

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15. Name **four** methods of dehorning. **[2 marks]**

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16. Distinguish between cropping and harvesting in fish. **[2 marks]**

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17.Give **four** importances of keeping livestock healthy. **[2 marks]**

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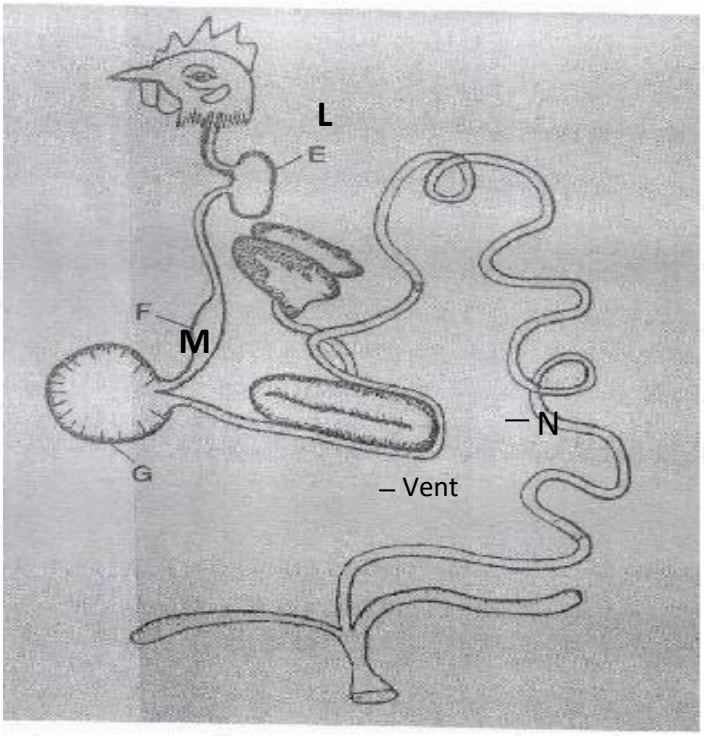
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SECTION B [20 MARKS] ANSWER ALL QUESTION

18. The diagram below illustrates the digestive system of a farm animal.



a) Name the farm animal with this digestive system. **[1 mark]**

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b) Name the part labeled.

L:…… [1 mark]

M:…… [1 mark]

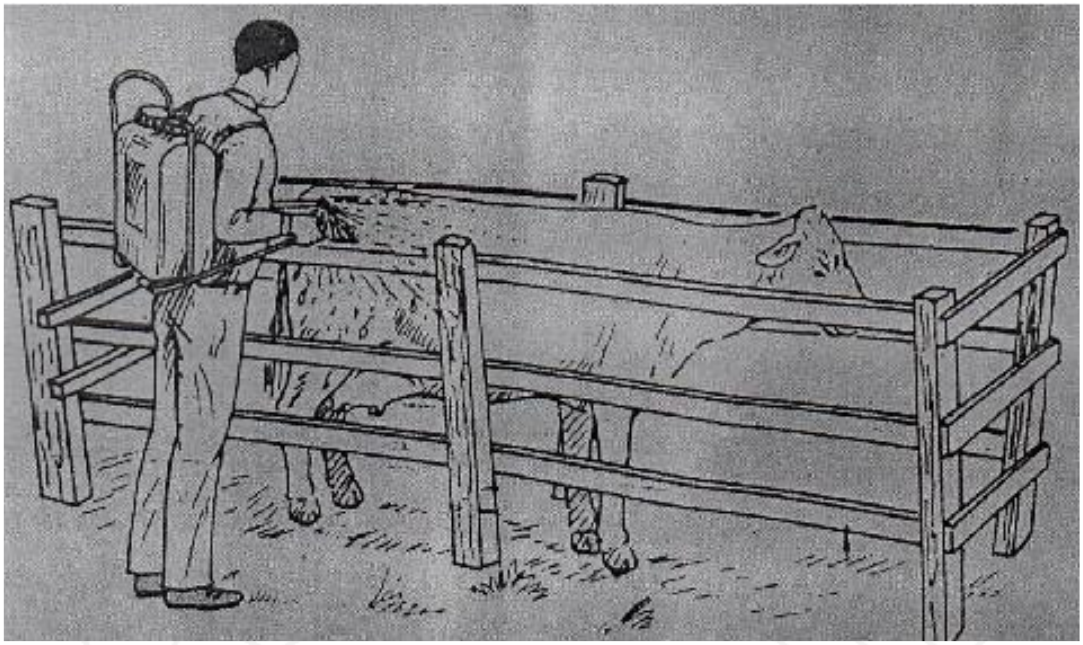
c) State **two** functions of the part labeled N. **[2 marks]**

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19. The illustration below shows a farm practice used in the control of external parasites.



a) Name the method of parasite control shown in the illustration. **[1 mark]**

……

b) Name **two** ectoparasites that can be controlled using this method. **[1 mark]**

i)……

ii) ……

c)i) Name the equipment being used to carry out the practice illustrated above. **[1 mark]**

……

ii) State **two** factors that will lead to maximum effectiveness when using the practice above to control ectoparasites. **[2 marks]**

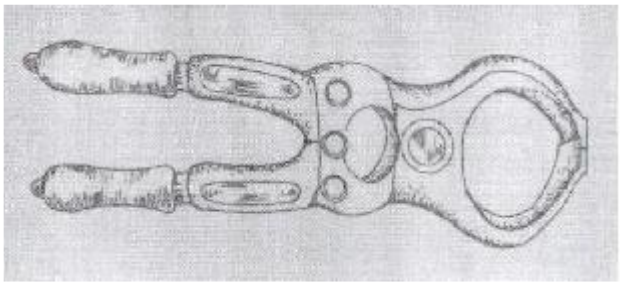
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20. Below is a diagram of a tool used in livestock rearing.



a) Identify the tool. **[1 mark]**

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b) State **two** uses of the tool. **[2 marks]**

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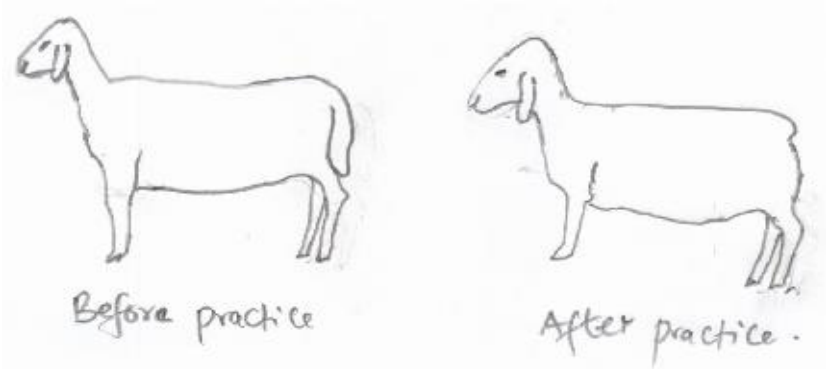
c) Give **two** reasons why farmers prefer using the tool. **[2 marks]**

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21.The illustration below shows a practice carried out in sheep



a) Identify the practice. **[1 mark]**

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b) State **two** reasons for carrying out the practice. **[2 marks]**

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c) At what age should the practice named in (a) above carried out? **[1 mark]**

……

d) Give **one** reason why a hot iron is recommended when carrying out the practice. **1 mark**

……

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SECTION C [40 MARKS] ANSWER ONLY TWO QUESTIONS

22.a) Explain **seven** structural requirements for a grain store. **[7 marks]**

b) State the factors considered when selecting livestock for breeding. **[8 marks]**

c) Outline the procedure of handling a heifer when administering a liquid deworming drug to control internal parasites. **[5 marks]**

23.a) Describe **ten** characteristics of a poor layer. **[10 marks]**

b) Describe short term tractor servicing. **[5 marks]**

c) Explain **five** maintenance practices of a wheel barrow. **[5 marks]**

24.a) Describe how a farmer will ensure clean milk production in a dairy farm. **[10 marks]**

b) Outline **four** observations on behaviour of chicks that indicate that temperature in a brooder is too high. **[4 marks]**

c) Explain **six** advantages of kenya top bar hive (K.T.B.H) in bee keeping. **[6 marks]**

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KCSE 2024 PREDICTION EXAM

POSSIBLE SERIES 1

565/1

BUSINESS STUDIES

PAPER 1

TIME: 2 HOURS

NAME……

SCHOOL…… SIGN……

INDEX NO…… ADM NO……

(Kenya Certificate of Secondary Education)

Instructions to candidates:

- *Write your **name** and **index number** in spaces provided **above**.*
- *Sign and write the date of the examination in the spaces provided above.*

FOR EXAMINER'S USE ONLY

QUESTION	1	2	3	4	5	6	7	8	9	10	11	12	13
MARKS													

14	15	16	17	18	19	20	21	22	23	24	25	**TOTAL**

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1. In the table below, fill in the correct discipline from the given statements (**4mks**)

STATEMENT	DISCIPLINE
Systematic way of recording business transactions	
Study of trade and aids to trade	
Activities carried out in an office	
Study of how human beings strive to satisfy their wants using scarce resources.	

2. Outline four benefits that a consumer gets from warehousing. (**4mks**)

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3. Outline four circumstances under which a producer may opt to sell his product directly to the consumer. (**4mks**)

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4. Amina complains to her friend that nowadays she is finding it increasingly hard to satisfy her needs. Give four reasons why she may be finding herself in such a situation.

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5. State four uses of general journal as a book of original entry. (**4mks**)

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6. Highlight four types of complains that consumers organization may receive from consumers.

(**4mks**)

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7. The following information relates to Juma traders as at 30th June 2023.

- Capital 96 600
- Debtors 29 520
- Creditors 24 670
- Motor vehicle 79 000
- Cash 11 250
- Stock 1 500

Prepare a trial balance (**4mks**)

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8. Match the following definition with appropriate external business environment. (technological,legal-political;economic and social- cultural) (4 mks)

DEFINITION	BUSINESS ENVIRONMENT
Close monitoring of business and passing laws and policies to regulate them.	
Level of know-how, efficient use of tools.	
Customs, values and beliefs that regulate behaviour of people.	
Factors that affect the buyers' ability to buy goods and services offered by business	

9. Outline four factors influencing amount of money held for precautionary motive. (**4mks**)

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10. Judy a business lady has joined Facebook. Give four business related benefits she can get from being a user of Facebook. (**4mks**)

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11. Outline four assumptions to the circular flow of income in a two-sector economy. (**4mks**)

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12. Highlight the functions of the following documents used in international trade. (**4mks**)

a) Certificate of origin

b) Indent

c) Bill of landing

d) Commercial invoice

13. Outline four benefits of indirect production to an economy. (**4mks**)

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14. Highlight four circumstances under which insurance company may decline to compensate the insured after the occurrence of the risk.

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15. The following information relates Kamoko traders as at 31st December 2023.

	(Sh)
Fixed assets	400,000
Stock	120,000
Current liabilities	60,000
Net profit of the year	100,000

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Calculate:

a) Rate of return on capital employed

b) Current ratio

16. Highlight four factors that a firm may consider when deciding on goods to produce (**4mks**)

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17. Classify each of the following items of government expenditure as development or recurrent.

(**4mks**)

Item	Type of expenditure
Purchase of medicine for hospital	
Construction of new roads	
Payment of teachers' salary	
Purchase of a tractor for agricultural use	

18. State four reasons why hyper-markets are becoming very popular in kenya. (**4mks**)

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19. Outline four differences between perfect competition and monopolistic product market. (**4mks**)

Perfect competition **Monopolistic**

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20. Outline four factors that have limited containerization in transportation of goods. (**4mks**)

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21. Highlight four factors that promote entrepreneurial culture in a country. (**4mks**)

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22. Highlight four factors that may lead to shift of demand curve to the right. (**4mks**)

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23. State four principles that distinguish cooperative society from other forms of business organizations. (**4mks**)

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24. Outline four circumstances under which the capital of a business may change. (**4mks**)

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25. Mary has been appointed as a manager in a company. State four measures that she will take to improve the efficiency of workers. (**4mks**)

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KCSE 2024 PREDICTION EXAM

POSSIBLE SERIES 1

565/2

BUSINESS STUDIES

PAPER 2

TIME: 2½ HOURS

NAME……

SCHOOL…… SIGN……

INDEX NO…… ADM NO……

(Kenya Certificate of Secondary Education)

INSTRUCTIONS TO CANDIDATES

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

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

(c) *Answer any five questions in the spaces provided*

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

FOR EXAMINERS USE ONLY

Question	Maximum Score	Candidate's score
	20	
	20	
	20	
	20	
	20	
Total score		

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Answer any five questions in the spaces provided

1. (a) Explain five characteristics of an under-developed country. **(10 marks)**

(b) In the recent past, Kenya has been experiencing high rates of inflation. Explain any five non-monetary measures that a country may use to control this situation **(10 marks)**

2. (a) The per capita income in country A is considerably higher than that in country B. Explain five reasons why the citizens of country A may not necessarily enjoy higher standards of living than citizens of country B. **(10 marks)**

(b) Explain five circumstances under which personal selling would be the most appropriate method of product promotion. **(10 marks)**

3. (a) Explain any ways in which the external environment may contribute to the success of a business **(10 marks)**

(b) The following balances relate to Utawala Traders as at 31st December 2021

	Shs	
Salaries	70,000	
Stock (1/1/2021)	30,000	
Premises	700,000	
Creditors		35,000
Capital		700,000
Purchases	150,000	
Bank		120,000
Insurance	10,000	
Electricity	40,000	
Debtors	60,000	
Sales		350,000
Stock (31/12/2021)		20,000
2-year bank loan		200,000
Cash		90,000
Returns inwards	15,000	

Required:

(i) Prepare a trading, profit and loss account for the year ending 31st December 2021 **(5 marks)**

(ii) Prepare a balance sheet as at 31st December, 2021 **(5 marks)**

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4. (a) Explain ***five*** ways in which a computer may be used in an office **(10 marks)**

(b) Most of the African countries are suffering from rapid unemployment rates. Explain five causes of this situation. **(10 marks)**

5. (a) Outline five differences between a public limited company and a public corporation. **(10 marks)**

(b) Currently, commercial banks are establishing Banking Agencies in different parts of the country. Explain five benefits that are enjoyed by their customers as a result of this development. **(10 marks)**

6. (a) On 1st October 2013, Nyati Traders Had shs.10 000 and shs.40 000 at the bank. During the month, the following transactions took place.

2013

Oct 2 Bought goods worth shs3,100 by cheque
3 Paid motor expenses shs.6000 in cash
6 Sold goods worth 8200 cash
10 paid a creditor shs.9500 by cheque after deducting a 5% cash discount
12 Received a commission of shs.580 directly into the bank account.
15 The bank deducted shs. 850 from the business account for services rendered
19 The owner took shs.1500 by cheque for personal use
23 Paid Maboko traders shs.39,200 by cheque in full settlement of their account less 2% cash discount
24 Withdrew shs.15,000 from bank for business use
26 Received shs.8,200 cash from a debtor in full settlement of a debt of shs.8,500
30 Took all the cash to the bank leaving only shs.1800 in the cash till

Required:

Prepare a duly balanced three column cash book **(10 marks)**

(b) Explain any **five** ways of improving the efficiency of a warehouse. **(10 marks)**

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KCSE 2024 PREDICTION EXAM

POSSIBLE SERIES 1

313/1

CHRISTIAN RELIGIOUS EDUCATION

PAPER 1

TIME: 2½ HOURS

NAME……

SCHOOL…… **SIGN**……

INDEX NO…… **ADM NO**……

(Kenya Certificate of Secondary Education)

INSTRUCTIONS TO CANDIDATES:

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

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

c) *This paper consists of **six** questions.*

d) *Answer **any five** questions in the spaces provided at the end of question 6.*

e) *Each question carries **20 marks.***

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

FOR EXAMINERS USE ONLY

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

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*Answer any **FIVE** questions*

1. a) Give **seven** reasons why Christians read the bible. **(7 marks)**

b) Outline the teachings on the relationship between human being and the environment from Genesis stories of creation. **(7marks)**

c) State **six** consequences of breaking taboos in traditional African communities. **(6 marks)**

2. a) Describe how God prepared the Israelites for the making of the covenant at Mt. Sinai.(Exodus 19). **(8 marks)**

b) State **seven** importance of God's covenant with Abraham. **(7marks)**

c) Give **five** lessons that Christians learn from the incident when Abraham was willing to sacrifice his son Isaac. **(5marks)**

3. a) State **seven** ways why the Israelites demanded to be led a king. **(7marks)**

b) Describe the incident in which King Ahab took Naboth's vineyard. (1 Kings 21: 1-16**)** **(8 marks)**

c) State **five** lessons Christians learn from the ministry of Prophet Elijah. **(5marks)**

4. a) Explain **four** categories of prophets in Old Testament. **(8marks)**

b) Outline the teaching of prophet Amos on the remnant and a restoration of the Israelites. (Amos 9: 8-15) **(6marks)**

c) State **six** relevance of prophet Amos teaching on election of Israel to Christians in Kenya today **(6marks)**

5. a) Give reasons why Jeremiah was not willing to accept the call of God to become a prophet, **(6marks)**

b) Give **seven** reasons why Nehemiah introduced the policy of separation of Jews from foreigners. **(7 marks)**

c) Identify **seven** ways in which the Government of Kenya supports church leaders in their work. **(7marks)**

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6. a) State **seven** African Communities practices that show their belief in life after Death.

(7marks)

b) Identify the requirements that one had fulfill to be made an elder in traditional African Communities. **(6marks)**

c) Outline **seven** Factors that are undermining the role of elders in Kenya today. **(7marks)**

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KCSE 2024 PREDICTION EXAM

POSSIBLE SERIES 1

313/2

CHRISTIAN RELIGIOUS EDUCATION

PAPER 2

TIME: 2½ HOURS

NAME……

SCHOOL…… **SIGN**……

INDEX NO…… **ADM NO**……

(Kenya Certificate of Secondary Education)

INSTRUCTIONS TO CANDIDATES:

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

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

c) *This paper consists of **six** questions.*

d) *Answer **any five** questions in the spaces provided at the end of question 6.*

e) *Each question carries **20 marks.***

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

FOR EXAMINERS USE ONLY

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

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*Answer any **FIVE** questions*

1. a) Outline the events that took place on the night Jesus was born. **(7marks)**

b) Outline the message given to Mary by Angel Gabriel concerning Jesus. **(6marks)**

c) Outline **seven** ways through which Christians in Kenya express their joy for the birth of Jesus. **(7marks)**

2. a) State **seven** importance of transfiguration to Jesus and his disciples' life. **(7marks)**

b) Describe the incident when Jesus was rejected at Nazareth (Luke 4: 16-30) **(7 marks)**

c) State **six** ways in which church leaders can respond to those who oppose them in their work. **(5marks)**

3. a) Narrate the parable of the shrewd manager in Luke 16:1-10. **(7marks)**

b) State **seven** teachings of Jesus on the kingdom of God. **(7marks)**

c) State **six** ways on how Christians misuse their wealth. **(6marks)**

4. a) State **seven** Saint Paul's teaching on the proper use of the gifts of the Holy Spirit in the church. **(7marks)**

b) Describe how the image of the body of Christ is used in relation to the unity of believers. **(8marks)**

c) Outline **five** causes of conflict in the church today. **(5marks)**

5. a) Explain **four** causes of unemployment in Kenya today. **(8marks)**

b) State the role of professional ethics in a work place. **(6marks)**

c) State **six** consequences of denying employees rest. **(6marks)**

6. a) State ways through which unfair distribution of wealth can lead to social disorder in Kenya today. **(8marks)**

b) Outline **six** teachings of Jesus on wealth. **(6marks)**

c) Outline the importance of paying taxes as a Christian to the Government of Kenya. **(6marks)**

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KCSE 2024 PREDICTION EXAM

POSSIBLE SERIES 1

311/1

HISTORY AND GOVERNMENT

PAPER 1

TIME: 2½ HOURS

NAME……

SCHOOL…… SIGN……

INDEX NO…… ADM NO……

(Kenya Certificate of Secondary Education)

INSTRUCTIONS TO CANDIDATES

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

FOR EXAMINER USE ONLY

SECTION A	SECTION B				SECTION C			GRAND TOTAL
1-17	18	19	20	21	22	23	24	

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SECTION A (25MKS)

Answer all questions in this section

1. Name **two** pre historic sites in Kenya **2mks**

2. Identify the dispersal point of river lake Nilotes in Uganda **1mk**

3. Identify **two** duties of Orkoiyot among the Nandi during pre-colonial period **2mks**

4. Give the political significance of circumcision among Kenyan societies in pre-colonial period **1mk**

5. What was the **main** reason for rulers of Malindi to welcome the Portuguese in the 16thC? **1mk**

6. State **two** reasons why the government may limit the freedom of speech in Kenya today **2mks**

7. Give **two** types of democracy used in Kenya **2mks**

8. State **two** terms of Anglo- German agreement of 1886 **2mks**

9. Name **one** leader of the Asian delegation to London during the Devonshire White paper of 1923 **1mk**

10. Identify the **main** incident that prompted the declaration of the state of emergency in Kenya on 20TH October 1952 **1mk**

11. Give **two** objectives of Kenya African Democratic Union (KADU) **2mks**

12. Name the body responsible for coordination of elections in Kenya **1mk**

13. Name the Chief accounting officer of the Judicial Service Commission **1mk**

14. Name the education commission established in 1982 to review the system of education **1mk**

15. What was the political consequence of 1966 Limuru conference **1mk**

16. Identify **two** ex-official members of Kenyan parliament **1mk**

17. Give **two** examples of external sources of revenue for national government **2mk**

SECTION B (45MKS)

Answer any three questions

18. a) Name **five** communities which belong to Highland Nilotes **5mks**

b) Describe the social organization of the Somali during the pre-colonial period **10mks**

19. a) Give **five** reasons why Nabongo Mumia collaborated with the British **5mks**

b) Explain **five** effects of missionary activities in Kenya **10mks**

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20. a) State ways in which the colonial land policies negatively affected the African in the colonial period **5mks**

b) Explain the role of political parties in the struggle for independence in Kenya in the 19th C **10mks**

21. a) Identify **five** roles of National philosophies in Kenya's development **5mks**

b) Explain **five** challenges facing health sector in Kenya today **10mks**

SECTION C (30MKS)

Answer any two questions

22. a) Identify **three** ways that could be used to amend the constitution **3mks**

b) Outline the stages through which a bill passes before it becomes law in Kenya **12mks**

23. a) Give **three** reasons why general elections are conducted every five years **3mks**

b) Explain **six** functions of the public service in Kenya **12mks**

24. a) Give the composition of the county assembly **5mks**

b) Explain **five** reasons why the Kenyan government prepares an annual budget **10mks**

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KCSE 2024 PREDICTION EXAM

POSSIBLE SERIES 1

311/2

HISTORY AND GOVERNMENT

PAPER 2

TIME: 2½ HOURS

NAME……

SCHOOL…… SIGN……

INDEX NO…… ADM NO……

(Kenya Certificate of Secondary Education)

INSTRUCTIONS TO CANDIDATES

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

FOR EXAMINER USE ONLY

SECTION A	SECTION B				SECTION C			GRAND TOTAL
1-17	18	19	20	21	22	23	24	

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SECTION A (25mks)

Answer all questions in this section

1. Name two types of written materials used by historians as a source of history and government. **(2mks)**
2. List **two** economic activities of early man during the stone age period. **(2mks)**
3. Name the person who invented seed drill. **(1mk)**
4. State **two** ways trough which slaves were obtained in West Africa during the Trans-Atlantic trade. **(2mks)**
5. Give **two** features of the Roman roads by 300AD. **(2mks**
6. Identify the **MAIN** use of steam power during the industrial revolution in Europe. **(1mk)**
7. Outline the **MAIN** factor that led to the growth of ancient town in Kilwa. **(1mk)**
8. Name **two** officials who assisted the ruler of Shona to administer the kingdom. **(2mks)**
9. State the social factors which caused the maji maji rebellion. **(1mk)**
10. Outline the role of emirs of Northern Nigeria during the colonial period. **(1mk)**
11. Give two roles played Ex-World war soldiers in the growth of African nationalism after 1945. **(2mks)**
12. Identify one way in which the cold war was fought. **(1mk)**
13. Give two economic benefits enjoyed by members of common wealth. **(2mks)**
14. Identify two principles of Arusha declaration of 1967. **(2mks)**
15. Define the term Non-Alignment movement (NAM). **(1mk)**
16. Identify one house of congress in USA. **(1mk)**
17. State one function of the International Court of Justice in the United Nations Organisation. **(1mk)**

SECTION B (45MKS)

Answer any three questions in this section

18. a) Give **five** reasons why hunting of wild animals was mainly a group activity during the stone age period. **(5mks)**

    b) Discuss the factors that led to the Agrarian revolution in America. **(10mks)**

19. State **three** factors that led to the development of Trans-Atlantic trade. **(3mks)**

    b) Explain the factors for the decline of Trans-Saharan trade. **(12mks)**

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20. a) Give **five** factors that led to the growth of the Asante empire by the 19th century. **(5mks)**

b) Explain 5 reasons why the Africans were defeated during the Maji Maji rebellion. **(10mks)**

21. a) Give 3 social developments which have taken place in Tanzania since independence. **3mks**

b) Explain six political challenges in DRC. **(12mks)**

SECTION C (30MKS)

Answer any two questions in this section

22. a) Give **three** reasons why United States of America did not join the First World War until 1917. **(3mks)**

b) Explain **six** effects of the Second World War. **(12mks)**

23. a) State **three** reasons why the British used indirect rule in Northern Nigeria. **(3mks)**

b) Explain **six** problems experienced by French administration in Senegal. **(12mks)**

24. a) Outline the **five** roles of the prime minister in India. **(5mks)**

b) Explain the functions of House of Lords in Britain. **(10mks)**

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KCSE 2024 PREDICTION EXAM

POSSIBLE SERIES 1

312/1

GEOGRAPHY

PAPER 1

TIME: 2¾ HOURS

NAME……

SCHOOL…… SIGN……

INDEX NO…… ADM NO……

(Kenya Certificate of Secondary Education)

INSTRUCTIONS TO CANDIDATES

1. *Write your name, Admission Number and Class*
2. *The paper consists of two section A and B*
3. *Answer **all question** in section **A***
4. *In section B answer question **SIX and any other TWO** questions*

FOR EXAMINERS USE ONLY.

	QUESTION	CANDINDATES SCORE
SECTION A	Q 1-5	
SECTION B	Q6	
	Q7	
	Q8	
	Q9	
	Q10	
TOTAL		

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SECTION A

Answer All Questions. 25 Marks

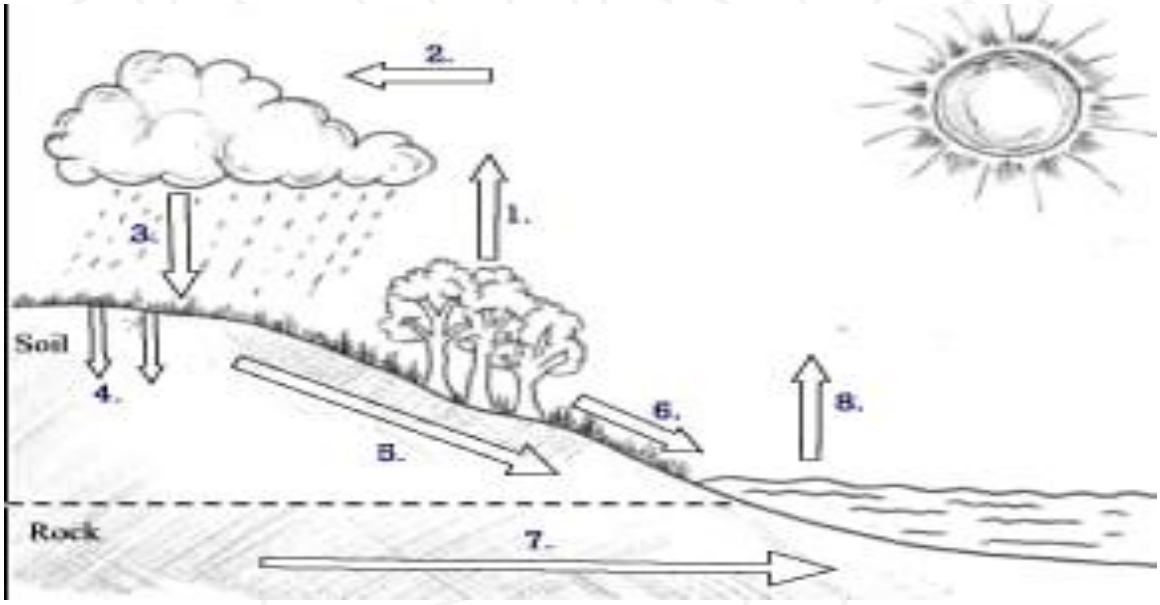
1a] Give **two** types of environments. **[2marks]**

b] State **three** major branches of practical geography**.** **[3marks]**

2. a] Differentiate between weather and climate. **[2marks]**

b] Give **three** benefits of humidity in the atmosphere. **[3marks]**

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



I] Identify the process labeled 3 and 6. **[2marks]**

II] State the force that is responsible for process 5**.** **[1mark]**

III] Highlight **two** factors that influence process 4**.** **[2marks]**

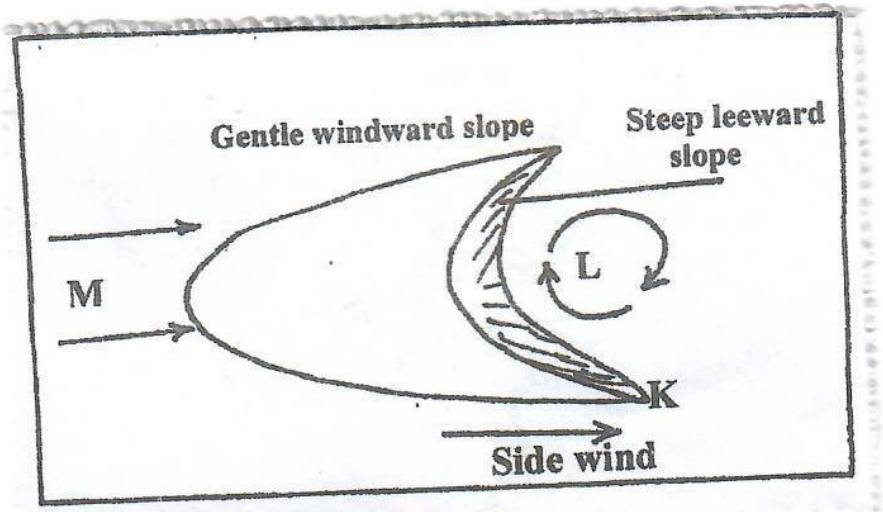
4. a] Give **two** causes of river rejuvenation**.** **[2marks]**

B] Identify **three** features that result from river rejuvenation**.** **[3marks]**

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5. The diagram below shows some features of wind deposition. Study it to answer questions that follows

a] Identify part marked **K, L** and **M** **[3marks]**



B] State **two** factors that influence deposition of materials by wind in deserts. **[2marks]**

SECTION B

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

6. Study the map of KISUMU EAST 1: 50000 [SHEET 116/2] provided to answer the following questions.

[a] I] Apart from the type of map you are using state any other **two** types of maps**.** **[2marks]**

II] Identify **two** vegetation in the area covered by the map **[2marks)**

II] Name **two** methods used to represent relief in the area covered by the map**.** **[2marks]**

[B] I] In what hemisphere does Kisumu East lie? **[1mark]**

II] Measure the distance of the section of railway line west of Easting 00 to Kisumu station, give your answer in kilometers. **[2marks]**

III] Identify **two** forms of land transport in Kisumu east**.** **[2marks]**

[C] I] Describe **relief** of the area covered by the map**.** **[3marks]**

II] Describe the distribution of settlement in the area covered by the map **[4marks]**

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D] Using a vertical scale of **1cm represent 20m** draw a cross section along northing **98 from Easting 96 to** Easting 02. **[4marks]**

On it mark and label the following. **[3marks]**

River Nyangori

Dry weather road

Steep slope.

7 a Define the karst scenery. [**2mark**]

I] Explain **three** factors that influence the formation of features in limestone area. [**6marks**]

II] Give **three** reasons why there are few settlements in the karst landscape**.** [**3marks**]

B] Describe how the following features are formed.

I] **Grikes and Clints.** **[4marks]**

II] **Swallow holes**. **[4marks]**

C] You are supposed to carry out a field study of an area eroded by underground water.

[I] Give **three** reasons why you would need a working schedule**.** **[3marks]**

[II] Name **two** erosional features you are likely to identify during the study. **[2marks]**

[II] State **three** recommendations that you could make from your study to assist the local community to rehabilitate the eroded area. **[3marks]**

8A I] Define the term earthquakes**.** **[1mark]**

II] State **three** types of earthquakes depending on the depth of focus**.** **[3marks]**

III] Differentiate between the **intensity** and **magnitude** of an earthquake. **[2marks]**

B] I] Highlight **three** causes of vulcanicity**.** **[3marks]**

II] State **two** types of magma. **[2marrks]**

III] State **three** factors that influence the shape and type of volcanic features formed.**[3marks]**

C] Describe how **hot springs** are formed. **[5marks]**

D] Explain **three** ways in which volcanic features positively influence human activities. **6marks]**

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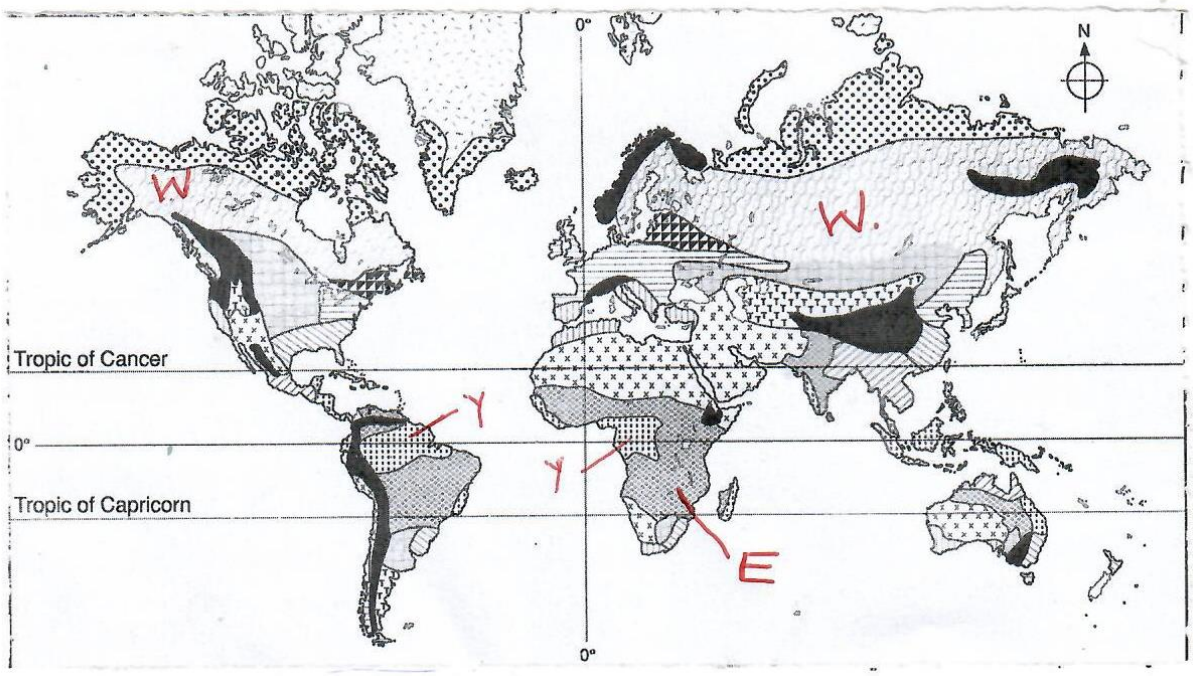
9. [A] Different between **derived** and **cultivated** vegetation**.** **[2marks]**

[b] Explain how the following factors influence vegetation distribution in Kenya.

[I] Living organism. **[2marks]**

[ii] **Precipitation.** **[2marks]**

C] The map below shows the globe distribution of vegetation. Study and use it to answer the questions that follow.



[I] Identify the vegetation labelled**, W and Y** **[2marks]**

[II] Describe the adaptive characteristics of the vegetation labelled E on the map. **[6marks]**

D] Your class is planning to undertake a field study on vegetation in Mt. Kenya Forest`,

[I] State **four** preparations you would carry out. [**4marks**]

[II] Give **three** sampling techniques you would use. **[3marks**]

[III] Identify **four** problems you are likely to encounter during the actual field study. **[4marks**]

10. A [I] what is continental shelf? **[2marks**]

[ii] State **two** characteristics of the continental shelf. [**2marks]**

B [I] state **two** types of islands**.** **[2marks]**

ii] Give **three** sources of ocean salts**.** **[3marks]**

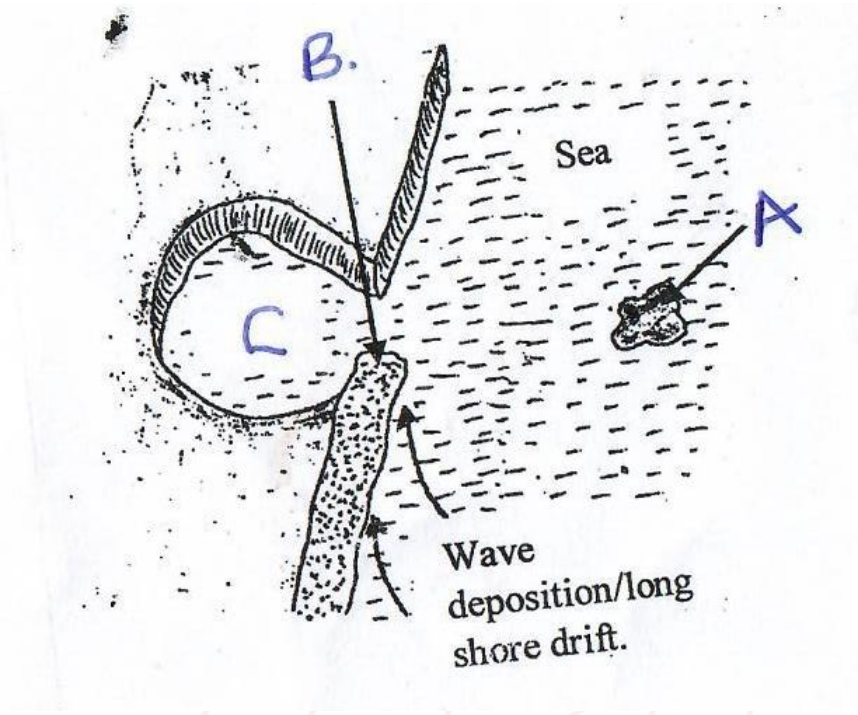
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iii] Give **two** reasons why water salinity is lower in areas around the equator seas than further away in the tropics. [**2marks]**

C i] Give **two** types of tides. **[2marks**]

ii] Using a well labelled diagram, describe how a wave break. **[4marks**]

D. Use the diagram below to answer questions that follow.



I] identify the parts labeled. **A, B and C.** **[3marks]**

E] Your class carried out a field study on the coastal landforms

I] State **two** features of lowland submerged coasts that you identified. **[2marks]**

III] Give **three** reasons why you needed a route map. [**3marks]**

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KCSE 2024 PREDICTION EXAM

POSSIBLE SERIES 1

312/2

GEOGRAPHY

PAPER 2

TIME: 2¾ HOURS

NAME……

SCHOOL…… SIGN……

INDEX NO…… ADM NO……

(Kenya Certificate of Secondary Education)

INSTRUCTIONS TO CANDIDATES

1. *Write your name, Admission Number and Class*
2. *The paper consists of two section **A** and **B***
3. *Answer **all question** in section **A***
4. *In section **B** answer question **SIX and any other TWO** questions*

FOR EXAMINERS USE ONLY.

	QUESTION	CANDINDATES SCORE
SECTION A	Q 1-5	
SECTION B	Q6	
	Q7	
	Q8	
	Q9	
	Q10	
TOTAL		

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SECTION A: Answer all questions in this section.25MKS

1. (a) State **two** formations in which mineral ores occurs. **(2mks)**

b) Give **three** reasons why coal resource in the Mui basin Kitui County has not been commercially exploited**.** **(3mks)**

2. (a) What is mixed farming? **(2mks)**

b) Give **three** advantages of mixed farming. **(3mks)**

3. a) What is energy crisis. **(2marks)**

b) Identify **three** causes of energy crisis. **(3marks)**

4. (a) Name **two** forest reserves in Kenya. **(2marks)**

(b) State **three** characteristics of Equatorial rainforests. **(3marks)**

5. a) State **three** human factors favoring tourism in Switzerland. **(3marks)**

b) **Define** eco-tourism. **(2marks)**

SECTION B (75MARKS)

Answer question SIX and any other TWO questions

6. The table below shows the various modes of transport used by tourists visiting Kenya between the years 2006 and 2009. Use it to answer the following questions.

Mode of transport	**No. of tourists.**			
Road	**2006**	**2007**	**2008**	**2009**
	100,000	50,000	150,000	200,000
Air	600,000	650,000	700,000	800,000
Water	200,000	150,000	100,000	50,000

a) i) state **two** reasons why tourists preferred air transport over the other modes of transport over the period**.** **(2marks)**

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ii) Calculate the percentage increase in the number of tourists between the year 2008 and 2009. **(3marks)**

iii) Using a scale of **1cm to represent 100 000** tourists, draw a compound bar graph to represent the number of tourists who visited Kenya using the different mode of transport. **(9marks)**

b) i) Explain **three** roles played by transport in the economy of Kenya. **(6marks)**

ii) Name **one** high way created in Africa to ease transport across the continent. **(1mark)**

c) Form **four** students from Kibutha high school visited Kisumu airport for a field study.

i) Identify **two** methods they used to record their data. **(2marks)**

ii) Give **two follow up** activities they engaged in. **(2marks)**

7. a) i) What is land reclamation. **(1mark)**

ii) State **five** benefits which Kenya derives from irrigation farming? **(5marks)**

b) Explain three factors that led to the successful establishment of Perkerra irrigation scheme. **(6marks)**

c) Give **four** problems facing the perkerra irrigation scheme. **(4marks)**

d) Name **three** crops grown under irrigation in perkerra. **(3marks)**

e) Explain **three** reasons why horticulture is more developed in the Netherlands than Kenya. **(6marks)**

8. (a)i) What is industrialization? **(2 marks)**

ii) State **three** reasons why some industries consider regular supply of water as the main reason for their location. **(3 marks)**

(b) Outline **four** similarities between Jua Kali industry in Kenya and cottage industry in India. **(4mks)**

(c) Explain **three** factors that have influenced the location of iron and steel industry in the Ruhr region of Germany in the 19th century. **(6 marks)**

(d) You intend to carry out a field study of a heavy manufacturing industry;

i) State **three** effects of the industry on the environment you are likely to observe **(3 marks)**

ii) Design a working schedule you would use during the day of study **(4 marks)**

iii) State **three** reasons why it is important to prepare a working schedule for the study. **(3 marks)**

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9. i) What is unfavorable balance of trade. **(2marks)**

ii) Outline **five** measures a country can adopt to reduce unfavorable balance of trade. **(5marks)**

b. Explain **five** benefits that Kenya derives from participating in international trade. **(10marks)**

c i) State **three** non-agricultural exports from Kenya. **(3marks)**

ii) State **five** problems facing developing countries in international trade. **(5marks)**

10. a) i) What is an environmental hazard? **(1mark)**

ii) Apart from floods list **three** other environmental hazard. **(3marks)**

b) Explain four ways in which air pollution affects the environment. **(8marks)**

c) Explain **four** incidents that may lead to noise pollution in urban areas. **(8marks)**

d) Students from Kangema carried out a field study on floods at Kano plains.

i) State **two** objectives for their study. **(2marks)**

ii) State **three** ways in which residents of Kano plains are affected by floods that students observed. **(3marks)**

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KCSE 2024 PREDICTION EXAM

POSSIBLE SERIES 1

101/1

ENGLISH

PAPER 1*(Functional Skills)*

TIME: 2 HOURS

NAME……

SCHOOL…… **SIGN**……

INDEX NO…… **ADM NO**……

(Kenya Certificate of Secondary Education)

INSTRUCTIONS TO CANDIDATES

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

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

(c) *Answer* ***all*** *the questions in this question paper.*

(d) *All your answers must be written in the spaces provided.*

(e) *Candidates* ***MUST*** *answer the questions in English.*

For Examiner's Use Only

Question	Maximum Score	Candidate's Score
1	20	
2	10	
3	30	
	Total Score	

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1. FUNCTIONAL WRITING

The K.C.S.E results have just been released. You attained an A-. You see an advertisement on a newspaper of an intake to join Kenyatta University for a degree programme in Actuarial Science. Write a letter of inquiry to The Dean of Studies, inquire about the dates of the next intake, the fees per semester and whether they offer accommodation. **(20marks)**

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2. CLOZE TEST (10MKS)

Fill in the blank spaces in the passage below with the most appropriate word.

Not all work (1) _____ by children should be classified as child labour that is to be targeted for elimination. The (2) _____of children or adolescents above the minimum age for admission to employment in work that does not (3) _____ their health and personal development or interfere (4) _____ their schooling is generally regarded as being something (5) _____. This includes activities such as assisting in a family business or (6) _____ pocket money outside school hours and (7) _____ school holidays. (8) _____ kinds of activities contribute to children's (9) _____ and to the welfare of their families; they provide (10) _____ with skills and experience, and help to prepare them to be productive members of society during their adult life.

3. ORAL SKILLS

a) Read the poem below and answer the question that follows. (10 marks)

A MINOR BIRD

I have wished a bird would fly away,
And not sing by my house all day,
Have clapped my hands at him from the door
When it seems as if I could bear no more.

The fault must have been in me.
The bird was not to blame for his key.
And of course there must be something wrong
In wanting to silence any song.

QUESTIONS

i.) Identify and illustrate two sound patterns used in the poem. **(4 marks)**

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ii.) Chart the rhyme scheme pattern of the poem**.** **(2marks)**

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iii.) How would you perform the last line of the poem**?** **2 marks**

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iv.) For each of the following words used in the poem, provide another that is pronounced the same way**.** **(2marks)**

a) Not- _____

b) Course-_____

b.) Study the following genre and answer the questions that follow.

Shem showed Silla's shining shoes shamelessly on Sheba's shore.

i. Classify the above genre**.** **(1mark)**

……

ii. Explain what would be lost if this genre is translated into Swahili? **(2marks)**

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iii. State two functions of the genre identified above. (**2 marks)**

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Imagine that your class is having a talk on career choices. The speaker keeps asking the students to pay attention. Give five indicators that inform the speaker that his/her listeners are not attentive. **(5 marks)**

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Identify the intonation in the following sentences. **(4marks)**

i. Did you finish your homework? _____

ii. What a beautiful girl! _____

iii. Get out of sight now. _____

iv. You actually saw the pyramids? _____

a) Read the following conversation between Njoroge and the secretary of Walimu Wema College and answer the questions that follow.

Njoroge: Hello.

Secretary: Hello. Who are you?

Njoroge: I am Njoroge Kamau. Is that Walimu Wema College?

Secretary: Yes, what do you want?

Njoroge: I would like to talk to the prin…

Secretary: The principal is not in.

Njoroge: I wanted to enquire the requirements for joining the college.

Secretary: There's no room for more students.

Njoroge: Could you kindly tell me about the next intake?

Secretary: I don't know. You will see the advert in the newspaper. (hangs up)

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i. Identify the shortcomings in the secretary's responses. **(3mks)**

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ii. Correct any three responses of the secretary to ensure that they adhere to telephone etiquette.

Write your responses in the table below**:** **(3mks)**

Serial No.	What she said.	What she should have said.
1.		
2.		
3.		

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KCSE 2024 PREDICTION EXAM

POSSIBLE SERIES 1

101/2

ENGLISH

PAPER 2

(Comprehension, literary Appreciation and Grammar)

TIME: 2½ HOURS

NAME……

SCHOOL…… SIGN……

INDEX NO…… ADM NO……

(Kenya Certificate of Secondary Education)

Instructions to the candidates.

a) Ensure you write **your name, admission number and class** in the spaces provided above.

b) All questions in this paper are **compulsory**.

c) Answer **ALL** questions in the spaces provided.

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Question	Maximum Score	Candidate's Score
1. Comprehension	20	
2. Excerpt	25	
3. Poetry	20	
4. Grammar	15	
TOTAL	80	

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1. <u>Read the following passage and then attempt the questions that follow</u> 20 marks

Africa possesses incredible resilience as a race and has the potential to effectively utilize its abundant natural resources to enhance its quality of life. However, the key challenge lies in identifying strategies to create a conducive environment that promotes development across the continent. One crucial approach would involve establishing political structures and government institutions capable of formulating and implementing **genuine poverty alleviation strategies**. Revamping or eliminating administrative arrangements that no longer serve our needs is essential. The government should facilitate the exploitation and management of natural resources by fostering an enabling environment. While having a stable government is important, it is imperative to fight corruption. Leaders and government officials must be held accountable to the taxpayers, and the public should be educated on the harmful effects of corruption. Those who have stolen public funds should be compelled to return them and face legal consequences. Likewise, individuals known for hoarding money in foreign banks should be obligated to repatriate those funds to boost our economies.

Furthermore, Africa must find ways to resolve internal conflicts without relying on international intervention, recognizing that we are all united by a common purpose. Emphasizing the importance of unity and functioning as a unified entity should take precedence over tribal or clan sentiments that fuel animosity. Strengthening the African Union to effectively mediate both intra and inter-state disputes will pave the way for peace, creating an ideal environment for economic growth, recovery, and prosperity.

Another solution involves developing rural-based economies, considering that a significant portion of the population resides in rural areas. Industries that process agricultural products and manufacture farm inputs, machinery, and equipment should be strategically located in rural regions. Similarly, mining companies should establish processing plants near the mines. Such industries will naturally employ local labour, reducing the incidence of rural-urban migration. Establishing industries in rural areas will require the development of infrastructure, opening up these regions for business activities. Consequently, this will promote expansion, increase food production, and counter the persistent food shortages in Africa. For instance, developing dairy and beef processing industries in rural areas will encourage sustainable livestock keeping and mitigate losses due to drought. A rural-based economy will uplift the income of rural populations and narrow the wealth gap.

Introducing appropriate technology for resource exploitation and wealth creation is also crucial. Instead of relying on expensive imported technologies, Africa should leverage local expertise to develop technologies that align with our specific needs. Home-grown technology can significantly address Africa's food security by utilizing river and lake water for irrigation and harnessing wind and solar energy.

Lastly, our economic blocs such as ECOWAS, SADC, and EAC should evolve into common markets by eliminating unnecessary tariffs on goods at various entry points, thereby reaping the benefits of a unified market. The people of Africa should continuously strive for a better life. We possess abundant resources, a skilled workforce, and the capacity to drive progress forward.

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a) What should African countries do to fight corruption based on the information contained in the passage? **(2 marks)**

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b) Explain how Africans can open up rural areas**.** **(2 marks)**

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c) What do you understand by the term 'genuine poverty alleviation strategies'? **(2 marks)**

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d) How can we reduce the incidence of rural–urban migration? **(2 marks)**

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e) Why is appropriate technology useful? **(1 mark)**

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f) In not more than **fifty** words, write a summary of the various ways of fostering development in African countries**.** **(5 marks)**

Rough copy

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Fair copy

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g) What is the tone of the last paragraph of this passage concerning the future of Africa? **(3 marks)**

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h) The public should be educated on the ills of corruption. (Add a question tag.) **(1 mark)**

……

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

i) Stashed _____

ii) Disparity _____

2. EXCERPT 25 MARKS

Read the following excerpt and answer the questions that follow

First, there was a loud crash. Some moving object had hit another moving object. A trailer hooked to a truck negotiating a turn at a roundabout had broken free, spun outward, and ended up on top of a minibus in an adjacent lane.

The drivers of both vehicles had then run away. They had done so to avoid mob justice. Now the passengers in the unlucky minibus were struggling to get out, except for one—a woman trapped in a seat.

A man had seen her on his way out. He tried to go back in and get her out, but all doors had jammed. He pulled a mobile phone out of his pocket and called the mystical number — 999 — to report distress and request help.

The hour was ten in the morning. Onlookers started arriving. First, they only gawked, fascinated by the spectacle of a trailer sitting on top of a minibus. Goodness, how did it get there! Later, their attention moved down to the woman trapped inside the minibus. "Look," said one onlooker. A beautiful girl was trapped in her seat.

She was still conscious. "She is fine, then," said another onlooker. "Come on," said the first onlooker. "A heavy trailer is sitting on her minibus, so how can she be fine?" When the onlookers became a crowd, they tried to push the trailer off the minibus.

They failed. Then a big van appeared...

QUESTIONS

a) Put this excerpt in its immediate context. **(4 marks)**

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b) Give the character traits of the following**:** **(6 marks)**

The man_

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The onlookers

The drivers

c) From elsewhere in the novel, how does conflict arise between Kimani and Asiya over the death of their daughter? **(4 marks)**

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d) How is dialogue significant in this excerpt? **(4 marks)**

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e) Identify and explain one stylistic device used in the extract. **(3 marks)**

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f) "The hour was ten in the morning." Rewrite this statement beginning with: **(1 mark)**
It__

g) Explain the meanings of the following words as used in the excerpt. **(3 marks)**
Gawked

Fascinated

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Conscious

3. **ORAL NARRATIVE**

Read the story below and then answer the questions that follow. 20 marks

Once upon a time, there was the man who had a wife who was barren after giving birth to an only boy. After consulting a witch doctor, he went in search of an ogre's tail as he had been instructed. After a long and hazardous journey through unknown lands, he came into a country of the ogres. That day the ogres were celebrating the installation of a new king. He joined in their beer party and the ogres welcomed him though they had difficulty in restraining their deep desire to eat him.

When all ogres went to bed, the man with his knife in his hand stealthily crept to the bed chamber of the new king. Overcome with too much beer, the king was sleeping too heavily to notice that his tail was being slashed off. When he woke up the following morning, he found the other ogres dancing and singing:

Omwami kenyalile The king has urinated

Khane omwami kenyalanga So the king urinates

He looked about him and saw blood, then he noticed that his tail was missing. The visitor was also missing!

The king then changed himself into a beautiful woman. After a long journey, she came upon herds boys playing Lifundo with a ball made out of banana leaves. The beautiful woman asked each herds boy in turn what great thing his father had done. One said, "My father killed an elephant." Another said that his father had killed a troop of ten Teso warriors. The third said, "My father cut off the tail of an ogre." The woman rejoiced and asked the boy to take her to his father's home. The man, struck by her great beauty, made her his wife the same day.

That night the woman tried to change into an ogre but the man's two dogs, Kutubi and Mulikho, barked at her fiercely and she gave up the attempt. The following day she told the man that she wanted some firewood from the forest. She told him to tie the dogs in heavy chains. She then led

him deep into the forest, and then asked him to climb one of the trees that were dry. "I will hand the axe to you when you are up," she said.

But as soon as the man was up the tree, she turned into an ogre, "Now I have got you," the ogre said and started cutting down the tree. The man started calling for his dogs:

"Asa, asa, mbwa change Kutubi na Mulikho." ("Come, come, my dogs Kutubi and Mulikho.") Each time the tree showed signs of falling, a dove on a nearby tree said,

"*Kurr Murongoro kwa seyi lilisia*." ("Kurr, my tree. Regain your former state.") The ogre in a fury chased away the dove, which returned almost immediately.

In the meantime, the dogs after the struggle had cut their chains and came at breakneck speed as their master kept calling. When they arrived, the ogre threw away the axe, turned into the same beautiful woman and begged for mercy. But the dogs did not stop their onslaught until she was

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completely dead. My story ends there.

QUESTIONS

a.) State two characteristics of ogre stories evident in the above narrative. **(2marks)**

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b.) From the story, do you think the wife was cured of her illness? Explain your answer. **(2marks)**

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c.) Identify and illustrate two character traits of the man? **(4marks)**

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d.) With an illustration, identify one way in which the narrator has achieved the use of suspense in the above narrative. **(2marks)**

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e.) State any three features of oral narrative evident in the above narrative **(3marks)**

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f.) State any two functions of the song used in the narrative. **(2marks)**

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g.) What moral lesson do you learn from the above narrative? **(2marks)**

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4. GRAMMAR **15 MARKS**

(a) ***Rewrite the following sentences based on the instruction given after each*.** **(2 marks)**

(i) He understood why people had been laughing after he realized the ugliness of his headgear. (***Rewrite using present participle***).

_____

_____

(ii) The President-elect was sworn in only after the Supreme Court had validated the Presidential result. (***Begin:*** **Not until...**)

_____

_____

(b). (i) The maid had prepared supper by the time we got home.

(Rewrite to remove gender bias). **(1 mark)**

……

(ii) I have been studying in this school for four years complained the student but I have never scored one hundred per cent in any subject. (*Punctuate correctly)* **(1 mark)**

……

……

(iii)Chinua Achebe one of Africa's greatest writers passed on nine years ago.

(***Rewrite using parenthesis***). **(1 mark)**

……

……

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(c.) ***Use the correct form of the word given in the brackets.*** **(3 marks)**

a) The _____ between them is sickening (enemy)

ii) She was sacked due to chronic _____ (absent)

iii) Laziness is a _____ to success (hinder)

(d). ***Fill the blanks with the most suitable prepositions.*** **(3 marks)**

d) He was sentenced to life imprisonment _____ the law.

e) Unemployed youth often subscribe _____ illegal gangs.

f) They attended the party dressed _____ smart casual.

(e). ***Using the words in brackets, complete the following sentences with the most appropriate phrasal verbs.*** **(3 marks)**

d) My parents managed to _____ high school although with difficulty. (see)

e) I was _____by his childish behaviour during the academic parade. (take)

f) The new students could not _____their way to the dormitory. (make)

(f). His decision was a typical case of putting the ox before the cart.

(***Correct the idiomatic expression***). **(1 mark)**

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KCSE 2024 PREDICTION EXAM

POSSIBLE SERIES 1

101/3

ENGLISH

PAPER 3

(Creative Composition and Essays based on Set Texts)

TIME: 2½ HOURS

NAME……

SCHOOL…… **SIGN**……

INDEX NO…… **ADM NO**……

(Kenya Certificate of Secondary Education)

INSTRUCTIONS TO CANDIDATES

- *Answer **THREE** questions only.*
- *Question **one and two** are compulsory.*
- *In question Three**,** choose **one question from the book you have prepared on.***
- *Each of your essays must not exceed **450 words.***
- *Write legibly and neatly.*

FOR EXAMINER'S USE ONLY

QUESTION	MAXIMUM SCORE	STUDENT'S SCORE
1.	20	
2.	20	
3.	20	
Total	60	

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1. Imaginative composition (Compulsory) **(20 marks)**

Either

a). Write a composition beginning: I had not seen the object before. It was not there last night. I carefully…

OR

b) Write a composition, supporting or opposing this statement: "Both girls and boys have equal rights to their parents' property**."**

2. COMPULSORY ESSAY. Novel: *The Samaritan*. *(*20 marks)

When a society elects selfish leaders, they bear the full brunt. Using examples from the Play *The Samaritan*, write a composition to show the truth of this statement.

3. OPTIONAL SET TEXTS

EITHER

a) Short story: *A Silent Song and Other Stories* by Godwin Siundu **(20 marks)**

"War causes a lot of harm and thus should be avoided at any cost." Validate this statement basing your illustrations from Chimamanda Adichie's '***Ghosts***'

Or

b) Play: Adipo Sidang'; Parliament of Owls **(20 marks)**

'Our Greatest enemies are those close to us.' Support this statement from **Adipo Sidang's play "Parliament of Owls"**

Or

c) Novel: *An Artist of the Floating World* by Kazuo Ishiguro. **(20 marks)**

'*An Artist of the floating* world is a Novel about intergenerational conflicts' Discuss.

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KCSE 2024 PREDICTION EXAM

POSSIBLE SERIES 1

102/1

KISWAHILI

KARATASI YA 1 (INSHA)

MUDA: SAA 1¾

JINA……

SHULE…… SAHIHI……

NAMBARI YA USAJILI…… MKONDO……

Cheti cha Kuhitimu Kisomo cha Sekondari (KCSE)

MAAGIZO:

- *Andika insha mbili. Insha ya kwanza ni ya **lazima**.*
- *Kisha chagua insha **moja** nyingine kati ya hizo **tatu** zilizobakia.*
- *Kila insha isipungue Maneno **400**.*
- *Kila insha ina alama **20**.*
- *Kila insha **lazima** iandikwe ya lugha ya Kiswahili*

Kwa matumizi ya mtahini pekee

Swali	Upeo	Alama
1	20	
	20	
Jumla	40	

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1. <u>SWALI LA LAZIMA</u>

Andika tahariri kwa Gazeti la Mwanga wa Jamii kuhusu manufaa ya mfumo wa elimu ya umilisi (CBC) nchini.

2. Mfumo wa serikali za Kaunti umeleta faida nyingi kuliko hasara. Jadili.

3. Andika kisa kitakachoafiki methali hii;

Mgaagaa na upwa hali wali mkavu.

4. Andika kisa kitakachoanzia kwa maneno yafuatayo.

Mambo ni kangaja huenda yakaja. Tulikuwa tumefanya mazoezi kwa wiki moja mfululizo. Siku ikawadia. Tuliamka mafungulia ng'ombe….

HUU NDIO UKURASA WA MWISHO ULIOPIGWA CHAPA.

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KCSE 2024 PREDICTION EXAM

POSSIBLE SERIES 1

102/2

KISWAHILI

KARATASI YA 2

LUGHA

MUDA: SAA 2½

JINA……

SHULE…… SAHIHI……

NAMBARI YA USAJILI…… MKONDO……

Cheti cha Kuhitimu Kisomo cha Sekondari (KCSE)

Maagizo

a) *Andika jina lako na nambari yako ya mtihani katika nafasi ulizoachiwa hapo juu.*
b) *Tia sahihi yako kisha uandike tarehe ya mtihani katika nafasi ulizoachiwa hapo juu.*
c) *Jibu maswali **yote**.*
d) *Majibu yote yaandikwe katika nafasi ulizoachiwa katika kijitabu hiki cha maswali.*
e) *Usitoe ukurasa wowote kutoka kwenye kijitabu hiki.*
f) *Majibu yote yaandikwe katika lugha ya Kiswahili*

Kwa matumizi ya mtahini pekee

Swali	Upeo	Alama
1	15	
2	15	
3	40	
4	10	
Jumla	80	

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1. UFAHAMU **(ALAMA 15)**

Soma makala yafuatayo kisha ujibu maswali yatakayofuata

Baada ya biashara ya utumwa kupigwa marufuku katika karne ya kumi na tisa kule Marekani,watu weusi na wa rangi waliendelea kukabiliwa na dhuluma za kila namna. Walidhalilishwa na kuchukuliwa kama binadamu wa hadhi ya chini kuliko weupe. Sheria zilitumika kuweka mipaka ya maingiliano kati ya raia wa nchi moja. Weusi wangepatikana popote palipotengwa weupe wangechukuliwa hatua za kisheria.

Katika usafiri wa umma, Mmarekani Mweusi alitakiwa kisheria kumpisha kiti Mmarekani mweupe ndani ya chombo cha usafiri. Aliyevunja sheria hii alitiwa mbaroni au kuhukumiwa kifungo pamoja na faini. Halikadhalika, alihatarisha maisha yake kwani angevamiwa na makundi ya wakereketwa kama vile *ku klax klan* (kkk); kundi ambalo lilitetea vikali udumishaji wa ubaguzi wa rangi.

Hii ndiyo iliyomchosha mwanamke, Mmarekani Mweusi Rosa Lee Parks. Akajifunga kibwebwe kukaidi sheria dhalimu na kupigania mabadiliko ya jamii. Akakamia mabadiliko yaliyolenga kuleta usawa wa kijamii na haki kwa wote bila kubaguliwa.

Mwanamke huyu aliyepewa lakabu ya 'Mama wa Mapigano ya Haki za Kimsingi' ni wa asili ya watumwa waliotwaliwa kutoka Afrika kwenda kutumikishwa na weupe katika mashamba yao kule Marekani. Alizaliwa Februari 14 mwaka 1913 huko Tuskegee, jimbo la Alabama. Masomo yake ya awali yalikwamizwa na maradhi pamoja na umaskini uliokabili familia yake. Hata hivyo baada ya ndoa yake na Raymond parks, manamo 1932, bwanake alimhimiza kwenda shuleni.

Elimu aliyoipata Rosa pamoja na ushawishi wa mumewe ulimfungua macho kuhusu ubaguzi wa rangi katika jamii yake. Alijiunga na kundi la wanaharakati waliokuwa wakiwatetea watu weusi, pamoja na Suriama. Rosa alichukizwa na ubaguzi uliotamalaki katika jamii yake. Alikirihiwa na sheria zilizoigawa jamii katika msingi wa rangi huku zikimtukuza mtu mweupe na kumtweza mweusi.

Kilele cha kuudhika kwa Rosa kilikuwa pale Desemba mosi 1955 akiwa ndani ya basi, abiria mweupe alitokeza na kumwamuru Rosa ampishe kiti alichokuwa amekalia. Miguu ya Rosa ilikuwa inauma. Hakuona ni kwa nini asimame ampishe abiria mwenzake ambaye alikuwa amelipa nauli sawa na yake. Rosa alikuwa amechoka na vitimbi vya kubaguliwa na kuchukuliwa kama mwananchi wa hadhi ya chini. Alikataa katakata kumpisha abiria huyu kiti.

Rosa alijua fika kuwa tendo lake la maasi lingempeleka kuhukumiwa jela, kutozwa faini, kutishwa, kuumizwa au kuuliwa na makundi ya **wakereketwa** weupe. Lakini yote haya aliyaweka pembeni ili atetee haki na usawa katika jamii.

Kwa uasi huo, Rosa alikuwa amekiuka sheria. Alitiwa mbaroni na kuhukumiwa kifungo na faini ya dola nne za Kimarekani; kiasi kilichokuwa kikubwa sana wakati huo. Hukumu hii ikazua maandamano dhidi ya sheria za ubaguzi. Umma ukiongozwa na kasisi wa Kibaptisti Martin Luther King uliungana na Rosa kutetea haki na usawa. Umma ukagomea mabasi kwa muda wa siku 381 huko Montgomery, Alabama. Migomo hii, pamoja na maandamano

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yakaishurutisha serikali kuanza juhudi za kuleta usawa na haki kwa wote Marekani. Juhudi hizo zilizoanzishwa na kuasi kwa Rosa zikafikia upeo wake mwaka 1964. Mwaka huo, serikali ya kitaifa ya Marekani ikapitisha sheria iliyopiga marufuku ubaguzi wa rangi.

Bi Rosa Lee Parks, aliyekufa akiwa na umri wa miaka 92, ni kielezo cha **nguvu fiche za** wanawake ambazo zinaweza zikatumika kutetea hadhi, haki na usawa wa wote waliokandamizwa. Atakumbukwa kama mtu aliyepigania binadamu kuwa huru na kupewa hadhi kama binadamu bila kubaguliwa. Alikuwa amechoshwa na unyanyasaji na kufedheheshwa. Silaha pekee aliyokuwa nayo ni uasi kwa njia ya amani. Silaha iliyotokeza kuwa na nguvu zaidi kuliko mtutu wa bunduki. Hili ni funzo kwa watu waliobaguliwa, hasa wanawake kote duniani wanaoendelea kukandamizwa na tamaduni zinazotukuza **ubabe** wa kiume. Bila shaka hao wanaweza kumwiga Rosa na kubadilisha hali zao kama alivyoweza Rosa.

Maswali

a) Biashara ya utumwa ilipigwa marufuku lini kule Marekani? **(alama1)**

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……

b) Kwa nini Rosa Parks alipewa lakabu ya "Mama wa Mapigano ya Haki za Kimsingi" **(alama 2)**

……

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c) Fafanua dhuluma ambazo Wamarekani Weusi walikabiliana nazo kulingana na taarifa hii. **(alama 4)**

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d i) Onyesha matokeo ya matendo ya Rosa kwa jamii ya Wamarekani na ulimwengu mzima. **(ala2)**

……

……

……

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ii) Ni funzo gani unalolipata kutokana na maisha ya Rosa**?** **(alama 1)**

……

……

e) Je,ni kweli kuwa silaha aliyokuwa nayo Rosa Parks ilikuwa na nguvu kuliko mtutu wa bunduki? Tetea jibu lako. **(alama 2)**

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f) Eleza maana ya maneno yafuatayo kama yalivyotumika katika taarifa **(alama 3)**

i)Nguvu fiche

……

……

ii) Wakereketwa

……

……

iii) Ubabe wa kiume

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……

2. UFUPISHO **(ALAMA 15)**

Sisi vijana wa Kenya inatupasa tuwajibike kufanya kazi kwa bidii na kwa dhati ya mioyo yetu ili tuweze kupata ufanisi na uwezekano wa kuinua nchi yetu changa katika kiwango cha juu. Tukumbuke, “Ajizi ni nyumba ya njaa”. Kwa hivyo basi haifai kulaza damu ikiwa matatizo nchini mwetu yametunzonga. Lazima tufanye kazi kwa busara, adabu njema na jitihada kwa moyo mmoja. Sharti tutilie maanani zaidi elimu ya vijana na watu wazima, kilimo, uchumi na amani katika nchi yetu. Tunahitaji taifa lenye watu walioelimika kwani bila elimu itakuwa vigumu sana kuweza kutekeleza mipango mbalimbali ya maendeleo. Tupende tusipende lazima tuzidishe mazao mashambani kwani kila kukicha idadi ya watu inaongezeka. Ni sharti tuweze kujitosheleza katika vyakula. Zaidi ya hayo pia lazima tujishughulishe na biashara ambapo kwa sasa ni Wakenya wachache sana ambao wanatambua umuhimu wa biashara. Wengi ni wale

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wenye mawazo ya kwamba lazima kila mmoja aajiriwe maishani. Yatupasa tujitahidi kuleta uchumi katika mikono ya wananchi wa Kenya badala ya kuwaachia wengine ambao hawahusiki.

Mafunzo tunayopata majumbani, shuleni na hata katika jamii, lazima yatuwezeshe kutambua mbinu za kupitia. Tunahitaji elimu tambuzi ambayo itamfanya Mwanakenya kujua wajibu wake katika jamii. Tumesinywa na elimu pumbao; inayotupumbaza na kutufanya tusiwe mbele. Sisi vijana tukiwa viongozi wa siku zijazo tuwe kielelezo chema kwa wengine. Watu lazima washirikiane na kufikiria kwamba wao ni wamoja, "utengano ni uvundo". Lugha ya taifa ndicho chombo pekee ambacho kinatuunganisha na kuweza kutuwasilishia mapendekezo, mawaidha na hisia zetu. Kukosa ndiko kibinadamu, wakati tunapokosea ,lazima tukubali tumekosea na kufanya masahihisho mara moja kwani, "usipoziba ufa utajenga ukuta". Tusikasirike kwa sababu tumesahihishwa makosa yetu na mwenzetu. Lazima tujitoe mhanga na kupigania nchi yetu tukiwa wazalendo halisi.

Sisi tukiwa vijana sharti tujishughulishe na kuyaangalia matatizo ya nchi, pia kutafuta njia za kutatua matatizo hayo. Siku zote tutekeleze nidhamu shuleni na majumbani mwetu. Ili watu waweze kuishi maisha bora na kuwa na maendeleo, amani na upendo, lazima tuwe na bidii, ushirikiano mwema na kuchagua viongozi wenye mioyo ya maendeleo. Tukiwa viongozi ambao hawajishughulishi na maendeleo,basi tutabaki nyuma kama mkia siku zote. Bahati mbaya ni kwamba wananchi wengi siku hizi huchagua viongozi wao kwa kufuata ukoo ama kwa utajiri wake. Kwa hivyo basi, tuchagueni viongozi ambao wanatuletea ufanisi badala ya wanaotokana na nasaba kubwa au utajiri.

Maswali

a) Fupisha aya mbili za mwanzo.(Maneno 70-75) **(alama 10,1**

ya mtiririko)

Matayarisho

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Jibu

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b) Dondoa hoja muhimu katika aya ya mwisho.(Maneno 30-35) (alama 5, 2 za Utiririko)

Matayarisho

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Jibu

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3. MATUMIZI YA LUGHA **(ALAMA 40)**

a) Taja sauti zifuatazo:

i) Kikwamizo sighuna cha ufizi **(alama 1)**

……

ii) Nusu irabu ya kaakaa gumu **(alama 1)**

……

b) Kwa kutoa mifano , eleza tofauti kati ya silabi wazi na silabi funge. **(alama 2)**

……

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c) Ainisha mofimu katika neno: **(alama 3)**

Atamnywea

……

……

……

……

……

d) Ainisha vitenzi katika sentensi hii. **(alama1)**

Wanafunzi walikuwa wanakariri mashairi

……

……

e) (i) Eleza maana ya ngeli. **(alama1)**

……

……

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(ii) Neno **tembo** linaweza kuwekwa katika ngeli mbili tofauti, zitaje. **(alama 2)**

……

……

……

f) Andika katika hali ya ukubwa wingi **(alama 2)**

Mzee huyu ana wake wengi.

……

……

g) Yakinisha sentensi ifuatayo. **(alama 2)**

Hawakuwa wakicheza wala kuimba.

……

……

h) Andika kinyume cha sentensi ifuatayo. **(alama 1)**

Tabasamu alijenga nyumba ya babu.

……

……

i) Tunga sentensi moja yenye masharti yasiyowezekana. **(alama 1)**

……

……

j) Andika katika msemo wa taarifa. **(alama 2)**

"Nimeenda kumtembelea nyanyangu. Hatujaonana tangu mwezi jana," mjukuu alisema

……

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k) Kwa kutoa mifano, eleza matumizi mawili tofauti ya alama ya vifungo. **(alama 2)**

……

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……

l) Tunga sentensi yenye muundo ufuatao. **(alama 4)**

KN(N+$\bar{S}$) +KT(T+RH+RE)

……

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……

m) Tumia **ni** katika sentensi moja kuleta dhana ya kitenzi na kielezi. **(alama 2)**

……

……

……

n) Onyesha aina za shamirisho katika sentensi ifuatayo. **(alama 3)**

Watoto wanalipiwa karo kwa hundi na wazazi wao

……

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……

o) Eleza maana mbili za sentensi hii. **(alama 2)**

Njoki amkimbilia Fatuma

……

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p) Tunga sentensi mbili kutofautisha vitate hivi kimaana. **(alama 2)**

i) Landa

ii) Randa

……

……

……

q) Tumia kirejeshi ‘o’ tamati katika sentensi ifuatayo. **(alama 2)**

Cheo ambacho amepewa ni kile ambacho anakitaka.

……

……

……

r) Iandike sentensi upya kulinga na maagizo. **(alama 2)**

Mwanariadha mmoja tu ndiye aliyefuzu katika mbio hizo. (Tumia hakuna na ila)

……

……

……

……

s) Mwanafunzi ni kwa mwanagenzi, bendera ni kwa _____ na _____ ni kwa hekima. **(alama 2)**

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

“….watu wa kaunti ya Makueni wamesahaulika kabisa. Ningependa kuelezwa kinagaubaga kama hawa ni Wakenya au la. Order! Order! Mheshimiwa Tata.

La! Tumekuwa marginalized kwa muda mrefu sana…”

a) Hii ni sajili gani? **(alama 2)**

……

……

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b) Eleza sifa nane za sajili iliyotajwa. **(alama 8)**

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KCSE 2024 PREDICTION EXAM

POSSIBLE SERIES 1

102/3

KISWAHILI

KARATASI YA 3

FASIHI

MUDA: SAA 2½

JINA……

SHULE…… SAHIHI……

NAMBARI YA USAJILI…… MKONDO……

Cheti cha Kuhitimu Kisomo cha Sekondari (KCSE)

MAAGIZO:

a) *Andika jina lako na nambari yako ya mtihani katika nafasi ulizoachiwa hapo juu.*
b) *Tia sahihi yako kisha uandike tarehe ya mtihani katika nafasi ulizoachiwa hapo juu.*
c) *Jibu maswali* ***manne*** *pekee.*
d) *Swali la* ***kwanza*** *ni la* ***lazima.***
e) *Maswali hayo mengine matatu yachaguliwe kutoka sehemu nne zilizobaki; yaani; Riwaya, Tamthilia, Ushairi na Hadithi Fupi.*
f) *Usijibu maswali* ***mawili*** *kutoka* ***sehemu moja****.*
g) *Majibu yote* ***lazima*** *yaandikwe kwa lugha ya Kiswahili*

KWA MATUMIZI YA MTAHINI PEKEE.

Swali	Upeo	Alama
1	20	
	20	
	20	
	20	
Jumla	80	

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SEHEMU A: FASIHI SIMULIZI

Lazima

1. *Soma utungo ufuatao kisha ujibu maswali*

Kila kukicha mashaka
Ni kero hili si huba
Mimi pendo la viraka, heri demu la mkoba
Ingawa mno nataka, kuishi nawe muhiba
Pendo viraka viraka
Litanishinda kuziba

Kamwe sitoshughulika
Nawaje wenye kuziba
Viumbe wanosifika,kwa fedha, chuma na shaba
Walostaarabika, si mimi wa tobatoba
Pendo viraka viraka
Litanishinda kuziba

Naapa sitojitweka
Limenichosha si haba
Nasomba vyangu viraka, nitie kwenye mkoba
Sikuye ya kuzinduka, mjinga hawi juba
Pendo viraka viraka
Litanishinda kuziba

(a) Huu ni wimbo wa aina gani? Thibitisha. **(alama 2)**

(b) Eleza sifa **<u>tatu</u>** za nafsinenewa katika wimbo huu **(alama 3)**

(c) Bainisha toni ya utungo huu. **(alama 1)**

(d) Fafanua mbinu **<u>nne</u>** ambazo nafsineni itatumia kufanikisha uwasilishaji wake. **(alama 4)**

(e) Eleza mambo ambayo yatapotea wimbo huu ukiandikwa. **(alama 6)**

(f) Ingawa nyimbo zina faida kwa wanajamii, zina madhara pia.Yaeleze madhara manne. **(alama 4)**

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SEHEMU B: RIWAYA

Clara Momanyi; *Nguu za Jadi*

Jibu swali la 2 au 3

2. *"Kwa nini apewe pesa na mtu aliyekuwa akitupangia mauti siku zote?"* **(ala 10)**

a. Fafanua muktadha wa dondoo hili. **(aL4)**

b. Tambua maudhui katika dondoo hili_ **(aL4)**

c. Fafanua maudhui uliyotambua kwa kurejelea riwaya nzima

AU

3. Fafanua jinsi Sihaba amejenga maudhui ya Ukatili riwayani**.** **(Ala 20)**

SEHEMU YA C: TAMTHILIA

Timothy Arege: *Bembea ya Maisha*

Jibu swali la 4 au 5.

4. Ulevi. Ulevi mwanangu! Gongo liliyamega maadili yake kimyakimya na taratibu uwajibikaji ukawa umemponyoka na kuteleza kama sabuni ya povu jingi na kumwacha na kisomo chake tu.

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

b) Fafanua mbinu **nne** za kimtindo zilizotumiwa katika dondoo hili. **(alama4)**

c) Eleza sifa **nne** za anayerejelewa . **(alama 4)**

d) Jadili umuhimu wa mandhari ya mazungumzo haya. **(alama8)**

au

5. a)Mwandishi wa tamthilia ya Bembea amefaulu kuchora mpaka uliopo kati ya usasa na ukale.Jadili kwa kutoa hoja **kumi.** **(alama 10)**

b)Kuishi mijini kuna adha chungu nzima.Jadili kwa kurejelea tamthilia nzima. **(alama 10)**

SEHEMU D: USHAIRI

Jibu Swali la 6 au 7.

6. Nduguni na dada zangu,nisikieni wendani
Neleze ya moyo wangu,yalo yaniumizani
Kuhusu ya ulimwengu,ng'onzi chui jifanyani
Wanasiasa ndu zangu,wanazo hila Chekwa.

Kila siku twahadawa, kura zetu kuzitaka
Vitu duni tunapewa,twandanganywa kila mwaka
Kwa wepesi shawishiwa,hatimaye sahaulika
Wanasiasa ndu zangu wanazo hila Chekwa

Watwambia shida zetu,kwazo siku tatatua
Watwambia kila kitu,kitakuja tengenea
Maisha ya kila mtu ,waamba tanawiria

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Wanasiasa ndu zangu,wanazo hila Chekwa

Wao huwa karibuni,kutwahidi nao moyo
Hali zetu twambiwani,taboreka bila wayo
Kila kitu waahidini, tafakuri bila nayo
Wanasiasa ndu zangu .wanazo hila Chekwa

Lao ajabu ni kuwani, kama lubwi hugeuka
Kiwapandisha ngazini, daima hutucheka
Wetu ujinga nambani,hutufanya kusumbuka
Wanasiasa ndu zangu, wanazo hila Chekwa

Wakipata na migwisho, waoni tausi huwa
Maringo yaso na mwisho, nyoyoni huwajawa
Wanaamba kwa vitisho, wa viongozi kwa kuwa
Wanasiasa ndu zangu, wanazo hila Chekwa

Ndu zangu tuzindukeni, twondokee zao hila
Kiwa humu duniani, wasije nao kutula
Waadilifu chagueni, tusongozwe nazo hela
Wanasiasa ndu zangu, wanazo hila Chekwa.

Walo walipo neleza, siku yao itafika
Walotufanya na boza, damu yetu faidika
Siku zao zitaiza ,safari yao safirika
Wanasiasa ndu zangu, wanazo hila Chekwa

Ndu zangu la muhimu, ni kutokufa moyoni
Duniani kiwa humu, tawaona kilipani
Liyotendea kaumu, takuja kuyalipani
Wanasiasa ndu zangu, wanazo hila Chekwa.

MASWALI

a)Kwa hoja mbili dhamira ya mshairi katika shairi hili **(alama 2)**

b)Fafanua sifa tatu za warejelewa. **(alama 3)**

c)Kwa kutolea mifano onyesha mbinu alizotumia mshairi ili kukidhi mahitaji ya kiarudhi. **(alama 3)**

d)Tambua nafsineni katika shairi hili. **(alama 2)**

e)Ainisha shairi hili kwa kutumia vigezo vifuatavyo. **(alama 2)**

i)Vipande
ii) Vina

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f)Fafanua mbinu mbili za kimtindo zilizotumika katika shairi **(alama 2)**

g)Andika ubeti wa saba kwa lugha nathari **(alama 4)**

h)Eleza toni ya shairi hili. **(alama 2)**

au

7. Unaponyimwa uhuru
Husemi unavyotaka
Na kudadisi ya kweli
Yakini mekandamizwa.

Unapoliona kosa
Kwa hofu usiliseme
Mtu akukosowe
Nawe usimkosowe
Ndu yangu mekandamizwa.

Unapofanywa mjinga
Usiwe na uamuzi
Ufanywe kama sanamu
Na haulizi kwa nini?
Hakika mekandamizwa.

Unapoanza kuiga
Kuiga bila sababu
Na kushawishika ya kwamba
Hu lolote hu chochote
Ndu yangu mekandamizwa.

Unapofanywa bidhaa
Uwe mali ya mtu
Na haulizi kwa nini?
Hakika mekandamizwa.

Unapotaka kulewa
Kulewa ujipumbaze
Usahau taabu zako
Fahamu mekandamizwa.

Unapoanza kuwaza
Uwaze na uwazue
Hujui ufanye nini

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Utakapo na kusahau
Mawazo yakurudie
Ndu yangu mekandamizwa.

Unapokata tamaa
Unapoheshimu mwenzako
Kwa kile alicho nacho
Taabu zikulemele
Yakini mekandamizwa.

MASWALI

a)Shairi hili ni la aina gani?Toa sababu yako. **(alama 2)**
b)Tambua dalili zozote nne za mtu aliyekandamizwa kulingana na mshairi. **(alama 4)**
c) Kwa kuotlea mfano, eleza maana ya mshororo mshata **(alama 2)**
d)Fafanua mbinu za kimtindo/ kifasihi zilizotumika katika shairi hili. **(alama 3)**
e)Onyesha namna mshairi alivyotumia idhini yake katika shairi hili. **(alama 2)**
f)Tambua nafsi neni katika shairi hili. **(alama 2)**
g)Andika ubeti wa pili kwa lugha nathari. **(alama 4)**
h)Onyesha matumizi ya usambamba katika shairi hili. **(alama 1)**

SEHEMU E: HADITHI FUPI

D.Lutomia na Phibbian Muthama: *Mapambazuko ya Machweo na Hadithi Nyingine.*

8.(a) 'Nipe Nafasi"

Baridi ilizidi kututafuna kadri tulivyokazana kupanda Milima ya Maloti. Vidole vyangu vya miguuni vilikufa ganzi. Mashavu yetu yaliadhibika kwa upepo baridi huku vipande vya theluji vikitupiga kwenye nyuso zetu.Miili yetu iliathirika;tulihisi njaa na uchovu. Nikatamani tufike kwa jamaa ya baba yetu ambako tungepata angalau mchuzi wa papa kabla ya kulala. Bidii ya mama ilitutia moyo wa kuendelea na safari.

(i) Tambua nafsi ya usimulizi iliyotumika katika hadithi hii na uthibitishe jibu lako.**(alama 2)**
ii) Eleza umuhimu wa mwandishi kutumia nafsi uliyotaja hapo(i) juu. **(alama 2)**
iii) Bainisha mbinu mbili za kimtindo zilizotumika katika dondoo hili **(alama 2)**
iv) "Mamake Msimulizi (Richman) ni kielelezo cha wanawake jasiri""Thibitisha kwa kutolea mifano mwafaka **(alama 7)**
b) Hadithi "Toba ya Kalia" inahimiza uwajibikaji. Jadili. **(alama 7)**

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KCSE 2024 PREDICTION EXAM

POSSIBLE SERIES 1

121/1

MATHEMATICS

PAPER 1

TIME: 2½ HOURS

NAME……

SCHOOL…… SIGN……

INDEX NO…… ADM NO……

Instructions to Candidates

1. Write your **name, Admission number and class** in the spaces provided.
2. Sign and write date of the examination in the spaces provided.
3. The paper contains **TWO sections**: **Section I and II**
4. Answer **ALL** questions in section I and **STRICTLY ANY FIVE** questions from section II.
5. All working and answers must be written on the question paper in the spaces provided below each question.
6. Show all the steps in your calculations, giving your answers at each stage in the spaces below each question.
7. Marks may be awarded for correct working even if the answer is wrong.
8. **Non-programmable** silent electronic calculators and **KNEC** Mathematical tables may be used except where stated otherwise.

For Examiner's use only

Section I

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	TOTAL

GRAND TOTAL

Section II

17	18	19	20	21	22	23	24	TOTAL

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SECTION I(50marks)

Answer all the questions in this section

1. Without using a calculator evaluate. **(3marks)**

$$\frac{2\frac{1}{3}-1\frac{1}{5}\ of\ 4}{\frac{1}{4}-\left(-\frac{1}{3}\right)^2}$$

2. A piece of rectangular plot measuring 27m by 16m is to be divided into smaller rectangular units leaving no remainder. Calculate the highest number of smaller units whose dimensions are each greater than 1m that can be obtained from the plot. **(3marks)**

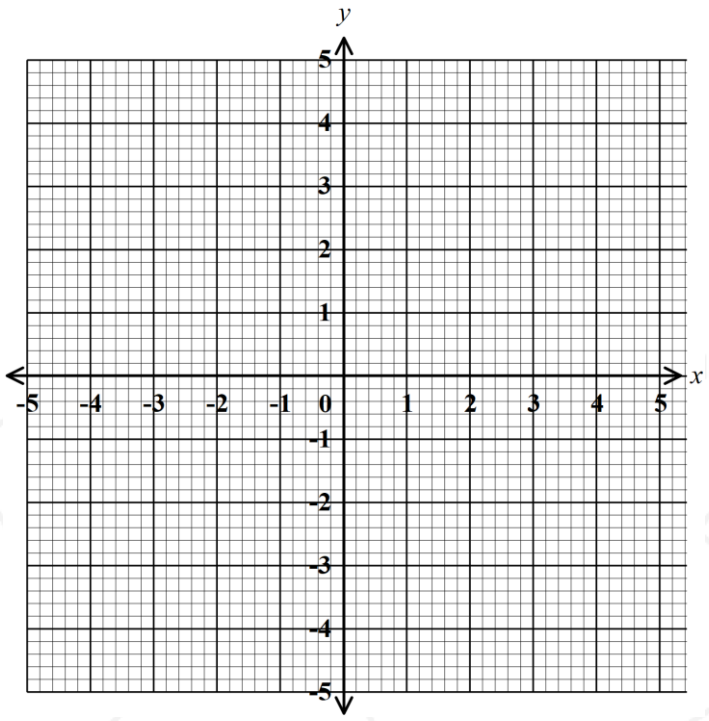
3. Given that $x=1.\dot{3}1\dot{3}$, find the **exact** value of . **(3 marks)**

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4. Using the grid provided below, solve the simultaneous equation **(3 marks)**

$3x-4y=10$

$5x+7y=3$



5. Write the following ratios in ascending order $2:3,\ 15:16,\ 7:6\ ,\ 13:15$ **(3 marks)**

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6. Under an enlargement, the image of the points $A(3,1)$ and $B(1,2)$ are $A'(3,7)$ and $B'(7,5)$. Find the centre and scale factor of enlargement. **(4 marks)**

7. A Kenyan businessman intended to buy goods worth US dollar 20,000 from South Africa. Calculate the value of the goods to the nearest south Africa (S.A) Rand given that 1 US dollar = Ksh 101.9378 and 1 S.A Rand = Ksh 7.6326. **(3marks)**

8. Solve for x in the following equation. **(3marks)**

$4^x (8^{x-1}) = \frac{sin45^0}{cos45^0}$

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9. From a viewing tower 40 metres above the ground, the angle of depression of an object on the ground is 36^o and the angle of elevation of an aircraft vertically above the object is 48^o. Calculate the height of the aircraft above the objet on the ground. **(3marks)**

10. Solve the equation $2x^2 + 3x = 5$ by completing the square method. **(3marks)**

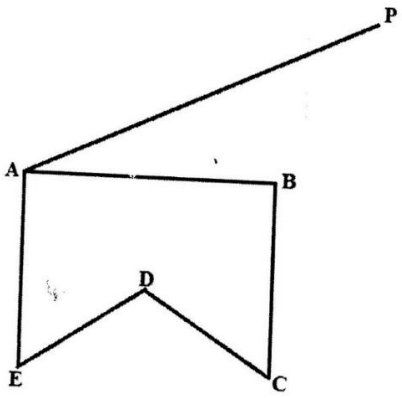
11. The mean of five numbers is 20. The mean of the first three numbers is 16. The fifth number is greater than the fourth by 8. Find the fifth number. **(3marks)**

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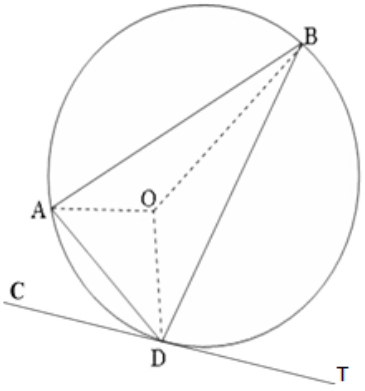
12. Simplify: **(3 marks)**

$$\left[\frac{x^3 - xy^2}{x^4 - y^4}\right]^{-1}$$

13. The figure below ABCDE is a cross-section of a solid ABCDEPDRST. The solid has a uniform cross-section. Given that AP is an edge of the solid, complete the sketch showing the hidden edges with a broken line. **3 marks)**



14. In the circle below, O is the centre, angle DAB = 87^0 and acute angle A0D=62^0. CD is a tangent to the circle at D.



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Calculate the size of;

i) Angle ABD. **(2marks)**

(ii) Angle ADC **(1mark)**

(iii) Angle ADB **(1mark)**

15. Given that log a = 0.30 and log b = 0.48 find the value of $\log \frac{b^2}{a}$. **(3marks)**

16. The area of a rhombus is 60cm^2. Given that one of its diagonal is 15cm long. Calculate the perimeter of the rhombus. **(3marks)**

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SECTION II (50marks)

Answer 5 questions only in this section

17. Three business partners Abila, Bwire and Chirchir contributed Ksh120,000, Ksh 180,000 and Ksh 240,000 respectively to boost their business. They agreed to put 20% of the profit accrued back into the business and to use 35% of the profits for running the business. The remainder was to be shared among the business partners in the ratio of their contribution. At the end of the year, a gross profit of Ksh225,000 was realised.

a. Calculate the amount.

(i) Put back into the business. **(2marks)**

(ii) Used for official operations. **(1mar**

b. Calculate the amount of profit each partner got. **(4marks)**

c. If the amount put back into the business was added to individual's shares proportionately of their initial contributions, find the amount of Chirchir's new shares. **(3marks)**

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18. One day Mr. Makori bought some oranges worth Ksh 45, on another day of the same week his wife Mrs.Makori spent the same amount of Money but bought the oranges at a discount of 75 cents per orange

a) If Mr.Makori bought an orange at Kshs x, write down and simplify an expression for the total number of oranges bought by the two in the week. **(3marks)**

b) If Mrs.Makori bought 2 oranges more than her husband, find how much each spent on an orange. **(5 marks)**

c) Find the number of oranges bought by the two. **(2 marks)**

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19. Two lines L_1:$2y - 3x - 6 = 0$ and $L_2 = 3y + x - 20 = 0$ intersect at a point A.

a) Find the coordinates of A **(3 marks)**

b) A third line L_4 is perpendicular to L_2 at point A. Find the equation of L_3 in the form $y = mx + c$, where m and c are constants. **(3 marks)**

c) Another line L4 is parallel to L_1 and passes through (-2, 3). Find the x and y intercepts of L_4 **(4 marks)**

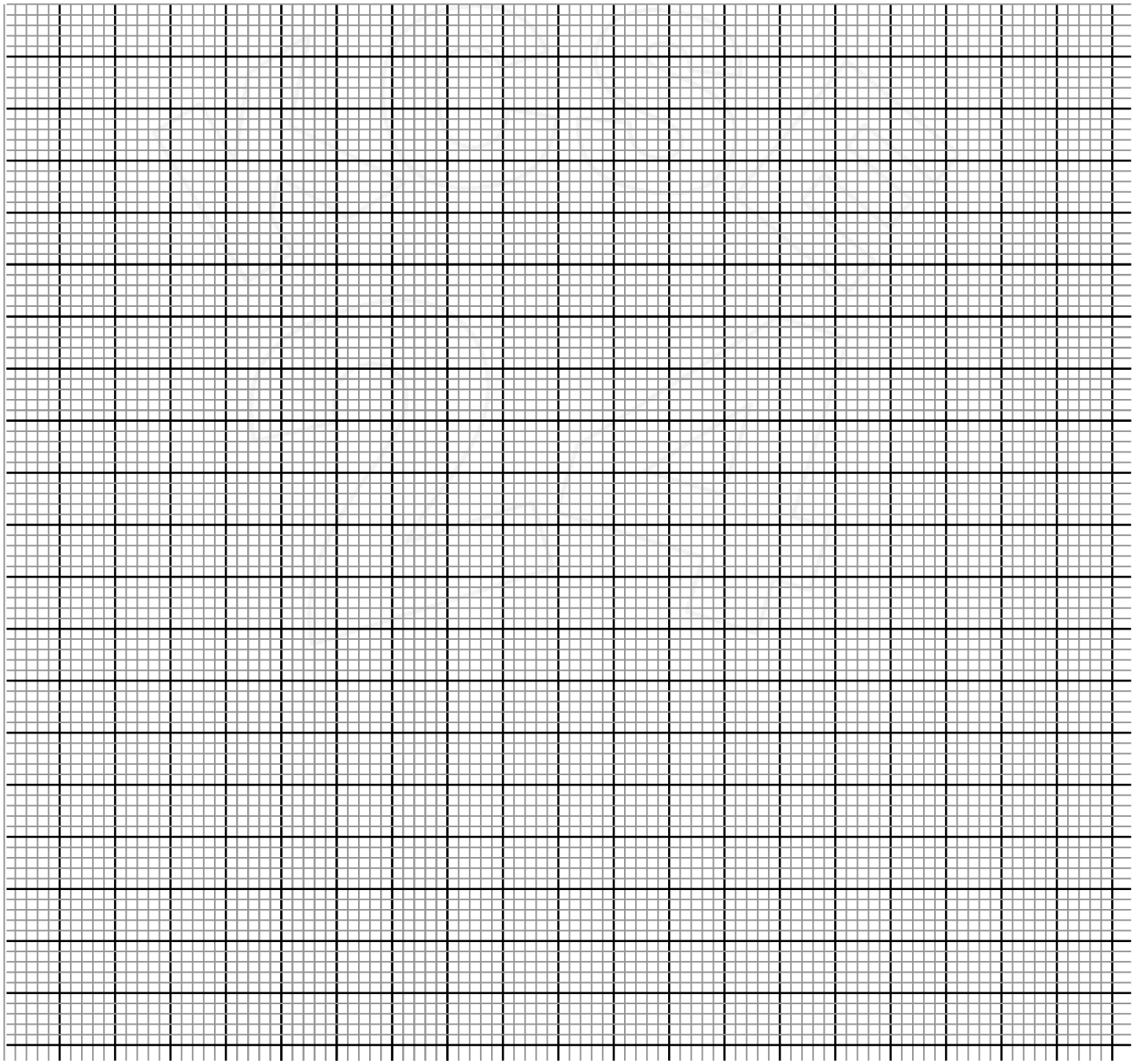
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20. The mases to the nearest kilogram of some student were recorded in table below

Mass (kg)	41-50	51-55	56-65	66-70	71-85
Frequency	8	12	16	10	6
Height of rectangle					0.2

a). Complete the table above to 1 decimal **(2 marks)**

b) On the grid provided below, draw a histogram to represent the above information **(3 marks)**



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c) Use the histogram to

i) State the class in which the median mark lies. **(1 mark)**

ii) Estimate the median mark **(2 marks)**

iii) The percentage number of students with masses of at least 74kg. **(2marks)**

KCSE 24

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21. Use a ruler and compass only for all the constructions in this question.

a) Construct a triangle XYZ in which XY= 6cm, YZ =5cm and angle XYZ= 120^0. **(2marks)**

b) Measure XZ and angle YXZ. **(2 marks)**

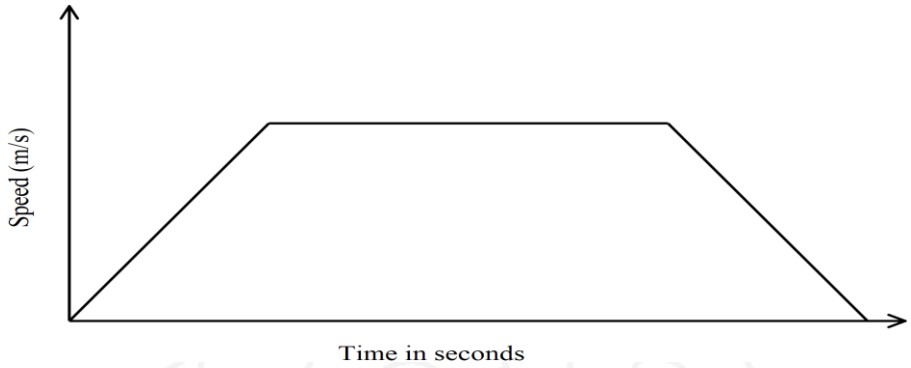
c) Construct the perpendicular bisector of XZ and let it meet XZ at M. **(1 mark)**

d) Locate a point W on the opposite of XZ as Y and that XW = ZW and YW =9cm and hence complete triangle XZW. **(2 marks)**

e) Measure WM and hence calculate the area of triangle XZW. **(3 marks)**

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22. The diagram below shows the speed time graph for a bus travelling between two stations, the bus starts from rest and accelerates uniformly for 75 seconds. It then travels at constant speed for 150 seconds and finally decelerates uniformly for 100 seconds.



(a) Given that the distance between the two stations is 5225 m. Calculate

(i) maximum speed in km/h attained by the bus**.** **(3 marks)**

(ii) the acceleration of the **bus** **(2 marks)**

(b) A van left Nairobi at 8.00 a.m and travelled towards Mombasa at an average speed of 80 km/h. At 8.30 am a car left Nairobi and travelled along the same road at an average speed of 120km/h.

(i) Calculate the distance covered by the car to catch up with the van. **(4 marks)**

(ii) Find the time of the day when the car caught up with van**.** **(1 mark)**

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23. While designing the water circulation system, planners of an estate used assumption that each housing unit in the estate will require at least $0.32m^3$ of water per day. To satisfy this need, they are to use a water pipe of radius 8cm to distribute the water. The water will be flowing in the pipe for only 14 hours a day at the rate of 24cm/s.

a) Determine the amount of water to the nearest litres, supplied in one hour. **(3marks)**

b) What is the maximum number of housing units that can be supported by the water circulation system? (Assume that a housing unit requires at most $0.32m^3$ of water per day). **(2marks)**

c) Each housing unit will pay a flat rate of sh. 280 per month for the supply of water. If the number of housing units in the estate is to be maximum and all end up being occupied, calculate the amount of money that will be collected in a month. **(2 marks)**

d) The maximum number of housing units were constructed and all got occupied. The estate ended up using on average $0.35m^3$ of water per housing unit per day. How much longer was the water pumped per day to satisfy the estate's water demand? **(3marks)**

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24. The equation of the curve is $y = x^3 - 2x^2 - 1$

(a) Determine

(i) the stationary points **(4marks)**

(ii) the nature of the stationary points in (a) (i) above **(2 marks)**

(b) Determine

(i) the equation of the tangent to the curve at $x = 1$ **(2marks)**

(ii) the equation of the normal to the curve at $x = 1$ **(2marks)**

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KCSE 2024 PREDICTION EXAM

POSSIBLE SERIES 1

121/2

MATHEMATICS

PAPER 2

TIME: 2½ HOURS

NAME……

SCHOOL…… **SIGN**……

INDEX NO…… **ADM NO**……

INSTRUCTIONS TO CANDIDATES:

- Write your **name**, **admission numbe**r and write **date** of examination in the spaces provided
- The paper contains **two** sections. Section I and Section II.
- Answer **ALL** the questions in section I and any **five** questions in section II.
- Answers and working **must** be written on the question paper in the spaces provided below each question.
- Show all steps in your calculations below each question.
- Marks may be given for correct working even if the answer is wrong.
- Non programmable silent electronic calculators and KNEC mathematical table may be used, except where stated otherwise.

FOR EXAMINERS USE ONLY

SECTION I

Question	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	**TOTAL**
Marks																	

SECTION II

Question	17	18	19	20	21	22	23	24	**TOTAL**
Marks									

GRAND TOTAL

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SECTION I: 50 MARKS
ANSWER ALL QUESTIONS IN THIS SECTION

1. Solve for x in the equation

$2\text{Sin}^2x - 1 = \text{Cos}^2x + \text{Sin}x$ for $0 \leq x \leq 360$ **(3 Marks)**

2. (a) Expand $\left(1 + \frac{3}{x}\right)^5$ upto the fifth term **(2 Marks)**

(b) Hence use your expansion to evaluate the value of $(2.5)^5$ to 3 d.p. **(2 Marks)**

3. Make p the subject of the formula **(3 Marks)**

$$E + m = m + \sqrt{\frac{p - 3u}{y - 3mp}}$$

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4. A object A of area $10cm^2$ is mapped onto its image B of area $60cm^2$ by a transformation whose matrix is given by $P=\begin{Bmatrix} x & 4 \\ 3 & x+3 \end{Bmatrix}$. Find the possible value of **(3 Marks)**

5. A variable Z varies directly as the square of X and inversely as the square root of Y. Find the percentage change in Z if X increased by 20% and Y decreased by 19% **(3 Marks)**

6. A circle whose equation is $(x-1)^2 + (y-k)^2 = 10$ passes through point (2,5). Find the coordinates of the two possible centres of the circle**.** **(3marks)**

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7. Juma deposited Sh. 45 000 in a bank which paid interest at 12% p.a compounded monthly. Calculate the amount of interest after 3 years **(3 Marks)**

8. (a) Find the inverse of the matrix $\begin{pmatrix} 4 & 3 \\ 3 & 5 \end{pmatrix}$ **(1 Mark)**

(b) Hence solve the simultaneous equation below using matrix method **(3 Marks)**

$4x + 3y = 6$

$5y + 3x - 5 = 0$

9. Given that $P=4+\sqrt{2}$ and $Q=2+\sqrt{2}$ and that $\frac{P}{Q}=a+b\sqrt{c}$, where a, b and c are constants, find the values of a, b and c. **(3 marks)**

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10. Find the value of x that satisfies the equation:

$log_3(x + 24) - 2 = log_3(9 - 2x)$ **(3 marks)**

11. Under a shear with x-axis invariant the point (3,2) is mapped onto (-2,2). Find the image of point (4,4) under the same transformation**.** **(3marks)**

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12. The data below shows the marks obtained by ten students in a test.

71, 55, 69, 45, 65, 57, 71, 82, 55, 50

Find the quartile deviations. **(3 marks)**

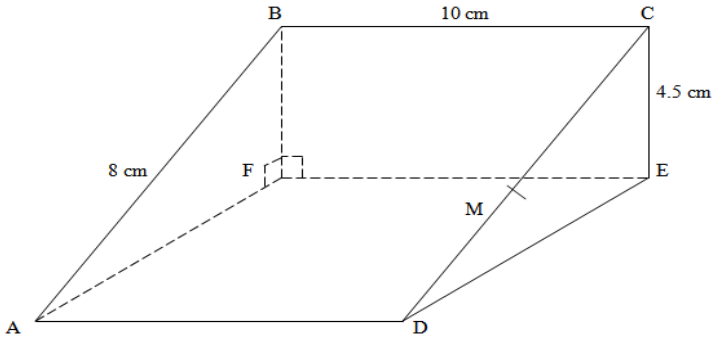
13. A bag contains 4 green, 9 purple and 18 blue balls. The balls are identical except for the colour. Two balls are picked at random, one at a time without replacement, find the probability that, a blue ball and a green ball are picked. **(3 marks)**

14. Find the equation of the tangent to the curve $y = x^2 + 2x + 3$ at the point where the gradient is equal to 4. **(3 marks)**

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15. The radius of a spherical ball is 2.5cm correct to one decimal place. Calculate the percentage error in calculating the surface area of the ball **(3 marks)**

16.



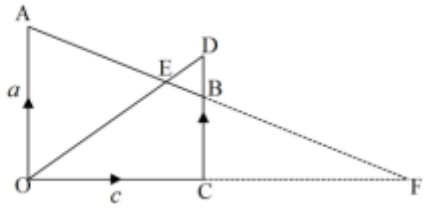
The above diagram represents a wooden prism. ABCD is a rectangle. Points E and F are directly below C and B respectively. M is the mid-point of CD. AB = 8 cm, BC = 10 cm and CE = 4.5 cm. Calculate the Angle CAE makes with the plane ADEF **(3marks)**

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SECTION II: 50 MARKS

ANSWER ANY 5 QUESTIONS IN THIS SECTION

17. In the figure below, $\boldsymbol{OA} = \tilde{a} and \boldsymbol{OC} = \tilde{c}.\ \boldsymbol{CB} = \frac{2}{3}\boldsymbol{OA}$ *and* $B divides\ CD\ in\ the\ ratio$ 3: 1



(a) Express the following vectors in terms of **a** and **c** only:

(i) **AB** **(1 mark)**

(ii) **OD** **(2 marks)**

(b) Given that **OE**=h**OD** and **AE**=k**AB** where h and k are scalars express OE in two different ways hence find the scalars h and k. **(5 marks)**

(c) If OC produced meets AB produced at F, find **OF** . **(3 marks)**

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18. (a) The 5th term of an AP is 82 and the 12th term is 103. find:

(i) the first term and common difference. **(3marks)**

(ii) the sum of the 21 terms. **(2 marks)**

(b) A stair case was built such that each subsequent stair has a uniform difference in height. The height of the 6th stair from the horizontal floor was 85 cm and the height of the 10th stair was 145. Calculate the height of the 1st stair and the uniform difference in height of the stairs.

(3 marks)

(c) During the construction of the staircase, each step was supported by a vertical piece of timber. If the staircase has 11 stairs, calculate the total length of timber used. **(2 marks)**

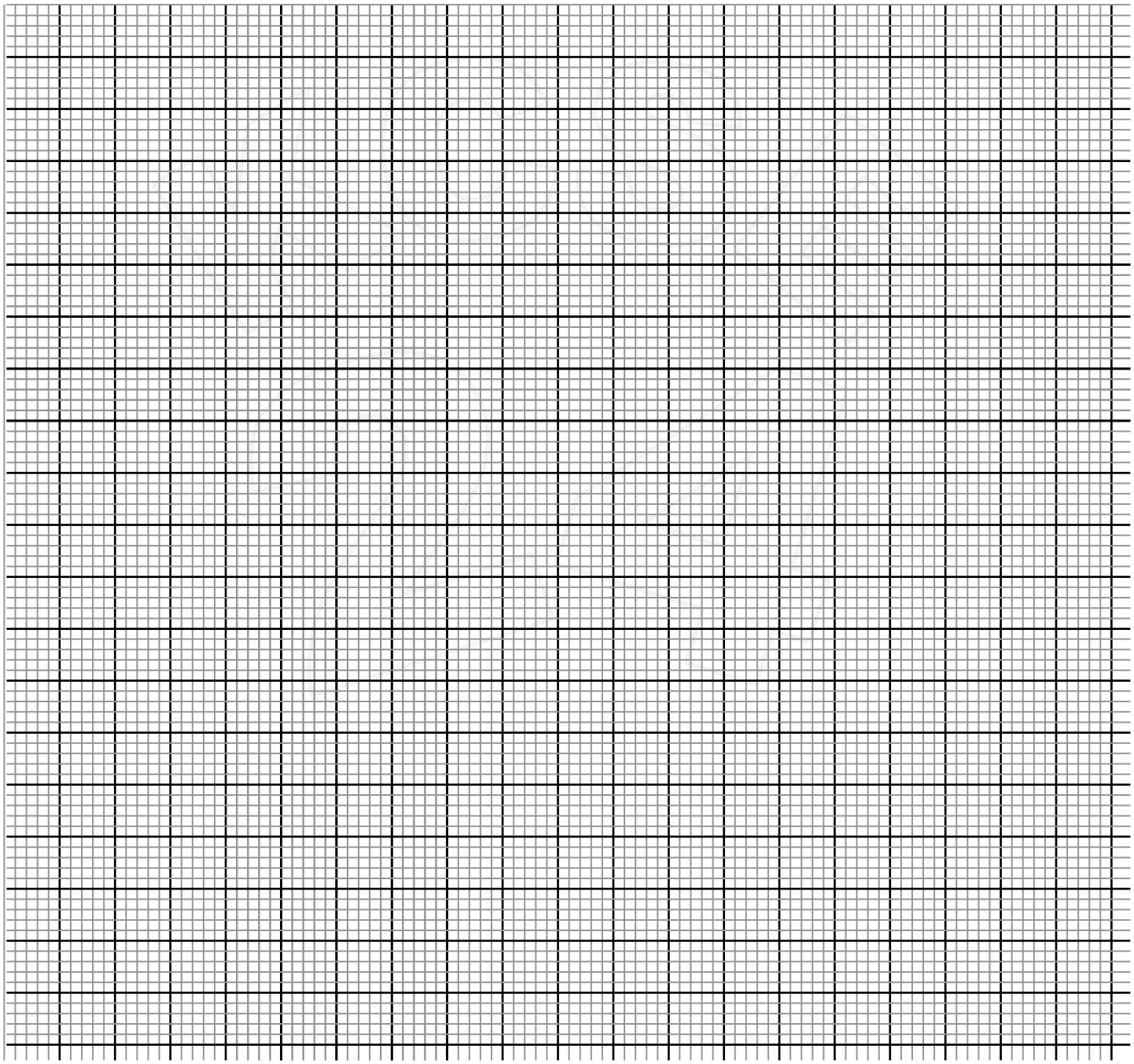
©2024 The Kenya National Examinations Council.

19.(a) Complete the table below given that $y = -x^2 + x + 12$ for $-4 \leq x \leq 5$ **(2 marks)**

X	-4	-3	-2	-1	0	1	2	3	4	5
Y	8				12	12				

(b) On the grid provided below, draw the graph of $y = -x^2 + x + 12$ for $-4 \leq x \leq 5$

Scale: 1 cm represents 1 unit on the x – axis and 1 cm represents 2 units on the y – axis. **(4 marks)**



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(c) Using your graph, to Solve the equation $x^2 - 3\,x - \ 10 = 0$ **(2 marks)**

ii. State the range of values of x for which $-x^2 \ + \ x \ + \ 12 \geq \ 0$ **(1 mark)**

(d) Estimate the coordinates of the turning point of the curve $y \ = -x^2 \ + \ x \ + \ 12$ **(1 mark)**

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20.An aircraft leaves town $P(30^{\circ}S, 17^{\circ}E)$and moves directly to town $Q(60^{\circ}N, 17^{\circ}E)$. It then moved at an average speed of 300 knots for 8 hours westwards to town R. Determine;

(a) The distance PQ in nautical miles. **(3 marks)**

(b) The position of town R. **(3 marks)**

(c) The local time at R if the local time at Q is 3:15 p.m **(2 marks)**

(d) The total distance moved from P to R in km. Take 1nm=1.853 km **(2 marks)**

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21. Using a ruler and compasses only.

(i) Construct a parallelogram ABCD such that AB = 10cm, BC = 7cm and angle ABC = 105º.

(3 marks)

(ii) Construct the loci of P and Q within the parallelogram such that 6cm. $AP \leq 4cm$ and $BQ \leq 6cm$

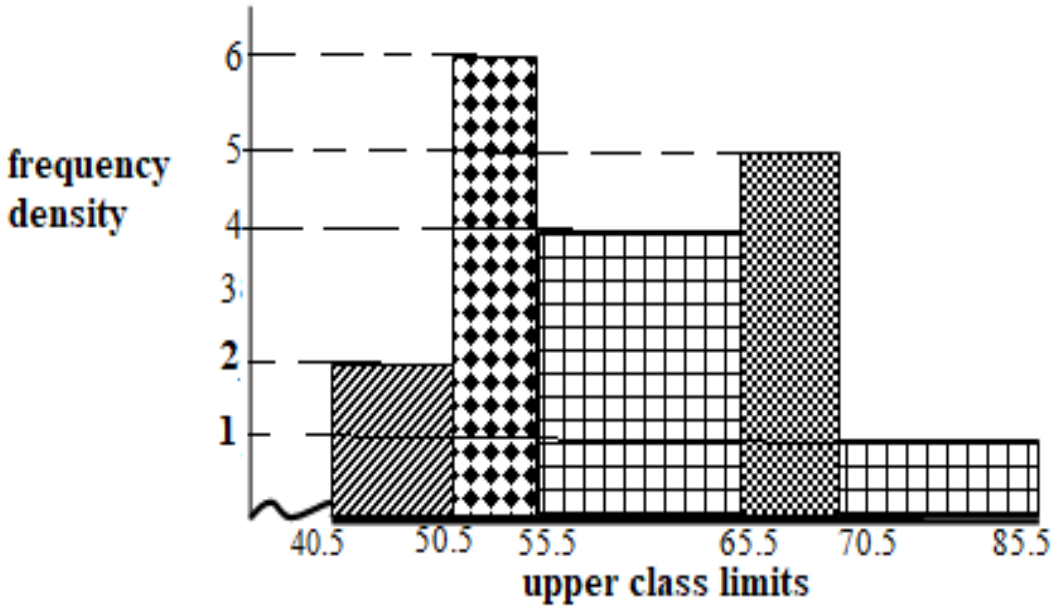
(3 marks)

(iii) Calculate the area within the parallelogram but outside regions bounded by the loci of P and Q.

(4 marks)

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22. Below is the histogram representing marks obtained in Mathematics test



(a) Develop a frequency distribution table for the data **(3 Marks)**

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(b) Using an assumed mean of 60.5 find the mean. **(3 marks)**

(c) Calculate Standard deviation. **(4marks)**

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23. (a) Use the mid ordinate rule with 5 strips to estimate the area bounded by the curve $y = x^2 - 3x - 4, x = -2, x = 3$ and $x - axis$ **(3 marks)**

(b) Calculate the exact area **above** **(5 marks)**

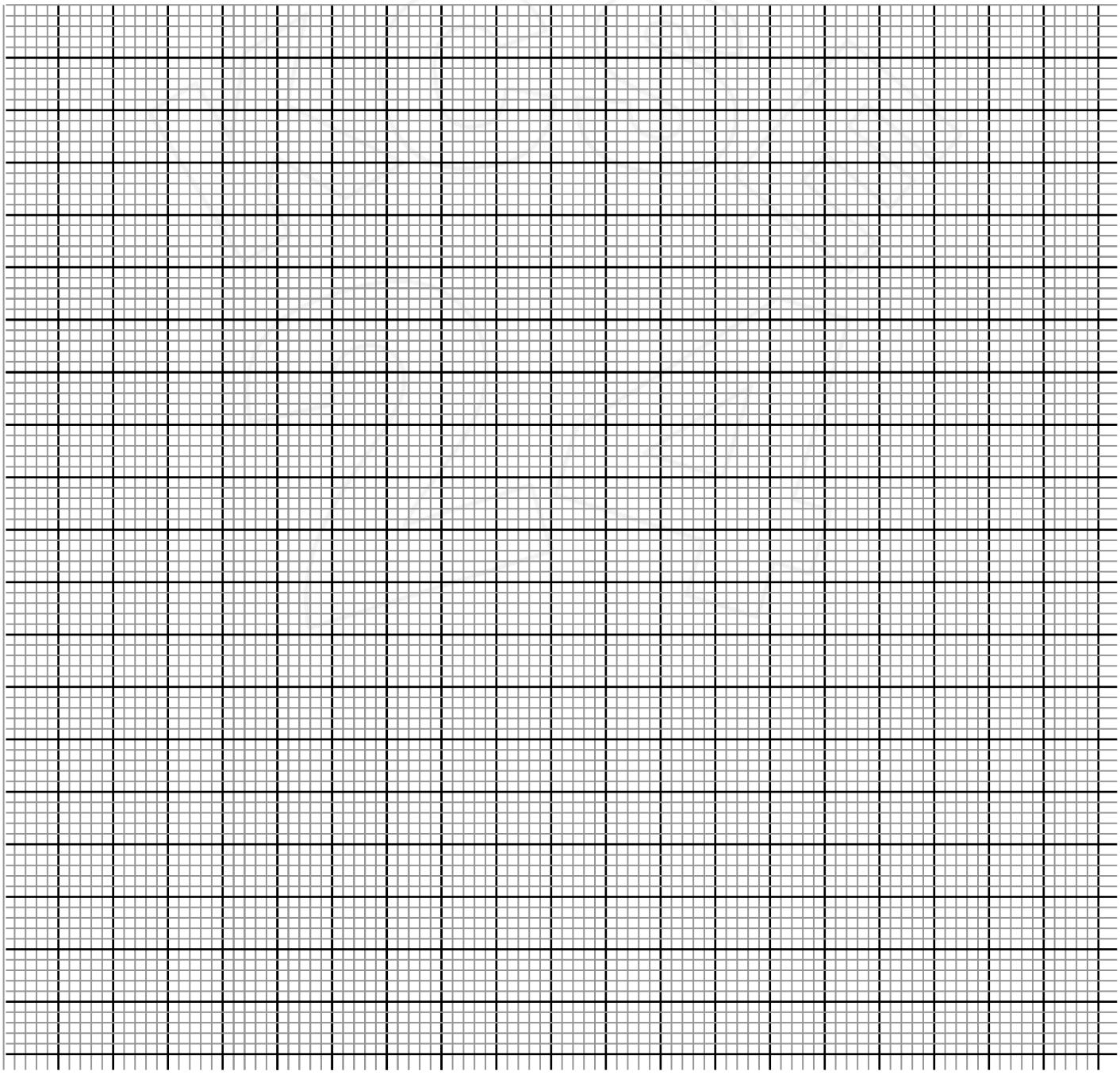
(c) Find the percentage error involve in using the mid-ordinate role. **(2 marks)**

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24. Eldoret Airport is planning to build a fire fighting plant on a space of $250m^2$. Two types of machines are to be installed, machine x which occupies a space of $5m^2$ and machine Y which occupies $10m^2$. The airport can have a maximum of 40 machines at a time. At most 15 machines of type Y are used at any given time.

a) Write down three inequalities other than $x>0$, and $y>0$. **(3marks)**

b) On the grid below, show the region satisfying the given conditions. **(4marks)**



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c) The profit from a type x machine is Ksh 1000 and that of type y is Ksh 4000. Use the graph to obtain the number of machines of each type that should be installed to obtain maximum profit. Calculate the maximum profit**.** **(3marks)**

KCSE 24

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KCSE 2024 PREDICTION EXAM

POSSIBLE SERIES 1

451/1

COMPUTER STUDIES

PAPER 1 (THEORY)

TIME: 2½ HOURS

NAME……

SCHOOL…… **SIGN**……

INDEX NO…… **ADM NO**……

(Kenya Certificate of Secondary Education)

INSTRUCTIONS TO CANDIDATES

1. *Write your name and Admission number in the spaces provided above*
2. *Answer all questions in section A*
3. *In section B,* ***answer question 16(compulsory)*** *and* ***any other three*** *questions*
4. ***Candidates should answer the questions in English.***

FOR EXAMINER'S USE ONLY

SECTION	QUESTION	CANDIDATE'S SCORE
A	1-15	
B	16	
TOTAL SCORE		

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SECTION A (40 Marks)

Answer all questions in this section

1. **State three** precautions that should be taken to prevent against electrical fire in the computer laboratory **(3 marks)**

……

……

……

……

2. **Identify** the most appropriate **input device** suitable for each of the following tasks:

i) Graphic designs and architectural drawing **(1 mark)**

……

ii) Data input by a person with impaired hands **(1 mark)**

……

3. Sharon has noticed that her stand-alone computer has become unusually slow and hanging frequently. Since she cannot figure out the problem with the computer, she decided to format the hard disk.

a) **State two** data recovery measures she has to take before formatting the hard disk **(2 marks)**

……

……

……

b) **State two** corrective measures she should have taken before resorting to formatting the hard disk **(2 marks)**

……

……

……

……

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4. The capacity of a computer's RAM is 4GB

a) **State one** function of the RAM in the computer **(1 mark)**

……

b) **Calculate** the number of nibbles the memory can support if another RAM of 512MB RAM was added. **(3 marks)**

……

……

……

……

5. The independent Electoral and Boundaries Commission (IEBC) has decided to transmit election results from the constituency level to the headquarters in Nairobi through the internet. **Explain two** data security threats that are likely to be faced during this transmission. **(4 marks)**

……

……

……

……

6. The icons below represent commands used in a DTP package to manipulate graphics.





Figure A *Figure B*

State the use of each of the icons labeled *Figure A* and *Figure B* **(2 marks)**

……

……

……

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7. Explain the importance of each of the following in word processing

i) tab stops **(2 marks)**

……

……

……

ii) word wrap **(2 marks)**

……

……

……

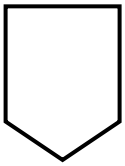
8. State the **use** of each of the following symbols in a system flowchart:



a. **(1 mark)**

……

b. **(1 mark)**



……

9. State two ways in which power failure is a threat to data security **(2 marks)**

……

……

……

……

……

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10. Pesa Tele Company has realized that someone is illegally gaining access to their data in their computer networks. **Name two** computer professionals that the company should consult and their roles. **(2 marks)**

……

……

11. **State two** factors that determine the cost of an operating system **(2 marks)**

……

……

12. The examination processing system of Mamboleo high school requires entry of students' monthly CAT marks at the end of each month. At the end of the term, the system generates a student's termly report form.

a) **Name** this type of data processing mode **(1 mark)**

……

b) **State two** advantages of this data processing approach **(2 marks)**

……

……

13. An organization has offices in Nairobi and Kampala. The management intends to network the computers in these offices. **State two** factors that they need to consider when choosing a physical network topology to use. **(2 marks)**

……

……

……

14. Apart from sending and receiving mails, **state other two** functions of an email. **(2 marks)**

……

……

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15. Distinguish between an *index key* and a *primary key* field as used in databases **(2 marks)**

……

……

……

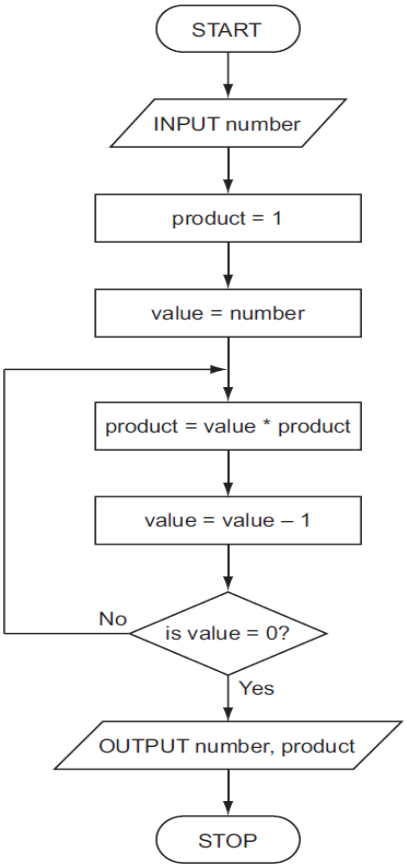
SECTION B (60 Marks)

Answer question 16 (Compulsory) and any other three questions

16. a) Using a suitable example, **explain** the term *mnemonics* as used in programming **(2 marks)**

b) An interpreter is a programming language translator that converts high level languages to machine code. **State three** characteristics of an interpreter **(3 marks)**

c) The figure below shows a flowchart. Use it to answer the questions that follow:



i) Determine all the outputs of the flowchart if the input is the number **three**. **(3 marks)**

ii) Explain what happens if the number zero is input. **(1 mark)**

iii) Write a pseudocode for the flowchart above **(6 marks)**

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17. a) With an aid of a diagram, **describe** time sharing mode as used in data processing.**(4 marks)**

b) **Explain** the function of each of the following in system documentation:

i) User Manual **(2 marks)**

ii) Invalid data **(2 marks)**

c) State two functions that are specific to networking operating systems **(2 marks)**

d) Mwanzo mpya holding is a company that deals with selling of computers and computer parts. **State three** benefits of advertising their business through the internet. **(3 marks)**

e) Distinguish between the *integrated software* and *software suite* **(2 marks)**

18. a) Perform the binary arithmetic

111.01 + 1011.111 – 101.011

And convert the answer to decimal notation **(4 marks)**

b) Using two's complements and 8 bit notation, subtract 11_{10} from 8_{10} leaving your answer in binary notation **(5 marks)**

c) The figure below is an extract of a spreadsheet showing what students had targeted to score and the actual score in a computer remedial class.

	A	B	C	D
1	**NAME**	**TARGET SCORE**	**ACTUAL SCORE**	**PERFORMANCE FACTOR**
2	Abdi	40	45	
3	Alex	30	65	
4	Ben	50	60	
5	Betty	30	20	
6	Bena	45	45	
7	Sheila	70	60	

A performance factor is obtained by subtracting the target score from the actual score and dividing the difference by the target score.

Using cell references, **write** a formula that would be entered in cell

i) D4 to compute the performance factor **(2 marks)**

ii) E2 to display the statement '*More remedials'* if the performance factor is less than zero, 'Exempted' if the factor is greater than zero and '*optional remedials'* if otherwise. **(4 marks)**

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19. a) Kenya Wildlife Service (KWS) is a government agency whose part of their responsibility is to conserve wildlife. **State three** ways they can use ICT to achieve their goal. **(3 marks)**

b) **State** the **role** of each of the following data communication devices:

i) Gateway **(1 mark)**

ii) Brouter **(1 mark)**

iii) Codec **(1 mark)**

c) **Explain two** circumstances under which phased changeover strategy would be preferred when implementing a new system. **(4 marks)**

d) **State three** reasons why the fibre optic cable has become a very popular data communication media in most organizations today **(3 marks)**

e) A local bank had its electronic money transfer system attacked by a computer criminal. In their meeting over the matter, the Board of Directors instructed the CEO not to report the matter to the law enforcement agencies but to deal with it internally. **State two** reasons why the board of directors took such a decision. **(2 marks)**

20. a) An architectural firm uses a computer system for designing building plans. **State three** advantages of using CAD software instead of DTP software to perform this function. **(3 marks)**

b) **State three** reasons why it is necessary to create table relationships during database design **(3marks)**

c) **Explain two** circumstances under which the use of robots may be preferred in manufacturing industries **(4 marks)**

d) The growth of the internet has led to the rise of many social networking sites. **State three** negative impacts of these social networking services offered over the internet. **(3 marks)**

e) A student was advised to use ergonomic keyboard while typing his project documentation. **State two** health problems that can be solved when the advice is taken. **(2 marks)**

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KCSE 2024 PREDICTION EXAM

POSSIBLE SERIES 1

451/2

COMPUTER STUDIES

PAPER 2 (PRACTICAL)

TIME: 2½ HOURS

NAME……

SCHOOL…… **SIGN**……

INDEX NO…… **ADM NO**……

(Kenya Certificate of Secondary Education)

INSTRUCTIONS TO CANDIDATES:

(a) Indicate your name and index number at the top right-hand corner of each printout.

(b) Write your name and index number on the CD/Removable storage medium provided.

(c) Write the name and version of the software used for each question attempted in the answer sheet provided.

(d) Answer all the questions.

(e) All questions carry equal marks.

(f) Passwords should not be used while saving in the CD/Removable storage medium.

(g) All answers must be saved in your CD/Removable storage medium.

(h) Make a printout of the answers on the answer sheet.

(i) Arrange your printouts and tie/staple them together.

(j) Hand in all the printouts and the CD/Removable storage medium used.

(k) Candidates should answer the questions in English.

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2. The following data was extracted from Applicants' file of HITECH COMPUTER COLLEGE. Enter the data as it appears in a spreadsheet and save it as Hitech CC. **[6marks]**

	A	B	C	D	E	F	G	H	I
1	**NAME**	**ADDRESS**	**TOWN**	**ENG**	**KISW**	**MATH**	**MEAN**	**POSITION**	**REMARK**
2	Alma N.	400	Nairobi	75	60	80			
3	Otieno G.	320	Kisumu	55	50	40			
4	Nyambane T.	560	Kisii	70	60	50			
5	Simiyu S.	123	Bungoma	30	80	70			
6	Staicy C.	48	Eldoret	75	70	80			
7	Akora A.	603	Mombasa	40	30	50			
8	Natasha J.	802	Nyeri	65	75	70			
9	Amoit C.	23	Busia	80	50	70			

(a) Copy the contents of sheet1 to sheet2 and rename as *modified* **[1 mark]**

(b) On the sheet named *modified* perform the following:

(i) Insert two blank rows at the top of the worksheet. **[1 Mark]**

(ii) Enter the following title and subtitle in the blank rows respectively; HITECH COMPUTER COLLEGE and APPLICANTS FILE. **[2 Marks]**

(iii) Centre the title and subtitle across the columns that contain data. **[2 Marks]**

(iv) Using suitable functions and cell references only, compute:

- The mean for each student and format it to zero decimal place. **[4 Marks]**
- The position of each student. **[2 Marks]**
- The highest score for each subject. **[2 Marks]**

v) The college wishes to analyze the applicants' data in order to find those applicants who qualify for admission to pursue a course in IT. Generate the remarks based on the following conditions

Mean	**Remark**
70 and above	Successful
Between 50 and 69	Retake
Less than 50	Unsuccessful

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Enter an appropriate function in cell I4 and copy it to other cells to determine whether the student qualifies for admission. **[7 Marks]**

(vi) Enter the label "Number of Successful Candidates" in cell A13. Using a suitable function, determine the number of applicants who are successful. The output should be displayed in cell B13. **[3 Marks]**

(c) Copy the contents in *modified* sheet to a new worksheet and rename it as *filtered list* **[3 Marks]**

(d) Filter the new sheet (*filtered list*) to display the records of those applicants who are successful. **[4 Marks]**

(e) Copy the filtered list into a new worksheet and rename it as *successful applicants* **[1 mark]**

(f) Delete the rows with the title "HITECH COMPUTER COLLEGE" and "APPLICANTS FILE". Save changes made in the worksheet. **[2marks]**

(g) The college wishes to send admission letters to the successful applicants. Using a Word processor, type the following letter as it appears and save it as **Admission letter1**. **[4Marks]**

(Type today's date here)

<<NAME>>

<<ADDRESS>>

<<TOWN>>

Dear <<**NAME**>>,

RE: INVITATION TO PURSUE A COURSE IN IT

We are pleased to inform you that your application to pursue an IT course has been successful.

You are required to report on 2nd October, 2023 at 8.00 a.m. Other details will be given to you on your reporting day.

Yours faithfully,

Douglas Mayaka,

CHIEF PRINCIPAL

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(h) Merge the admission letter in (g) above with the '*Successful Applicants'* Sheet you created in a spread sheet in (e) above to generate personalized letters to the successful applicants. Save as **Admission letter2**. **[4 Marks]**

(i) Print: **[2 Marks]**

I. Sheet1;

II. Successful Applicants Sheet;

III. Admission letter1;

IV. *Any one* successful applicant's admission letter in Admission letter2.

2. The figure below shows the design of a book cover. It shows the front the front, the back and space between where book pages will be folded. Use a desktop package to design the book cover as follows:

a) Create a new publication named graphics book cover with the following page layout **(4marks)**

i. Page size : A4

ii. Orientation : landscape

iii. Margins 1.27 cm or 0.5 inches all round

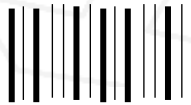
b) Enter the text and objects and format them as they appear in the Figure. The front and back sections of the book cover each measure 18 cm (7.1 inches) by 12.5 cm (4.9 inches) and the space between them measures 1.7 cm (0.7inches). **(45marks)**

c) Save and print the publication **(1mark)**

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Course Objectives

- Define and trace the development of Graphic Design
- Identify the numerous design careers which are available
- Identify and use the Elements and Principles of Design in a decisive fashion
- Distinguish between the types of graphic images used
- Understand and use color to communicate ideas to others
- Understand the principles of graphic placement
- Utilize Adobe Photoshop to edit photographs and create artistic imagery
- Utilize Adobe InDesign to create publications such as advertisements and brochures



Book Of Graphics Design Pixel24

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The best

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Full

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World

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Dhaka 1212

Level	Duration	Fees (Kshs)
Certificate	3 months	Ksh. 5000
Diploma	1 Year	Ksh.. 15,000
Degree	2 Years	Ksh. 30,000

KCSE 24

KCSE 2024 PREDICTION EXAM

POSSIBLE SERIES 1

441/1

HOME SCIENCE

PAPER 1 (THEORY)

TIME: 2½ HOURS

NAME……

SCHOOL…… **SIGN**……

INDEX NO…… **ADM NO**……

(Kenya Certificate of Secondary Education)

INSTRUCTION TO CANDIDATES:

1. *Write your name and Index Number in the spaces provided above*
2. *Sign and Write the date of examination in the spaces provided above*
3. *This paper consists of THREE sections; A, B and C.*
4. *Answer ALL the questions in section A and B and any TWO questions from section C in the spaces provided.*
5. *Answers MUST be written in the spaces provided*
6. *Answer the questions in English.*

FOR EXAMINER'S USE ONLY

SECTION	QUESTIONS	MAXIMUM SCORE	CANDIDATE'S SCORE
A	1 – 21	40	
B	22	20	
C	23	20	
	24	20	
	25	20	
TOTAL SCORE		**100**	

SECTION A (40 MARKS) (COMPULSORY)

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

1.Define the term Malnutrition **(1mk)**

……

……

2.Give **three** reasons for blanching vegetables. **(3mks)**

……

……

……

3. State **two** characteristics of a well made inseam pocket. **(2mks)**

……

……

4. Mention **two** nutritional diseases that are common among teenagers. **(1mk)**

……

……

5. State **two** methods of cake making. **(2mks)**

……

……

6. Give **two** reasons for starching cotton. **(2mks)**

……

……

……

7. Mention **two** factors that determine the efficiency of laundry detergent **(2mks)**

……

……

8. State three factors that determine safe parenthood. **(3mks)**

……

……

……

9. State **two** points to consider when cutting buttonholes **(2mks)**

……

……

10. List **four** diseases that are in the immunization schedule. **(2mks)**

……

……

……

……

11. Complete the table below on primary and secondary colours. **(3mks)**

s/n	**Primary colours**	**Secondary colours**
a)	……. + Red	…….
b)	…….. + ……..	Green
c)	Blue + ……..	……

12. Mention **two** ways of achieving mechanical ventilation in a house. **(1mk)**

……

……

……

13. List **two** methods of lighting in a home. **(1mk)**

……

……

14. Mention **two** rights of a consumer. **(2mks)**

……

……

15. List **two** examples of conspicuous seams. **(1mk)**

……

……

16. State **three** qualities of a well-made stitch. **(3mks)**

……

……

……

17. Mention the **three** layers that make a pleat. **($1^1/_2$mks)**

……

……

……

18. Name a biological raising agent in flour mixtures. **($^1/_2$mk)**

……

19. State three physical needs of the sick at home **(3mks)**

……

……

……

20. Differentiate between pressing and ironing **(2mks)**

……

……

……

21. State two reasons why meals should be planned **(2mks)**

……

……

……

SECTION B (20 MARKS) COMPULSORY

22. You have gone to visit your grandmother over the half-term break.

Describe the procedure you would follow to:-

a) Launder her loose coloured cotton kitenge dress **(7mks)**

b) Clean her polished bedroom floor. **(7mks)**

C) Daily clean her hurricane lamp. **(6mks)**

SECTION C (40 MARKS)

Answer any TWO questions from this section.

23.a) Explain four disadvantages of open drainage system **(8mks)**

b) Discuss any three danger signs of pregnancy **(6mks)**

c) Explain three activities to undertake before carrying out a family **wash** **(6mks)**

24.a) Discuss four ways of introducing air into flour mixtures mechanicaly **(8mks)**

b) Explain **three** functions of the counterfeit section in Kenya Bureau of Standards **(6mks)**

c) Discuss **three** qualities to look for when buying a saucepan to use **(6mks)**

25a) Explain four points to consider when choosing a toothbrush **(8mks)**

b) Explain three precautionary measures to take when handling leftover foods **(6mks)**

c) Sketch and explain any three pattern symbols likely to be found at the front bodice pattern of a blouse **(6mks)**

END

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KCSE 2024 PREDICTION EXAM

POSSIBLE SERIES 1

441/2

HOME SCIENCE

PAPER 2 (PRACTICAL)

TIME: 2½ HOURS

SCHOOL…… SIGN……

(Kenya Certificate of Secondary Education)

(CLOTHING CONSTRUCTION)

(PRACTICAL)

CONFIDENTIAL

2½ HOURS

INSTRUCTIONS TO CANDIDATES

The school should provide the following items:

- ✓ Poplin light coloured fabric 70cm long and 90cm wide
- ✓ Matching sewing thread
- ✓ Pressing tools
- ✓ Sewing machines
- ✓ 2012 pattern
- ✓ Envelopes

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KCSE 2024 PREDICTION EXAM

POSSIBLE SERIES 1

441/2

HOME SCIENCE

PAPER 2 (PRACTICAL)

TIME: 2½ HOURS

NAME……

SCHOOL…… SIGN……

INDEX NO…… ADM NO……

(Kenya Certificate of Secondary Education)

(CLOTHING CONSTRUCTION)

(PRACTICAL)

CONFIDENTIAL

INSTRUCTIONS TO CANDIDATES

1. *The paper consists of three pages*
2. *Candidates should check the question paper to ascertain that all pages are printed as indicated and that no questions are missing.*
3. *Candidates should check the question paper to ascertain that all the pages are printed.*

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A pattern of a girl dress is provided. You are advised to study the sketches, instructions and the layout carefully before you begin the test.

1. **MATERIALS PROVIDED**
   A. Bodice front
   B. Bodice back
   C. Skirt front
   D. Skirt back
   E. Sleeve
   F. collar
   G. cut out a crossway strip measuring 18cm long 4cm wide
2. Plain lightweight cotton fabric 70cm long and 90 cm wide.
3. Cotton sewing thread to match the fabric
4. One large envelope.

THE TEST

Using the materials provided, lay, cut out and make the left half of a girl's dress to show the following processes:

a) Cutting out **(16mks)**

b) Making of the dart at the front bodice **(6mks)**

c) Making of a shoulder seam using a double stitched seam. **($7^1/_2$mks)**

d) Making the side seam on bodice and skirt using an open seam. **(13 mks)**

e) Attaching of the bodice pieces to the skirt pieces using overlaid seam and neatening ¼ of the seam using overcasting stitches **($9^1/_2$mks)**

f) Preparation of the collar and attaching using a crossway strip**.** **(16mks)**

g) Preparation and attachment of the sleeve; use French seam for the underarm seam. Do not **TRIM OR NEATEN THE SEAM ALLOWANCE** **(10 ½ mks)**

h) Making of the worked loop on the back edge for 1cm wide button. **(5 mks)**

i) Overall presentation **($6^1/_2$mks)**

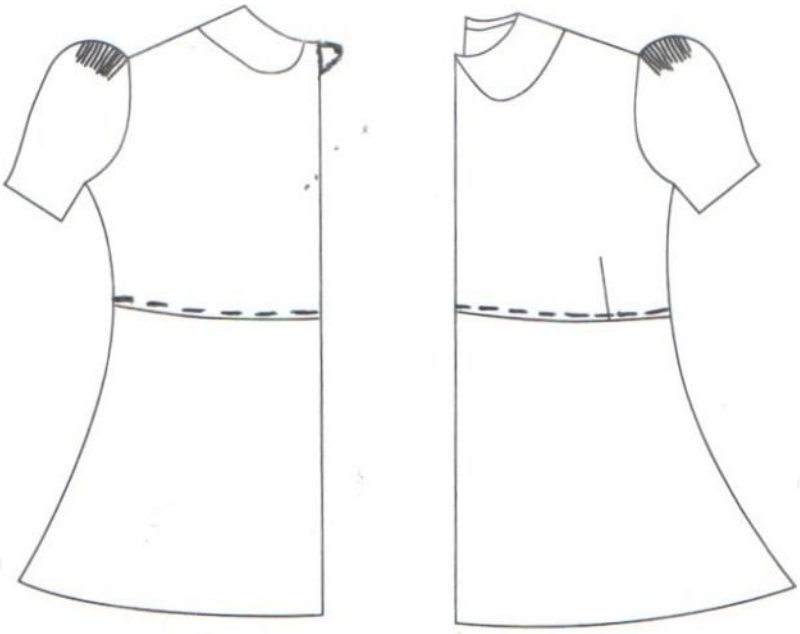
OMIT

The management of this lower hem to the skirt and sleeves.

At the end of the examination, firmly sew onto your work, on a single fabric a label bearing your name and index number. Remove the needle, pins and loose threads from your work.

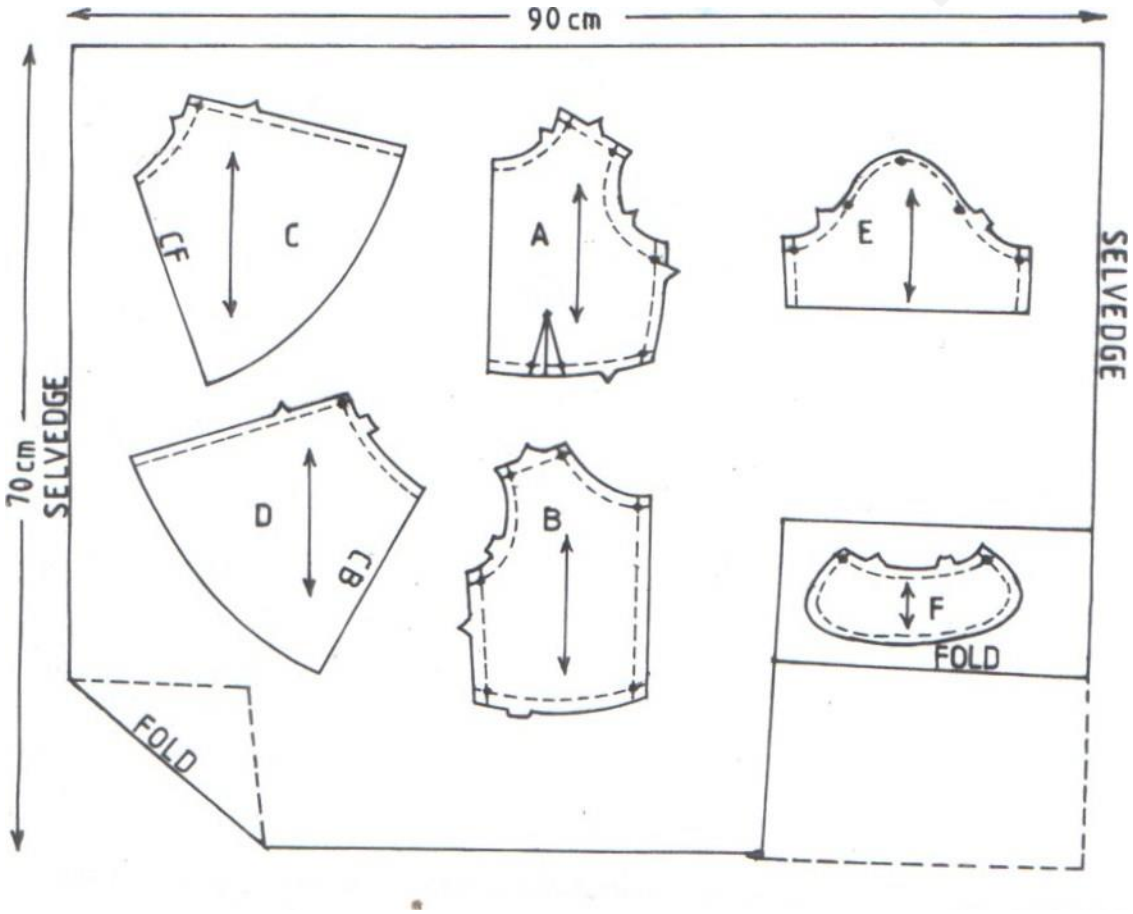
Fold your work neatly and place it in the envelope provided. Do not put scarps of fabric in the envelope. Do not seal the envelope.

DRESS VIEW



BACK FR0NT

LAYOUT (NOT TO SCALE)



KCSE 2024 PREDICTION EXAM

POSSIBLE SERIES 1

441/3

HOME SCIENCE

PAPER 3

TIME: 1¼ HOURS

NAME……

SCHOOL…… SIGN……

INDEX NO…… ADM NO……

(Kenya Certificate of Secondary Education)

441/3 HOMESCIENCE Paper 3

[FOOD AND NUTRITION]

Time: 1 ¼ Hours

Planning session: 30 minutes

Practical session 1 ¼ hours

INSTRUCTIONS TO CANDIDATES

- Read the test carefully.
- Textbooks and recipes may be used during planning session as reference materials
- You will be expected to keep to your order of work during the practical session.
- You are not allowed to bring additional notes to the practical session.

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THE TEST

You have been left in charge of the home with your younger brother. Using the ingredients listed below, prepare cook and present a suitable two dish meal for the two of you.

Include a stimulating drink for two.

Ingredients

- Salt
- Cabbage
- Minced beef
- Fat/oil
- Garlic
- sugar
- Rice
- Onion
- Ginger
- Tea leaves/cocoa
- Pilau mix
- Milk
- Green Peas
- Carrots
- Tomatoes

Planning Session.

Use separate sheets of paper for each task listed below and a carbon paper to make duplicate copies and proceed as follows: -

(i). Identify the dishes and write down their recipes

(ii). Write down your order of work.

(iii). Make a list of the food stuff, equipment and materials you would require.

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THE END

CALL/TEXT/WHATSAPP

0746-222-000

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