NAIROBI CLUSTER MOCKS

2025 SERIES 2

ALL SUBJECTS

NATIONAL SCHOOLS' JOINT MOCK WITHIN NAIROBI REGION

To promote academic excellence, leading national schools within Nairobi come together for this joint mock exam compilation. This cooperative endeavor includes demanding tests intended to test students' abilities and improve their preparedness for national examinations. Participating schools seek to improve student performance and foster an achievement culture by exchanging tools and tactics.

SUBJECTS TESTED;

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

For Marking Schemes

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

MWALIMU CONSULTANCY

KCSE 2025 NAIROBI CLUSTER MOCK

KCSE EXAM SERIES 2

BIOLOGY

231/1

PAPER 1 (THEORY)

TIME: 2 HOURS

NAME……

SCHOOL…… SIGN……

INDEX NO…… ADM NO……

Kenya Certificate of Secondary Education.

INSTRUCTIONS TO CANDIDATES

- *Write your name, class and admission number in the space provided above.*
- *Write the date of the examination in the space provided above.*
- *Answer all the questions in the spaces provided.*

FOR EXAMINER'S USE ONLY

QUESTION	MAXIMUM SCORE	CANDIDATE'S SCORE
1 – 32	80	

Answer all the questions in the spaces provided.

1. (i) Some herbaceous stems have very little strengthening tissue yet still remain upright. Explain. **(2 marks)**

……

……

……

(ii) Name the strengthening material in sclerenchyma **(1 mark)**

……

2. State the functions of the following structures of the human brain. **(3 marks)**

(i) Cerebrum

……

……

(ii) Cerebellum

……

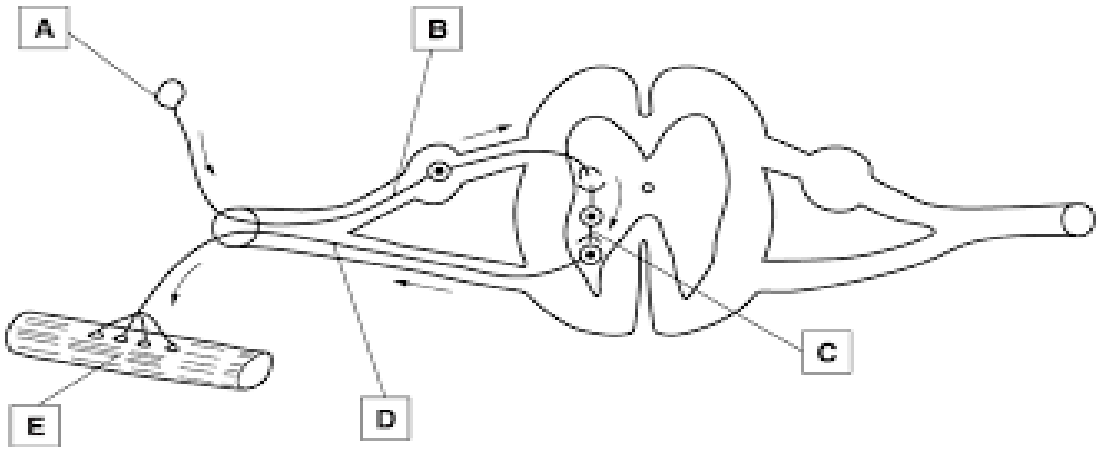
……

(iii) Medulla oblongata

……

……

3. The diagram shows a simple reflex arc.



Explain how an impulse is transmitted across the gap between neurons C and **D** **(3 marks)**

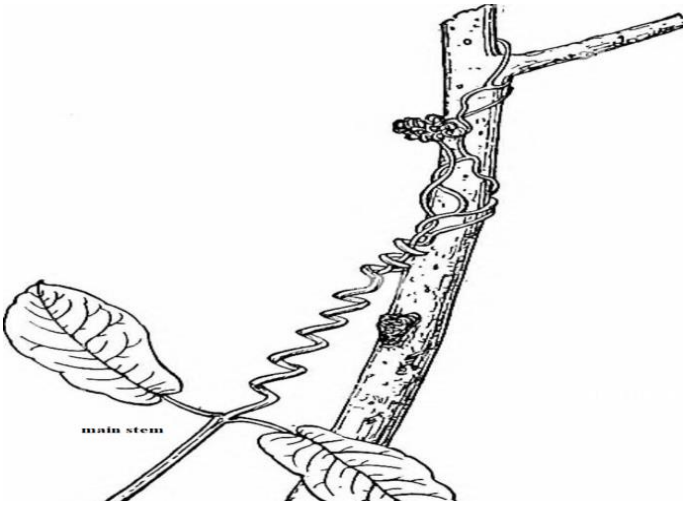
……

……

……

……

4. (a) Based on the structure available on this diagram classify this type of stem**.** **(1 mark)**



……

(b) How is the other type of stem different from this one? **(1 mark)**

……

……

5. State the importance of tactic responses among some members of kingdom Protoctista.**(1 mark)**

……

……

6. State two differences between tropisms and taxes. **(2 marks)**

	Tropisms	**Taxes**
(i)		
(ii)		

7. Explain continental drift as an evidence of evolution. **(2 marks)**

……

……

……

……

8. Why are some bacteria able to resist the effect of antibiotics? **(2 marks)**

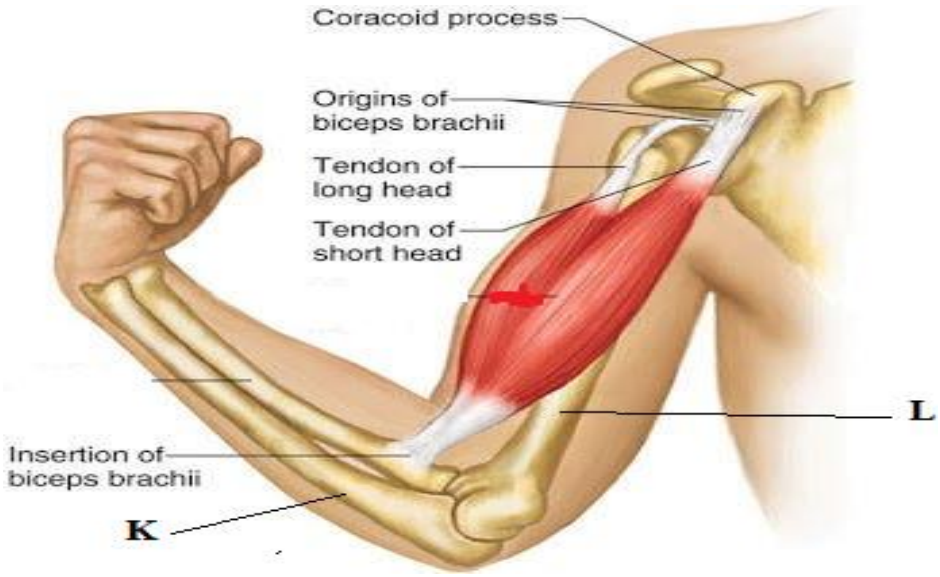
……

……

……

……

9. The diagram below illustrates the arrangement of bones and muscles in the human arm.



(i) Name the bone labelled K **(1 mark)**

K ……..

(ii) Explain how the upward movement of the lower arms is brought about by the bones and muscles shown in the diagram above. **(2 marks)**

……

……

……

……

10. Jerry's blood crystallizes at low oxygen concentration. He is married to Janice whose blood does not crystalize in low oxygen concentration. Work out the probability of the couple producing children with the same fate as their father Jerry. Use the letter d to denote for crystallization at low oxygen. **(4 marks)**

11. State the causative agents for the following diseases

(i) Syphilis..... ..... **(1mark)**

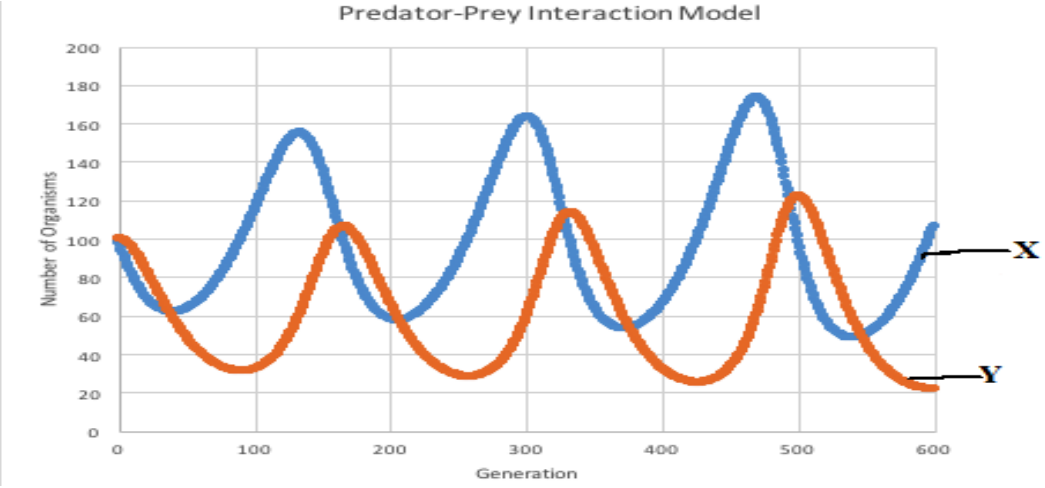
(ii) Trichomoniasis .... **(1mark)**

12. What do you understand by the term ecological niche? **(1mark)**

.....

.....

13. The diagram below shows the feeding relationship between rabbits and wolves in a given habitat over a period of 25 years. Study it and answer the questions that follow



(i) Name the type of feeding relationship. **(1mark)**

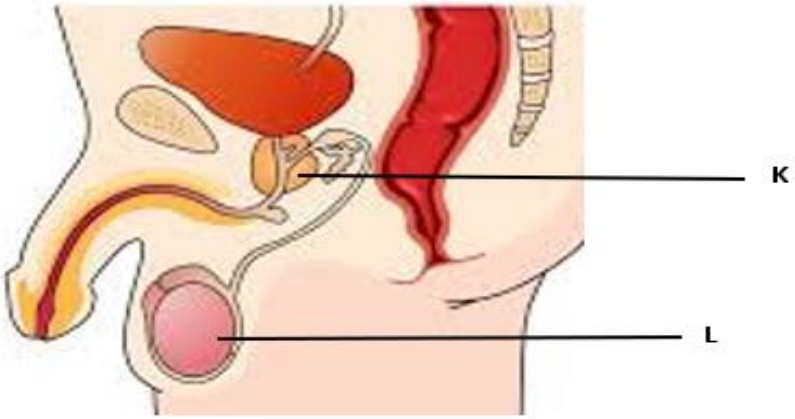
.....

(ii) Which organism in the relationship above is represented by the curve labeled X and Y **(2 mrks)**

X ……..

Y ……..

14. The diagram below represents a human reproductive organ.



(i) State **two** adaptations of the structure labelled L to its functions. **(2 marks)**

……

……

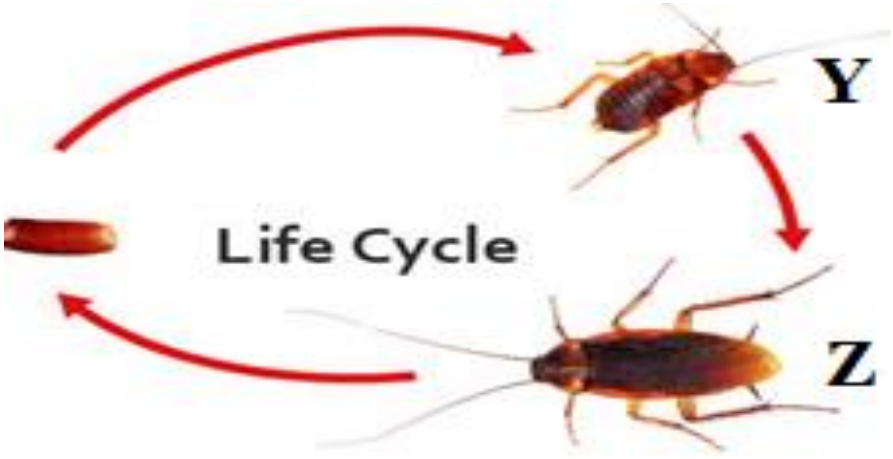
……

(ii) Explain the role of the role of the gland labelled K **(1mark)**

……

……

15. The diagram below shows different developmental stages of a given organism.



(a) Identify the stages represented by letter Y and Z **(2 marks)**

Y …….

Z ……..

(b) Identify the hormones which play a role in the above process and state where they are produced

(2 marks)

Hormone	Site of production

15. State the mode of asexual reproduction in **yeast** **(1 mark)**

……

……

16. Name **two** substances that leave the foetal blood through the placenta into maternal blood stream.

(2 marks)

……

……

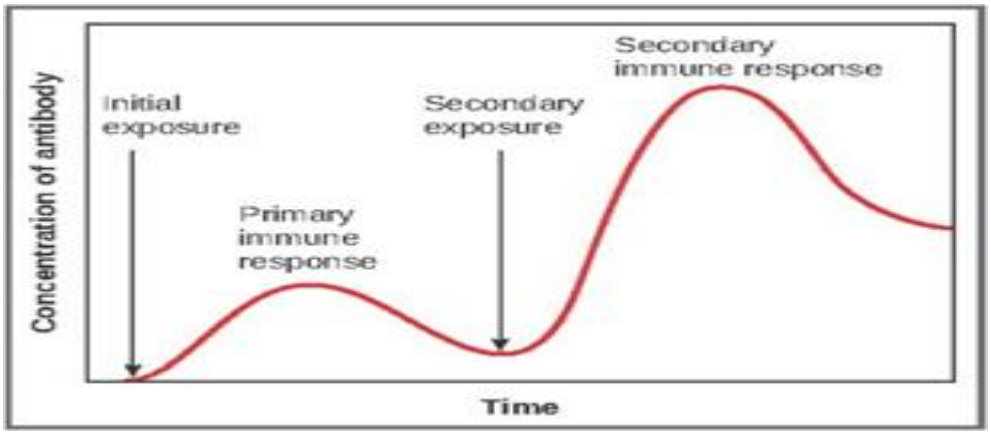
17. Besides venation, State **two o**ther external characteristics of leaves that can be used to classify plants**.** **(2 marks)**

……

……

……

18. The graph below shows the concentration antibodies produced during a primary infection and secondary infection against time. Study the graph and answer the question below.



(a) Name the type of immunity illustrated by the **graph** ` **(1 mark)**

……

(b) In a blood test a few drops of anti-B serum were added to two samples of blood separately. No agglutination occurred in either of them. What were the blood groups of the two samples **(2 marks)**

……

……

……

19. (a) State two ways in which opening of the stomata is important to plants **(2 marks)**

……

……

……

(b) Explain how accumulation of carbon (IV) oxide in a leaf affects the stomata **(3 marks)**

……

……

……

……

20. Explain each of the following observations:

(a) The stump of a severed tree trunk may exude copious quantities of fluids after cutting**(1 mark)**

……

……

(b) Leaf fall reduces the rate of **transpiration** **(1 mark)**

……

……

(c) The xylem tissue is made up of dead **tissue** **(1 mark)**

……

……

……

21. (a) During the process of respiration, the breakdown of glucose occurs in phases.Explain why these phases are necessary? **(2 marks)**

……

……

……

……

(b) Explain why the rate of production of lactic acid increases during exercise **(2 marks)**

……

……

……

22. Explain why body temperature regulation is more difficult in a hot humid conditions**(2 marks)**

……

……

……

23. Suggest **two** ways in which plants compensate for lack of complex excretory organs **(2 marks)**

……

……

……

24. State **two** factors that would lead to a decrease in the rate of photosynthesis. **(2 marks)**

……

……

25. Knowledge and skills acquired in the course of studying biology are very important. Justify the above statement. **(2 marks)**

……

……

……

……

26. The ileum is highly coiled in mammals, State **two** biological significance of this feature?

(2 marks)

……

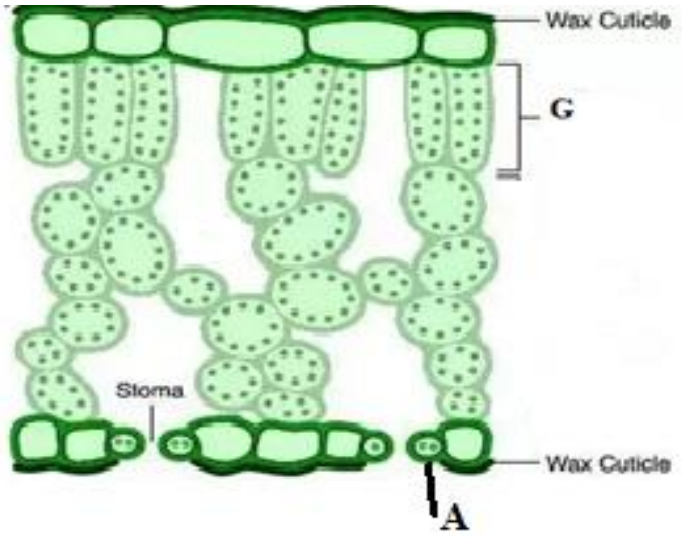
……

27. Caecum is part of the digestive system of some herbivores. What is its role in digestion?

(1 mark)

……

28. The diagram below is that of a certain plant tissue.



a) Name the structures labeled G. **(1 mark)**

……

b) State **two** adaptations of the specialized cell labeled A to its functions**?** **(2 marks)**

……

……

……

29. A student was viewing a slide prepared of an epidermal cell under medium power objective lens. The specimen appeared blurred. Which part of the microscope would the student adjust to obtain a clearer view? **(1mark)**

……

30. (i)Define active transport. **(1 mark)**

……

……

(ii) Why are the following factors important in the process of active transport in cells:

a) Oxygen **(1 mark)**

……

……

b) Optimum temperature **(1 mark)**

……

……

31. (i) Suggest a likely habitat of an organism with an active contractile vacuole. **(1 mark)**

……

……

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

……

……

32. How is dark stage of photosynthesis dependent on light stage? **(2 marks)**

……

……

……

KCSE 2025 NAIROBI CLUSTER MOCK

KCSE EXAM SERIES 2

BIOLOGY

231/2

PAPER 2 (THEORY)

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 the spaces provided.*
- *Answer **all** the questions in Section **A** in the spaces provided.*
- *In section **B** answer questions **6** (compulsory) and either question **7** or **8** in the spaces provided*

For Examiner's Use Only:

SECTION	QUESTIONS	MAXIMUM SCORE	CANDIDATES SCORE
A	1	8	
	2	8	
	3	8	
	4	8	
	5	8	
B	6	20	
	7 OR 8	20	
	TOTAL	**80**	

1.Haemophilia is a genetic disorder caused by a recessive sex-linked gene. A phenotypically normal couple got a hemophiliac son.

(a) State the genotypes of the parents **(2marks)**

Father ……...

Mother ……

(b) Using a genetic cross, determine the genotypes of the couple's children **(4marks)**

(c) Explain why hemophilia is common in males than in females **(2marks)**

……

……

……

2. Aplant physiologist studying the transport mechanisms in a particular plant species under different environmental conditions. He measured the rates of water uptake, nutrient absorption and sugar translocation in the xylem and phloem over 48 hours period. The data is summarized in the table below.

condition	Water uptake in mm/hr.	Nutrient absorption Mg/hr.	Sugar translocation Mg/hr.
Normal	15	8	12
High soil salinity	10	5	7
Drought condition	6	4	5

(a). Compare the rate of water uptake during normal conditions and during high salinity conditions **(2marks)**

……

……

……

(b). Compare the rate of sugar translocation during normal conditions and during drought conditions **(2marks)**

……

……

……

(c). Suggest two physiological conditions that plants use to cope the drought conditions **(2marks)**

……

……

(d)Name the physiological process involved in:

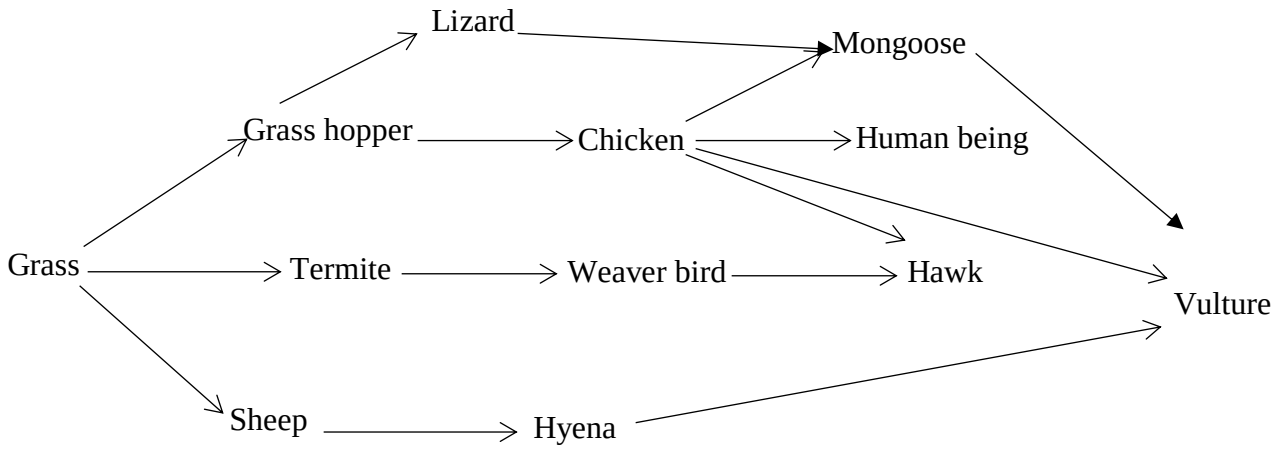
I. Water uptake **(1mark)**

……

II.sugar **translocation** **(1mark)**

……

3. The diagram below shows a food web, study it and answer the questions that follow.



(a) Name the tropic level occupied by the following organisms. **(2marks)**

(i) Human being

……

(ii) Grass

……

(b) (i) Identify the organism with the least biomass in this ecosystem. **(1mark)**

……

(ii) Explain your answer in b(i) above. **(2marks)**

……

……

……

(c) Name two ways a scientist would use to identify the type of food eaten by the various organisms in order to design the food web **(2marks)**

……

……

……

(d) Extract a food chain with a quaternary consumer **(1mark)**

……

4. An experiment was carried out to examine the rate of respiration (breaths per minute). The data was collected from infants, children and adults and the data summarized in the table below

Age group in years	Rate of respiration (breaths /min)
Infants (0-1)	30-60
Children (5-10)	20-30
Adults20-30	12-20

a). Account for the trend in respiration rates from infancy to adulthood **(2marks)**

……

……

……

b). Apart from age name two other factors that affect the rate of **respiration** **(2marks)**

……

……

……

c) Explain how anaerobic respiration can be applied in making dairy products **(2marks)**

……

……

……

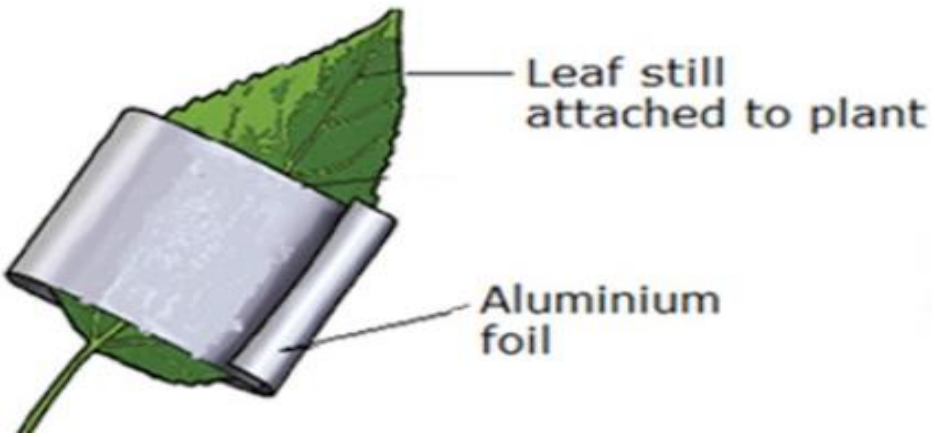
d). Name the part of the brain that controls the rate of breathing **(1mark)**

……

(e) Under what condition are proteins utilized as respiratory substrate **(1mark)**

……

5. In an experiment to investigate a factor affecting photosynthesis, a leaf of a potted plant which had been kept in the dark overnight was covered with aluminum foil as shown in the diagram below. The set up was kept in sunlight for three hours after which a food test was carried out on the leaf



(a) Explain the purpose of this experiment**?** **(1mark)**

……

……

b) What food test was carried out? **(1mark)**

……

c)(i) State the results of the food **test** **(2marks)**

……

……

……

(ii) Other than the factor being investigated above, State two other factors that increase the rate of the process **studied** **(2marks)**

……

……

……

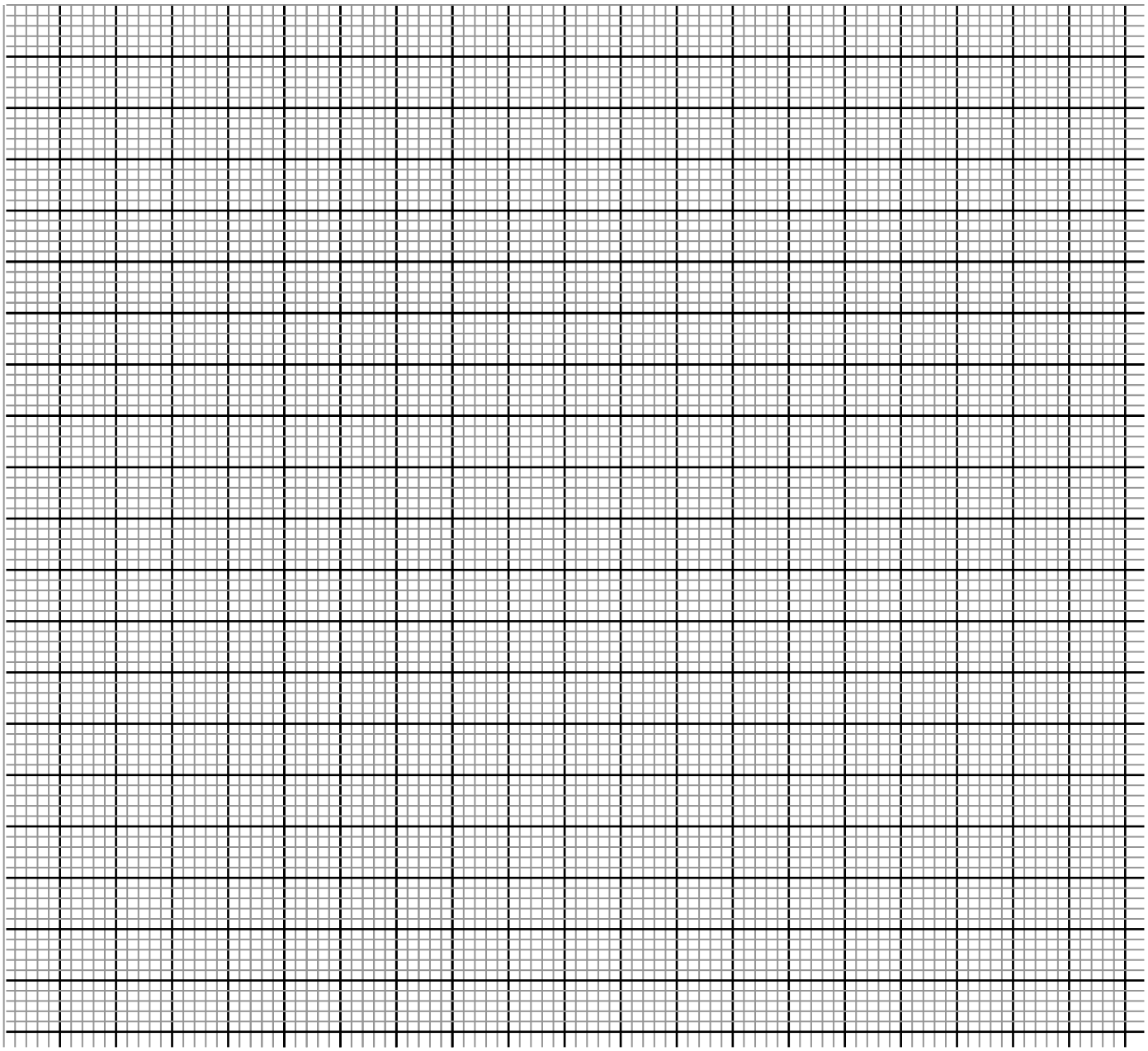
SECTION B

Answer Question 6(compulsory) and either question 7 or 8 in the spaces provide after question 8

The following results were obtained from a study of germination and early growth of cowpeas (***Vigna unguiculata***). The grains were sown in soil in a greenhouse and at two days intervals. Samples were taken, oven-dried and weighed. Graph is shown below.

Time after sowing (days)	0	2	4	6	8	10	12
Dry mass of embryo (g)	0.02	0.02	0.08	0.16	0.24	0.34	0.35

a) Using a suitable scale, plot a graph of dry mass of embryo against time **(6 marks)**



b) Give the name of the type of curve you have obtained in 6 (a) above? **(1mark)**

……

c) Explain why the rate of increase is low between day one and day three**?** **(2 marks)**

……

……

……

……

d) State t**hree** reasons for the limited rate of increase between day nine and day eleven. **(3 marks)**

……

……

……

……

……

e) Name a phylum whose growth does not take the shape of the curve drawn above. **(1mark)**

……

f) What name is given to the curve exhibited by organisms in the phylum you have named in (e) (i) above**?** **(1mark)**

……

g) What causes the behavior of the curve mentioned in (e) (ii) above? **(1mark)**

……

h) State **one** advantage of using dry mass instead of fresh weight in estimating growth of an organism**.** **(1 marks)**

……

i) State the role of the following growth hormones in plant growth and development

i.Abscisic Acid (ABA*)* **(2marks)**

……

ii. Florigens **(1 marks)**

……

……

7(a). Describe the mechanism of inhalation in bony fish **(10 marks)**

(b). Describe the response of a young herbaceous plant to each of the following unidirectional external stimuli and for each give one significance. **(10 marks)**

(i) Light

(ii) Contact

8. (a) Explain the role of the liver and pancreas in blood sugar regulation **(10 marks)**

(b) Describe the adaptations of halophytes to their habitats **(10 marks)**

KCSE 2025 NAIROBI CLUSTER MOCK

KCSE EXAM SERIES 2

BIOLOGY

231/3

PAPER 3 (PRACTICAL)

TIME: 1¾ HOURS

SCHOOL…… SIGN……

Kenya Certificate of Secondary Education.

CONFIDENTIAL

1. Specimen W(5 soaked bean seeds)
2. 6 ml Liquid G (Hydrogen peroxide)
3. 1% copper sulphate,
4. 2M sodium hydroxide,
5. Distilled water
6. 5 ml ethanol
7. Iodine solution
8. Pestle and mortar
9. 100ml beaker
10. 10ml measuring cylinder
11. 2 labels
12. 2 boiling tubes
13. 6 test tubes
14. Test tube holder
15. Source of heat
16. Specimen Q (Bougainvillea flower -complete)
17. A hand lens
18. Scalpel

KCSE 2025 NAIROBI CLUSTER MOCK

KCSE EXAM SERIES 2

BIOLOGY

231/3

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 above.*
- *Sign and write date of examination in the spaces provided above.*
- *Answer **ALL** questions in the spaces provided in the question paper.*
- *You are **NOT** allowed to start working with the apparatus for the first 15 minutes of the 1 3/4 hours allowed for this paper.*

For Examiner's Use Only

ESTION	XIMUM SCORE	NDIDATE SCORE
	14	
	13	
	13	
	40	

1. You are provided with **specimen W, liquid G** (Hydrogen peroxide) and **1% copper sulphate solution, 2M sodium hydroxide solution, distilled water, ethanol and iodine solution**. Use them to carry out tests below.

Place five pieces of specimen W into a mortar and crush into paste using a pestle. Transfer the paste into 100ml beaker and add 30ml of water and stir then divide the solution into two equal portions in two different boiling tube. Label the portions X and Y.

a) Divide portion X into two separate test tubes.

i) To the first test tube add 2ml of hydrogen peroxide and record your observations. **(1mark)**

……

……

ii) Boil the contents of the second test tube then add 2ml of hydrogen peroxide and record your observations**.** **(1mark)**

……

……

b) Explain your observation in (ii) above. **(2marks)**

……

……

……

c) Use portion Y to test for the food substances present using the reagents provided. **(9marks)**

Food substance	*Procedure*	*Observation*	*Conclusion*

d) Name the enzyme in the human digestive system required for the complete digestion of the food substance absent**.** **(1mark)**

……

2. You are provided with specimen Q. Observe it then compare with the photograph R shown below and answer the questions that follow.



Photograph R

(a) Name the classes of organisms represented by Q, R and P and give a reason for each one basing on observable features only **(6marks)**

SPECIMEN	CLASS	REASON

(b) Specimen P probes into nectaries of specimens Q and R. State two characteristics of living organisms achieved after the **process** **(2marks)**

……

……

(c) Explain the adaptations of specimen in photograph R to pollination **(2marks)**

……

……

……

……

(d) Carefully remove one stamen of specimen Q then draw a well labeled diagram. **(3marks)**

3. You are provided with photographs of specimens **P** and **Q** examine them carefully and answer the questions that follow.



Specimen P



Specimen Q



a) Name the region of the mammalian skeleton from which the specimen P and Q were obtained from. **(2 marks)**

P. ……

Q. ……

b) With a reason identify the specimen represented in the photographs above

Specimen P

Identity **(1mark)**

……

Reason **(1mark)**

……

Specimen Q

Identity **(1mark)**

……

Reason **(1mark)**

……

c) State **two** ways specimen **Q** is suited to its function **(2marks)**

……

……

……

d) State **two** structural differences between specimen **P** and **Q** **(2marks)**

P	Q

e) The actual length of the hand-lens next to specimen **Q** is 6. 5cm.Use this information to calculate the actual lateral length of specimen **P** **(3marks)**

KCSE 2025 NAIROBI CLUSTER MOCK

KCSE EXAM SERIES 2

CHEMISTRY

233/1

PAPER 1 (THEORY)

TIME: 2 HOURS

NAME……

SCHOOL…… SIGN……

INDEX NO…… ADM NO……

Kenya Certificate of Secondary Education.

Instructions to Candidates

1. *Write your name and index number in the spaces provided above.*
2. *Answer all the questions in the spaces provided.*
3. *All working must be clearly shown.*
4. *Non-programmable silent electronic calculators and KNEC mathematical tables may be used.*

For Examiner's Use only

Questions	Maximum score	Candidates score
1 – 27	80	

Answer All The Questions In The Spaces Provided:

1. A school laboratory technician left a sample of concentrated sulphuric (VI) acid in an open boiling tube for 24 hours and she found out that the volume had increased slightly.

a) What property of concentrated sulphuric (VI) acid was shown by the above observation?

(1 mark)

……

b) Give one use of concentrated sulphuric (VI) acid based on the property named in (a) above. **(1 mark)**

……

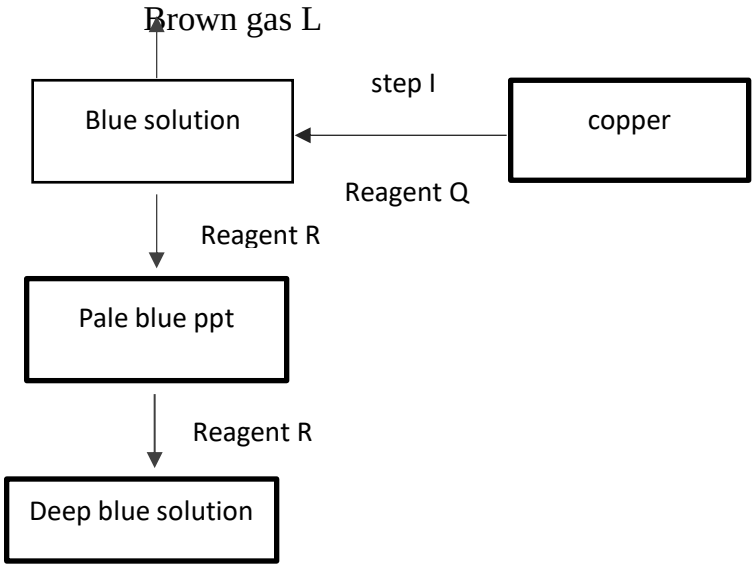
c) Determine the oxidation state of Sulphur in $S_2O_7^{2-}$. **(1 mark)**

……

……

……

2. Study the flowchart below and use it to answer the questions that follow.



(a) Give the identity of reagents Q and **R** **(2 marks)**

……

……

……

(b) Write equation leading the formation of the deep blue solution**.** **(1 mark)**

……

……

3. (a) State Charles' Law. **(1 mark)**

……

……

(b) The volume of gas Y at a temperature of 25 ^{o}C and 600 mmHg pressure is 9.6 x 10^{-2} m^3. Calculate the temperature at which the volume of the gas would be 6.4 x 10^{-2} m^3 pressure remains constant. **(2 marks)**

……

……

……

……

4. A form three student from **Isaboke** High school was interested in determining the pigments present in amaranthus leaves that makes it have the green and yellow colourations

a) Identify the substances responsible for the green and the yellow colourations. **(2 marks)**

……

……

……

b) State the two processes that make the separation of the pigments possible**.** **(1 mark)**

……

……

5. The combustion of a hydrocarbon compound gave 4.4g carbon (IV) oxide and 2.25g water.

i) Calculate the mass of carbon and hydrogen in the hydrocarbon sample**.** **(1 mark)**

……

……

……

ii) Calculate the empirical formula and hence determine the molecular formula of the hydrocarbon given that it has a molecular mass of 58. (C=12.0, H=1.0) **(2 marks)**

……

……

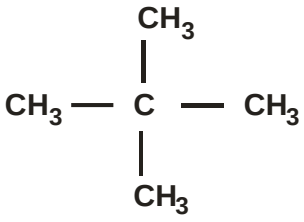
……

6. a) Define hydrocarbons. **(1 mark)**

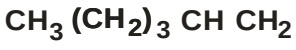
……

……

b) Name the following organic compounds. **(2 marks)**



……..

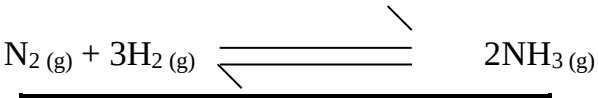


……..

7. State **one** role of Chemistry in the society**.** **(1 mark)**

……

8. Use the bond enthalpies given below (at 298K) to answer the questions that follow.



d	**d energy kJ /mol**
H	436
H	388
N	944

a) Work out the enthalpy change for the reaction above. **(2 marks)**

……

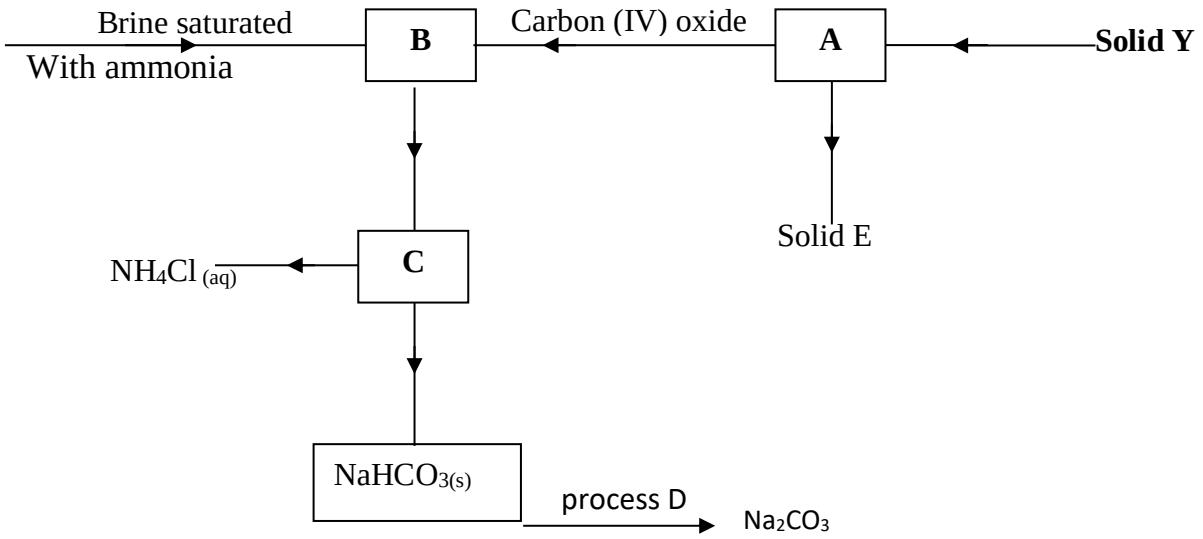
……

……

……

b) Draw an energy level diagram showing the activation energy for the above reaction. **(2 marks)**

9. The diagram below shows part of the Solvay process.



a) Name process D …… **(1 mark)**

b) State the process taking place in chamber C **(1 mark)**

……

c) State two uses of sodium carbonate. **(2 marks)**

……

……

10. One of the methods of removing water hardness is by use of ion exchange.

a) Explain how the method can be used to remove water hardness. **(2 marks)**

……

……

……

b) After continuous use the ion exchanger column gradually loses the ability to remove water hardness. How can its ability be regenerated? **(1 mark)**

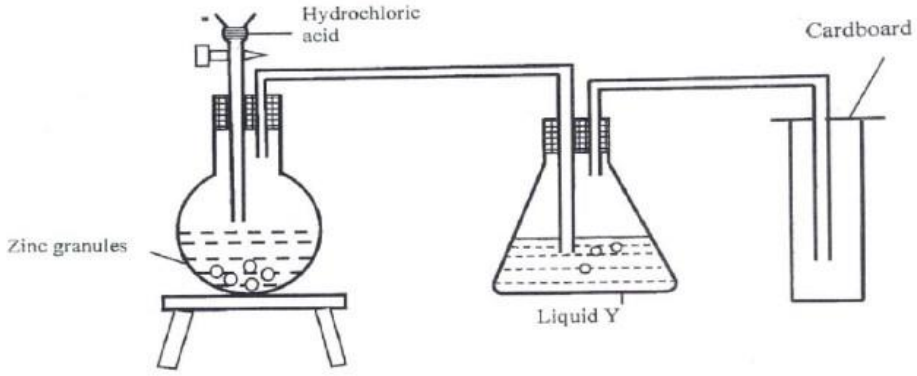
……

……

c) Give one disadvantage of hard water. **(1 mark)**

……

11. The set up below was used by a form one student in an attempt to prepare and collect sample of a dry sample of hydrogen gas.



a) Give a reason why the aim of the experiment was not achieved**.** **(1 mark)**

……

……

b) Identify the catalyst that can be used in the reaction in the round bottomed flask**.** **(1 mark)**

……

12. Use the data given in the table below to determine the molar enthalpy of formation of ethanol **(3 marks)**

Combustion of:	Molar enthalpy in $kJmol^{-1}$
Carbon	-394
Hydrogen	-286
Ethanol	-1386

……

……

……

13. Using dots (●) and crosses (x) diagrams to represent electrons, show bonding in:

(i) the compound formed when fluorine and nitrogen combine**.** **(1mark)**

(atomic numbers N =7. fluorine = 9)

(ii) potassium oxide. **(1 mark)**

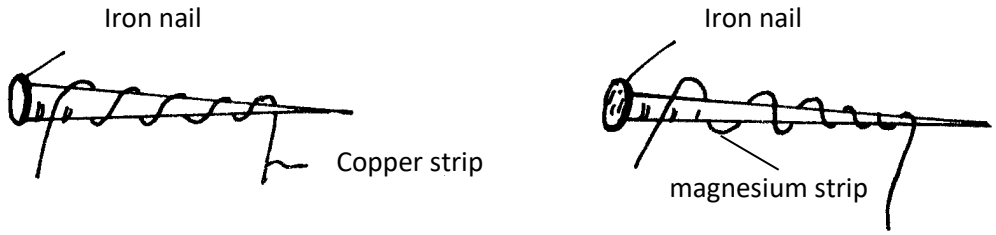
(Atomic numbers K = 19, O=8)

14. a) Define the term rust. **(1 mark)**

……

……

b) Use the diagram below to answer the question that follows



X **Y**

State the observations made in X and Y if the set- ups are exposed to air for long. **(2 marks)**

……

……

……

……

15. A dynamic equilibrium between chromate (VI) and chromium (III) ions is as shown below

$Cr_2O_7^{2-}{}_{(aq)} + 14H^+{}_{(aq)} \rightleftharpoons 2Cr^{3+}{}_{(aq)} + 7H_2O_{(i)}$

(Orange) **(Green)**

State and explain the observation made when dilute sodium hydroxide solution is added to the equilibrium mixture. **(2 marks)**

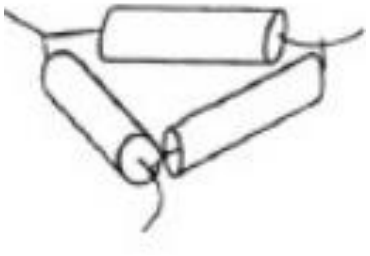
……

……

……

……

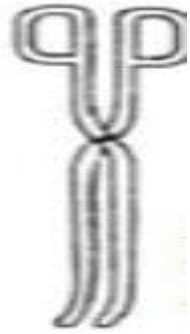
16. Name and give the uses of the following pieces of apparatuses



a)

Name……(½ mark)

Use…… (½ mark)



b)

Name……..(½ mark)

Use…….. (½ mark)

17. "JIK" is common house hold bleach which contains sodium hypochlorite as the active ingredient.

a) Write down an equation to show how the active ingredient in "JIK" bleaches a colored dye.

(1mark)

……

……

b) Name the process by which "JIK" bleaches a coloured dye. **(1 mark)**

……

c) Suggest why it is better to use "JIK" as bleach when washing clothes instead of using chlorine water. **(1 mark)**

……

……

18. a) P grams of a radioactive isotope sample takes 160 days to disintegrate to 7g. The half-life of the isotope is 40days. Find the initial mass P. **(2 marks)**

……

……

……

……

b) State one danger associated with radioactivity. **(1 mark)**

……

……

19. Starting with recycled copper, describe how copper (II) sulphate crystals can be prepared in the laboratory. **(3 marks)**

……

……

……

……

……

20. Ethanedioic acid, $(COOH)_2$, was used to prepare carbon (II) oxide instead of methanoic acid, HCOOH, in the laboratory. It gave equal volumes of carbon (II) oxide and carbon (IV) oxide.

a) Write an equation for the dehydration of ethanedioic acid**.** **(1 mark)**

……

……

b) Explain how pure carbon (II) oxide can be obtained from the mixture of the two gases?**(1 mark)**

……

……

c) State two physical properties of carbon (II) oxide which make it be referred to as a "silent killer."

(1 mark)

……

……

21. a) What are isotopes? **(1 mark)**

……

……

b) Element W has two isotopes ^{36}W and ^{40}W which occur in the ratio K:4. Given that R.A.M of W is 37.25. find the value of K**.** **(2 marks)**

……

……

……

22. a) What is meant by an acid-base indicator? **(1 mark)**

……

……

b) Give **two** disadvantages of using flower extract as acid-base indicator compared to commercial indicators. **(2marks)**

……

……

……

23. The data below was recorded when metal M was completely burnt in air (M is not the actual symbol of the element, R.A.M; M=207, O = 16)

Mass of the empty crucible and lid =10.2 g

Mass of crucible, lid and metal M = 16.41g

Mass of crucible, lid and metal oxide =17.37 g

a) Determine the mass of:

i) Metal M **(½ mark)**

ii) Oxygen **(½ mark)**

b) Determine the empirical formula of the metal oxide. **(2 marks)**

24. The products formed by the action of heat on the nitrates of elements K, M and N are given in the table below.

Nitrate	Products formed
K	**metal + nitrogen (IV) oxide + oxygen**
M	**metal oxide+ nitrogen (IV) oxide + oxygen**
N	**metal nitrite + oxygen**

a) Which element forms a soluble carbonate. **(1 mark)**

……

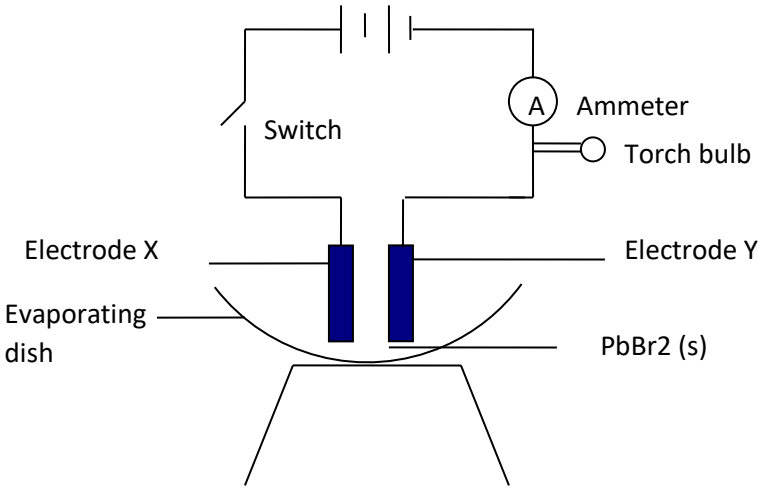
b) Arrange the metal elements in increasing order of reactivity. **(1 mark)**

……

c) Give one example of K. **(1 mark)**

……

25. The set-up below illustrates an experiment to investigate conduction of electric of lead (II) bromide. Study it and answer the questions that follow.



a) State the mistake in the set-up. **(1 mark)**

……

b) If the experiment was properly carried out, state the observations made at the cathode at the end of the experiment and write a half-reaction equation for the reaction. **(2 marks)**

……

……

……

26. The following are reduction potentials of some elements.

Half reaction	**E^{θ} volts**
$Zn^{2+}_{(aq)} + 2e^- \rightarrow Zn_{(s)}$	-0.76
$Al^{3+}_{(aq)} + 3e^- \rightarrow Al_{(s)}$	-1.66
$Fe^{2+}_{(aq)} + 2e^- \rightarrow Fe_{(s)}$	-0.44

Using the information above, **explain** whether it is advisable or not to store iron (II) sulphate solution in aluminium containers. **(2 marks)**

……

……

……

……

27. The table below shows organic compounds A, B, C, D and E. Use the information given to answer the questions that follow.

Substance	A	B	C	D	E
Symbol	$R\text{-}COO^{-}Na^{+}$	CH_2OH $CHOH$ CH_2OH	$+(CH_2 - CH_2)-_n$	$R\text{-}COOCH_2$ $R\text{-}COOCH$ $R\text{-}COOCH_2$	$R\text{-}OSO_3^{-}Na$

a) Identify

I. A soapless detergent. **(1 mark)**

……

II. An ester **(1 mark)**

……

b) Give **one** disadvantage of continued use of substance C. **(1 mark)**

……

27. (a) Both water gas (carbon (II) oxide and hydrogen) and producer gas (carbon (II) oxide and nitrogen) can be used as fuels. Explain why water gas is a better fuel**.** **(2 marks)**

……

……

……

……

b) Give the abbreviation of "dichlorodiphenyltrichloroethane" **(1 mark)**

……

-THIS IS THE LAST PRINTED PAGE~

KCSE 2025 NAIROBI CLUSTER MOCK

KCSE EXAM SERIES 2

CHEMISTRY

233/2

PAPER 2 (THEORY)

TIME: 2 HOURS

NAME……

SCHOOL…… SIGN……

INDEX NO…… ADM NO……

Kenya Certificate of Secondary Education.

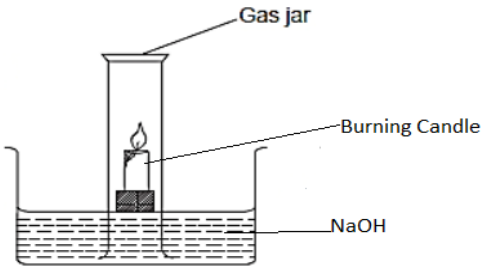
INSTRUCTIONS

- *Write your name, Index number and class in the spaces provided above.*
- *Answer **ALL** the questions in the spaces provided.*
- *Mathematical tables and silent electronic calculators may be used.*
- *All working **MUST** be clearly shown where necessary.*

FOR EXAMINER'S USE ONLY

QUESTION	MAXIMUM SCORE	CANDIDATE'S SCORE
1	**10**	
2	**12**	
3	**12**	
4	**10**	
5	**12**	
6	**12**	
7	**12**	
Total	**80**	

1. (a) Study the set up below and use it to answer the questions that follow.



(i) What is the aim of the experiment? **(1 mk)**

……

(ii) Identify one mistake in the set up above. **(1 mk)**

……

(iii) After the experiment, the student calculated the volume of air used and found to be 19.2%. Comment on the results. **(2 mks)**

……

……

……

(b) Another student carried out the same experiment using phosphorous. Instead of burning candle:

(i) State one modification the student should carry out on the above set up to suit the experiment. **(1 mk)**

……

……

(ii) Describe the above experiment to show how results were obtained. **(3 mks)**

……

……

……

(iii) After the experiment the student added three drops of methyl orange indicator in the trough. State and explain the observation made. **(2 mks)**

……

……

……

2. (a) The grid below represents part of the periodic table. Study it and answer the questions that follow. The letters do not represent the actual symbols of elements.

A					B		C	
	D		E			F	G	J
H								

(i) Using an ionic equation explain the observation made when a solution of potassium bromide is reacted with G. **(2 mks)**

……

……

……

(ii) Both F and G are period 3 elements. Compare with a reason, their electronegativities. **2 mks)**

……

……

……

(iii) Element A combines with chlorine to form a chloride of A. State the most likely pH value of a solution of a chloride of A. Explain. **(2 mks)**

……

……

……

(i) Write a chemical equation for the reaction between an oxide of E and sodium hydroxide. **(1 mk)**

……

(b) (i) Explain why molten calcium chloride and magnesium chloride conducts electricity while carbon tetrachloride and silicon tetrachloride do not. **(2 mks)**

……

……

……

(ii) Under the same conditions gaseous neon was found to diffuse faster than gaseous fluorine. Explain the observation. (F = 19.0, Ne = 20.0) **(2 mks)**

……

……

……

(iii) Give one use of element J **(1mk)**

……

3. I. Study Table below and answer the questions that follow

	E^{θ}(V)
$Ag^{+}_{(aq)} + e^{-}$	$Ag_{(s)}$ 0.80
$Cu^{2+}_{(aq)} + 2e^{-}$	$Cu_{(s)}$ 0.34
$2H^{+}_{(ag)} + 2e^{-}$	$H_{2(g)}$ 0.00
$Cr^{3+}_{(aq)} + 3e^{-}$	$Cr_{(s)}$ 0.74
$Na^{+}_{(aq)} + e^{-}$	$Na_{(s)}$ 2.17

a) Identify the strongest reducing agent. Explain. **(2mks)**

……

……

……

b) Give two half cells which will produce the highest E^{θ} value when connected. **(1mk)**

……

……

c) Why is it not practical to make the cell you have given in (b) above. **(1mk)**

……

……

II. A certain celebrity wanted to electroplate a certain ornament with Copper to a surface of 0.25 cm^2. How long will to take to pass a current of 0.5A through a solution of copper (II) Sulphate in order to electroplate 2 cm of the ornament. (Density of copper = 8.92 g/cm^3, IF = 96500, Cu = 63.5)

(3mks)

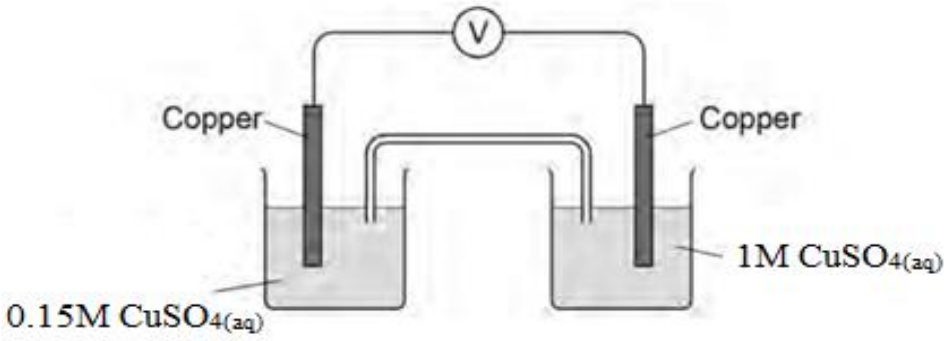
……

……

……

……

III. A student set up the cell shown in the figure below



The student recorded an initial voltage of +0.16 V at 25^0C

(a) Explain how the salt bridge provides an electrical connection between the two solutions.**(1 mark)**

……

……

(b) The standard electrode potential for the $Cu^{2+}_{(aq)}/Cu_{(s)}$ electrode is

$Cu^{2+}_{(aq)} + 2e^- \rightarrow Cu_{(s)}$ $\quad E^{\Theta} = +0.34$ V

(c) Calculate the electrode potential of the left-hand electrode in the Figur**e** **[1mark]**

……

……

……

(d) Both electrodes contain a strip of copper metal in a solution of aqueous Cu^{2+} ions. State why the left-hand electrode does not have an electrode potential of +0.34 V **[1mk]**

……

……

(e) Give the conventional representation for the cell in the figure above. **[1mk]**

……

……

(f) When the voltmeter is replaced by a bulb, the emf of the cell in the Figure decreases over time to 0V, Suggest how the concentration of copper (II) ions in the left-hand electrode changes when the bulb is alight. Give one reason why the emf of the cell decreases to 0V **[1mk]**

……

……

4. I. One of the factors which determine the reaction rate of solids is particle size.

(a) A mixture of finely powdered aluminium and air may explode when ignited. This causes a large and sudden increase in temperature. Explain each of the following in terms of collisions between reacting particles.

(i) Why is the reaction between finely powdered aluminium and air very fast? **(1mk)**

……

……

(ii) Explain why for most reactions the rate of reaction decreases with time. **(1mk)**

……

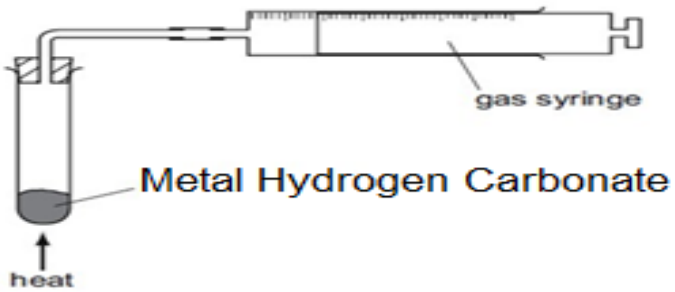
……

(iii) Suggest an explanation why the rate of reaction in an explosion could increase rather than decrease with time. **(1mk)**

……

……

(b) A student compared the rates of reaction of three metal Hydrogen carbonates. She measured the volume of gas released using the apparatus shown.

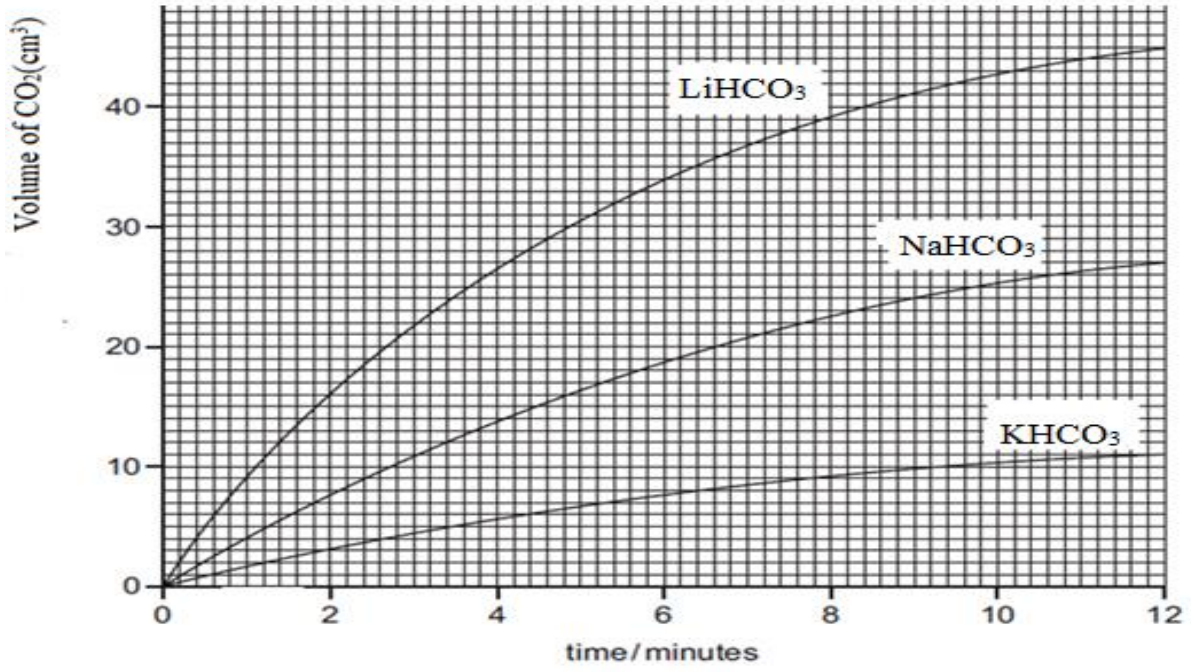


State one thing that must be kept constant if the rates of the three reactions are to be compared in a fair way. **(1 mk)**

……

……

(c) The graph shows the volume of carbon (IV) oxide released when the three metal Hydrogen carbonates were heated.



(ii) Which carbonate produced carbon (IV) oxide at the highest rate? **(1mk)**

……

……

(iii) What volume of carbon (IV) oxide was produced by Sodium Hydrogen Carbonate in twelve minutes? **(1 mk)**

……

……

II. Carbon (II) oxide and hydrogen are used in the manufacture of methanol (CH_3OH). The reaction is reversible and can reach a position of dynamic equilibrium.

$CO_{(g)} + 2H_{2\,(g)} \rightleftharpoons CH_3\,OH_{(g)} \quad \Delta H = -91$ kJ/mol

The reaction is carried out at a pressure of about 100 atmospheres and a temperature of 250^0C.

(a) State one feature of a reaction that is in dynamic equilibrium. **(1mks)**

……

……

(b) (i) How would a decrease in temperature at constant pressure affect the amount of methanol in the equilibrium mixture? Explain your answer **(2mks)**

……

……

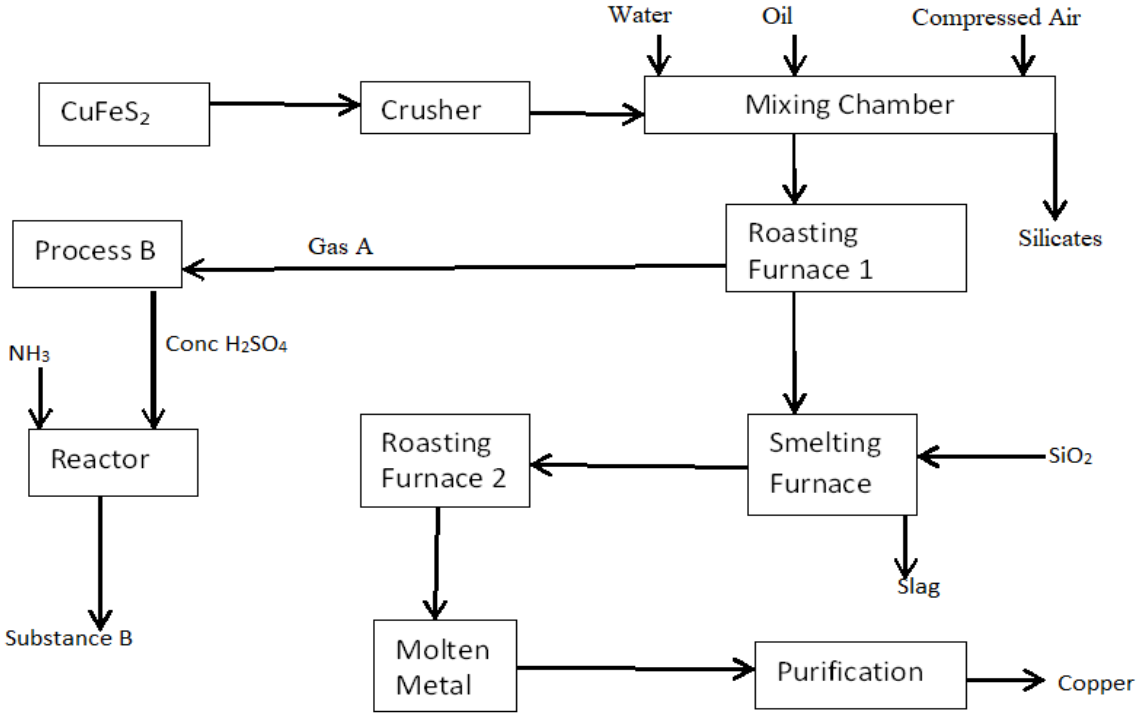
……

(ii) How would an increase in pressure at constant temperature affect the amount of methanol in the equilibrium mixture? **(1mk)**

……

……

5. Study the flow charts below and answer the questions that follow.



(a) Identify process B. **(1 mk)**

……

(b) Give two optimum conditions required in the process named above. **(2 mks)**

……

……

(c) Explain why the ore is crushed. **(1 mk)**

……

……

(d) Which process occurs in the mixing chamber?

……

(e) Explain use of the following: **(2 mks)**

(i) Water

……

……

(ii) Oil

……

……

(f) Write the equation for the formation of slag **(1 mk)**

……

(g) Identify the cations present where the metal is being purified **(1 mk)**

……

(h) Give a reason for the following use of the above metal.

I. Making electrical wires **(1 mk)**

……

……

II. Making soldering wires **(1 mk)**

……

……

(i) Give two environment effects of the above process. **(2 mks)**

……

……

……

6. a) Phosphorus trichloride reacts with water to form two acids.

(i) One of the acid is H_3PO_3, Calculate the oxidation state of Phosphorus in the acid and hence give the IUPAC name for the acid **[2marks]**

……

……

……

(ii) Describe how you could show that the other acid is a weaker acid than hydrochloric acid. **(2mks)**

……

……

……

(iii) Two salts of phosphoric acid are its sodium salt, which is soluble in water, and its calcium salt which is insoluble in water. Suggest a method of preparation for each of these salts from aqueous phosphoric acid. **(2mks)**

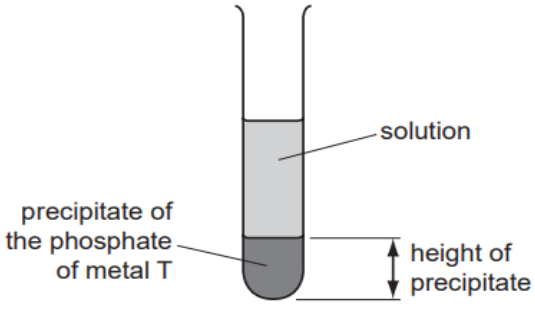
sodium salt ……

……

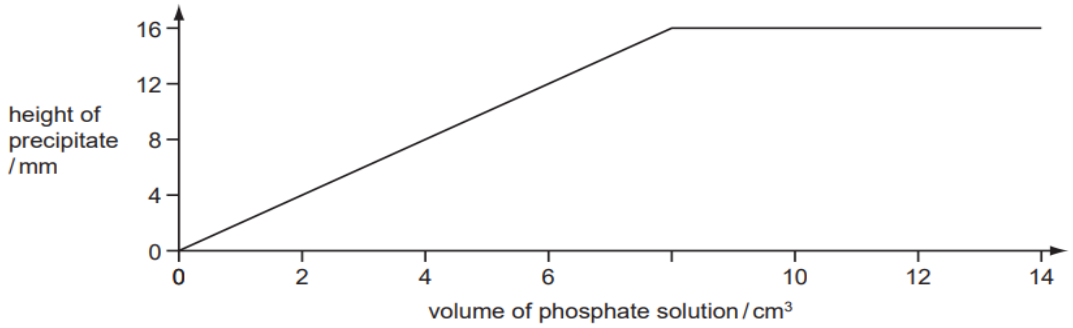
Calcium salt……

……

b) The formulae of insoluble compounds can be found by precipitation reactions. To 12.0 cm^3 of an aqueous solution of the nitrate of metal T was added 2.0 cm^3 of aqueous sodium phosphate, Na_3PO_4. The concentration of both solutions was 1M. When the precipitate had settled, its height was measured.



The experiment was repeated using different volumes of the phosphate solution. The results are shown on the following graph.



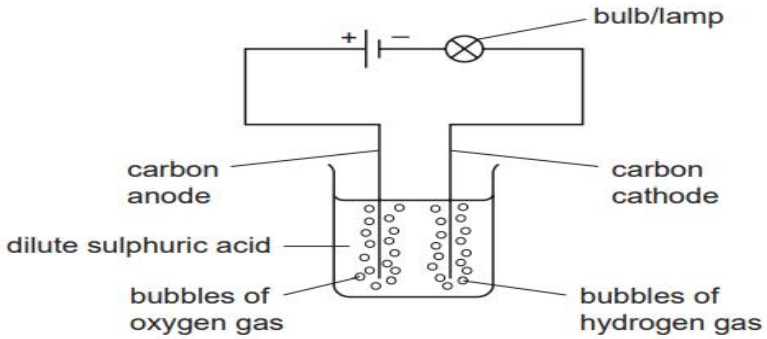
(i) What is the formula of the phosphate of metal T? Give your reasoning. **(2mks)**

……

……

……

c) The following apparatus was set up to investigate the electrical conductivity of dilute acids



If it was replaced by a weak acid, what two differences in the observations would you expect to make **(2mks)**

……

……

……

d)Explain the following observation. A certain Chloride dissolves in water to form an electrolyte while the same chloride dissolves in methylbenzene to form a non-electrolyte. **(2mks)**

……

……

……

7. (a) Name the following compounds **(2mks)**

(i) CH_3OHCH_2

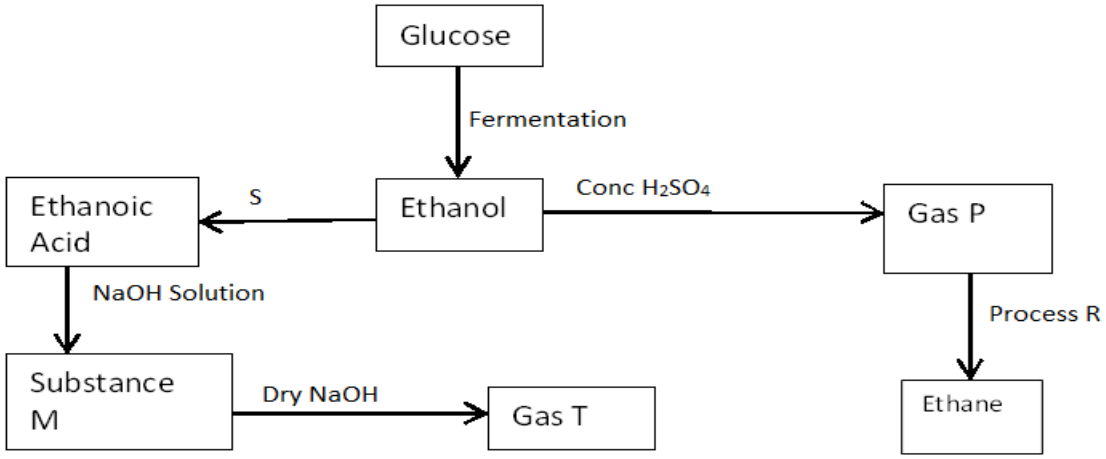
……..

(ii)



……

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



(i) State the conditions necessary for fermentation of glucose to take place. **(1mk)**

……

……

(ii) State one reagent that can be used to carry out process S. **(1 mk)**

……

(iii) Identify the substances **(2 mks)**

P……

T……

(iv) Write an equation for the reaction resulting to formation of substance M. **(1 mk)**

……

(v) How sodium hydroxide is kept dry during the reaction. **(1 mk)**

……

……

(vi) Give one commercial use of process R. **(1 mk)**

……

……

(c)Describe a chemical test to distinguish between the compounds represented by formula C_nH_{2n+2} and C_nH_{2n} **(2mks)**

……

……

……

……

(d) State one use of ethanol other than as an alcoholic drink. **(1 mk)**

……

……

THIS IS THE LAST PRINTED PAGE

KCSE 2025 NAIROBI CLUSTER MOCK

KCSE EXAM SERIES 2

CHEMISTRY

233/3

PAPER 3 (PRACTICAL)

TIME: 2¼ HOURS

SCHOOL…… SIGN……

Kenya Certificate of Secondary Education.

CONFIDENTIAL.

In addition to the apparatus and fittings found in the laboratory, each student will require the following:

1. About **100 cm3** of Sodium hydroxide solution
2. About **50 cm3** of solution B
3. pipette and pipette filler.
4. 50ml burette
5. 2 conical flasks (250ml)
6. A 250ml volumetric flask
7. 1 thermometer (-10^{o} C to 110^{o}C)
8. Stop watch/clock
9. 100ml plastic beaker
10. 6 test tubes
11. 2 boiling tubes
12. 10ml measuring cylinder
13. 1 label
14. Filter funnel
15. 500 cm^3 Distilled water
16. 0.5g sodium hydrogen carbonate.
17. 5cm^3 Ethanol.
18. 1-14 PH chart.
19. 2.0g Solid Q.
20. 2.0g Solid A.
21. 1 spatula.

ACCESS TO:

22. Universal indicator solution.

23. Phenolphthalein indicator supplied with a dropper

24. Acidified potassium manganate (VII) solution supplied with a dropper.

25. Bromine water supplied with a dropper.

26. Conc. Sulphuric (VI) acid with a dropper.

27. Means of heating

28. 2M Lead (II) nitrate solution.

29. 2M Dilute nitric (V) acid solution.

30. 0.5M Barium nitrate solution.

31. 2M Sodium hydroxide solution.

32. 2M Aqueous ammonia.

33. 2M Hydrochloric acid.

Preparation

- **Solution B (2M HCl)** is prepared by measuring about 500cm3 of distilled water and placing it in a one litre volumetric flask then add the 172cm3 of concentrated hydrochloric acid carefully and top up to the mark.
- **Sodium hydroxide** solution (0.1M) is prepared by dissolving 4.0g of the solid in about 500cm3 of water then diluting to one litre in a volumetric flask.
- **2M** aqueous Ammonia is prepared by dissolving 298cm^3 of concentrated Ammonia in distilled water and diluting to one litre of solution.
- Barium nitrate solution is prepared by dissolving 0.05g in one litre of solution.
- **2M** bench reagent of Sodium hydroxide is prepared by dissolving 80g of sodium hydroxide in one litre of solution.
- Bromine water is prepared by taking 10cm^3 of liquid Bromine and dissolving it in 100cm^3 of distilled water in a fume cupboard or open air.This must be freshly prepared and stored in a dark bottle.
- Acidified potassium manganate (VII) is prepared by dissolving 3.16g of $KMnO_4$ in 600cm^3 of 2MH_2SO_4 and made to one litre solution.
- **2M** Lead (II)nitrate solution is prepared by dissolving 662.4g of $Pb(NO_3)_2$in one litre of distilled water.
- **Solid R** is 2.0g of oxalic acid weighed accurately and supplied in a stopped container.
- **Solid Q** is 2.0g of hydrated $Al_2(SO_4)_3$
- **Solid A** is 2.0g of **potassium nitrate. (KNO_3)**

KCSE 2025 NAIROBI CLUSTER MOCK

KCSE EXAM SERIES 2

CHEMISTRY

233/3

PAPER 3 (PRACTICAL)

TIME: 2¼ HOURS

NAME……

SCHOOL…… SIGN……

INDEX NO…… ADM NO……

Kenya Certificate of Secondary Education.

INSTRUCTIONS TO CANDIDATES:

- *Write your name, admission number, index number and class in the spaces provided above.*
- *Indicate the date of exam and sign off in the spaces provided above.*
- *Answer all the questions in the spaces provided below each question.*
- *KNEC Mathematical tables and silent electronic calculators may be used.*
- *All working must be clearly shown where necessary.*
- *Candidate should take the first 15 minutes to go through the instructions.*

FOR EXAMINER`S USE ONLY

QUESTIONS	MAXIMUM SCORE	CANDIDATE`S SCORE
1	22	
2(a)	10	
(b)	8	
Grand Total	40	

1. You are provided with

- **Solid A**
- **2.0M** hydrochloric acid solution **B**
- **0.1M** Sodium hydroxide solution **D**

You are required to determine the enthalpy change Δ**H**. for the reaction between solid **A** and one mole of hydrochloric acid.

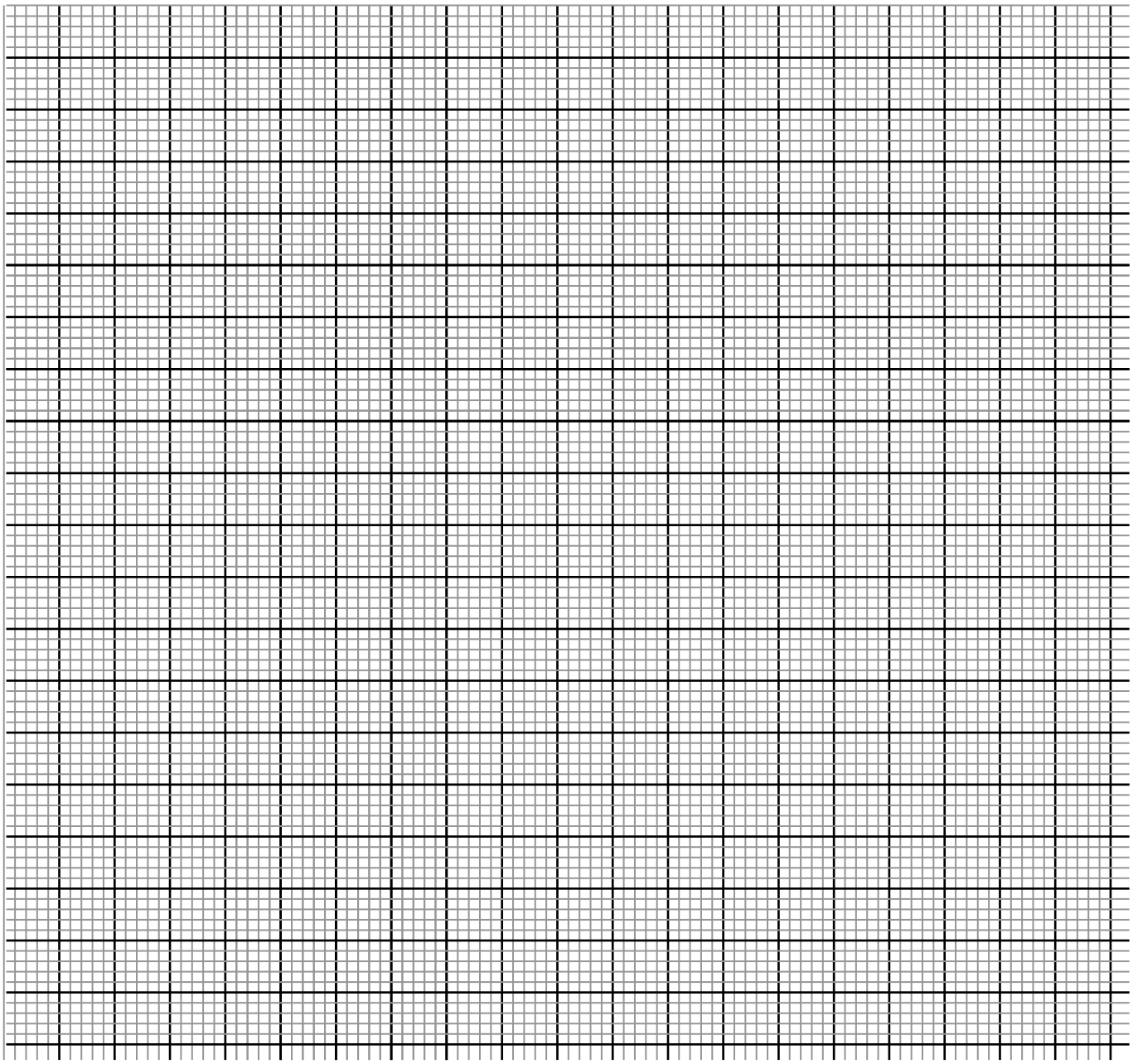
Procedure 1

Using a burette, place 20.0cm^3 of 2.0M hydrochloric acid, solution **B** in a 100ml beaker. Measure the temperature of the solution after every half-minute and record the values in **table 1**. At exactly **2 minutes**, add all of solid **A** to the acid. Stir the mixture gently with thermometer. Measure the temperature of the mixture after every **half-minute** and record the values in **table 1. Retain the mixture for use in Procedure II.**

Table 1 **(5marks)**

Time (min)	0	1/2	1	1 1/2	2	2 1/2	3	3 1/2	4	4 1/2	5
Temperature (c)											

(a) Plot a graph of temperature (y-axis) against time. **(3marks)**



(b) Using the graph determine the change in temperature, Δ**T** **(1mark)**

……

……

(c) Calculate the heat change for the reaction. (Assume that the specific heat capacity of the mixture of the mixture is $4.2Jg^{-1}K^{-1}$ and the density of the mixture is $1g/cm^3$). **(2marks)**

……

……

……

……

Procedure II

Rinse the burette thoroughly and fill it with sodium hydroxide solution **D**. Transfer all the contents of the 100 ml beaker used in **procedure 1** into a 250ml volumetric flask. Add distilled water to make up to the mark. Label this **solution C**. Using pipette and a pipette filler, place **25.0 cm^3** of solution C into a 250ml conical flask. Add two or three drops of phenolphthalein indicator and titrate against sodium hydroxide until a permanent pink colour just appears. Record your results in table. Repeat titration **two more times** and complete table 2.

Table 2 **(4marks)**

	I	II	III
Final burette reading (cm^3)			
Initial burette reading(cm^3)			
Average volume **of D used** (cm^3)			

Calculate the:

(d) Average volume of sodium hydroxide **solution D** used. **(1mark)**

……

……

……

(e) The number of mole of:

i. Sodium hydroxide **solution D used.** **(1mark)**

……

……

……

ii. Hydrochloric acid in **25** cm^3 of solution **C**. **(1mark)**

……

……

……

iii. Hydrochloric acid in **250** cm^3 of solution **C**. **(1mark)**

……

……

……

iv. Hydrochloric acid in 20.0 cm^3 of solution **B**. **(1mark)**

……

……

……

v. Hydrochloric acid that reacted with sold **A**. **(1mark)**

……

……

……

(f) Calculate the **Molar enthalpy** of reaction between solid **A** and one mole of hydrochloric acid. (**2marks)**

……

……

……

……

2. (I) You are provided with **solid Q**. Carry out the tests below and record your observations and inferences in the spaces provided.

(a) Strongly heat a spatula-end full of **solid Q** in a dry test tube.

Observation	Inference
(1mark)	**($^1/_2$mark)**

(b) (i) Place the remaining **solid Q** in a boiling tube. Add 10 cm^3 of distilled water. Divide the solution into five portions.

Observation	Inference
($^1/_2$mark)	**(1mark)**

(ii) To the first portion, add universal indicator solution.

Observation	**Inference**
($^1/_2$mark)	**($^1/_2$mark)**

(iii) To the second portion, add aqueous lead (II) nitrate solution.

Observation	Inference
($^1/_2$mark)	**(1mark)**

(iv) To the third portion, add dilute nitric(V)acid followed by barium nitratesolution..

Observation	**Inference**
(1mark)	**$^1/_2$mark)**

(v) To the forth portion, add few drops of sodium hydroxide until in excess.

Observation	Inference
(1mark)	**(1 mark)**

(vi) To the firth portion, add few drops of aqueous ammonia until in excess.

Observation	Inference
(1 mark)	**(1 mark)**

(II) You are provided with **solid R.** carry out the tests below and record your observations and inferences.

(a) Place a spatula-end full of **solid R** in dry boiling tube and add about 10 cm^3 of distilled water. Shake thoroughly and divide the solution into **five** portions.

Observation	Inference
(1 mark)	**(½ mark)**

(b) (i) Test the first portion with the universal indicator solution provided.

Observation	Inference
(½ mark)	**(½ mark**

(ii) to the second portion, add a few drops of acidified potassium manganate (VII) solution.

Observation	Inference
(½ mark)	**(1 mark)**

(iii) To the third portion, add few drops of bromine water.

Observation	**Inference**
(½ mark)	**(½ mark)**

(iv) To the fourth portion, add all the sodium hydrogen carbonate provided.

Observation	Inference
(1 mar	**(1mar**

(v) To the fifth portion in a boiling tube, add $5cm^3$ of ethanol followed by few drops of concentrated sulphuric (VI) acid. Warm the mixture.

Observation	**Inference**
($^1/_2$ mark)	**($^1/_2$ mark)**

THIS IS THE LAST PRINTED PAGE.

KCSE 2025 NAIROBI CLUSTER MOCK

KCSE EXAM SERIES 2

PHYSICS

232/1

PAPER 1 (THEORY)

TIME: 2 HOURS

NAME……

SCHOOL…… SIGN……

INDEX NO…… ADM NO……

INSTRUCTIONS TO CANDIDATES

(i) *Write your* ***name, admission number*** *and* ***class*** *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 sections* ***A*** *and* ***B*** *in the spaces provided.*

(v) ALL *working* ***MUST*** *be clearly shown.*

(vi) *Non-programmable silent electronic calculators and KNEC mathematical tables may be used.*

For Examiner's Use Only

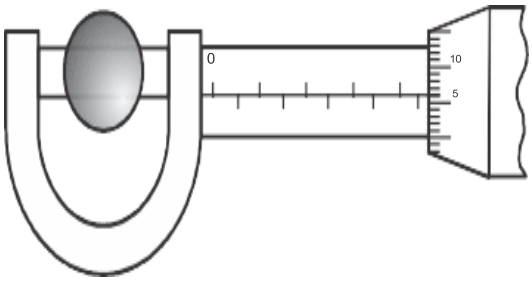
Section	Question	Maximum Score	Candidate's Score
A	1 – 13	25	
B	14	09	
	15	12	
	16	10	
	17	10	
	18	07	
	Total Score	80	

SECTION A : (25 MARKS)

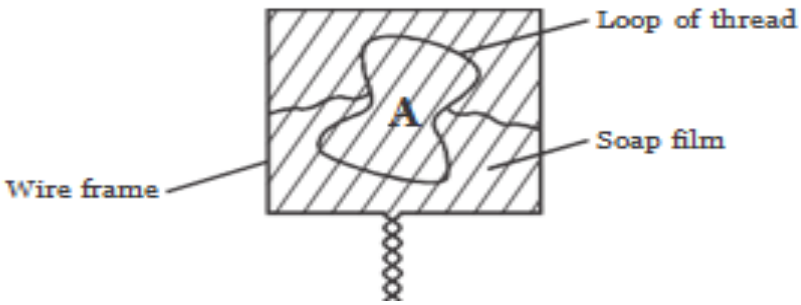
Answer all the questions in this section.

1. A stopwatch started 0.36s after the start button was pressed. The time recorded using a stopwatch for an athlete running from point A to B was 12.86s. Determine the actual time taken by the athlete.

2. Fig 1.0 shows a spherical ball held between the anvil and the spindle of a micrometer screw gauge. Determine the radius of the spherical ball. Give your answer in SI units. **(2 marks)**

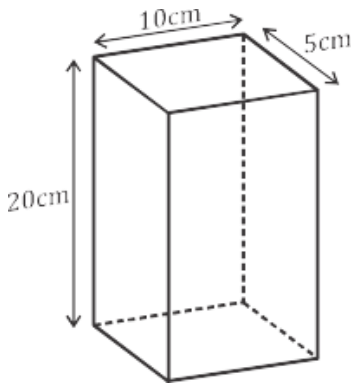


3. Figure 2.0 shows a loop of cotton thread tied onto a wire frame. The figure is dipped into a soap solution and withdrawn.



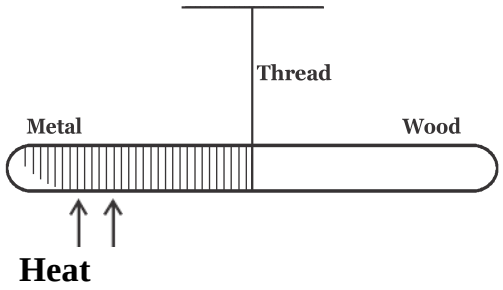
On the space left below , Illustrate and explain what happens to the shape of the loop of thread when part A is broken by touching it with a hot needle. **(2 marks)**

4. Figure 3.0 shows a brick of mass 8.0kg standing upright on the ground as shown.



What is the pressure it exerts on the ground ? ($g = 10Nkg^{-1}$) **(3 marks)**

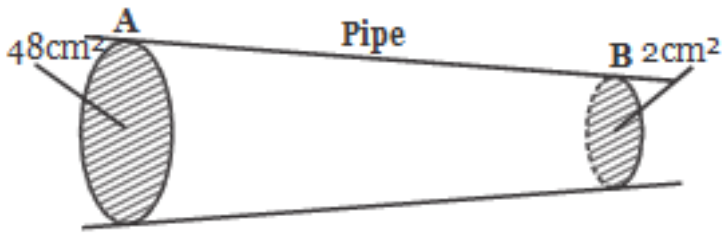
5. The figure 4.0 shows a rod made of wood on one end and metal on the other end suspended freely with a piece of thread so that it is in equilibrium.



The side made of metal is heated with a bunsen burner flame. State with a reason, the side to which the rod is likely to tilt **(2 mks)**

6. State the relationship between Physics and Mathematics.

The diagram in fig 5.0 shows a section of a pipe with different cross-sectional area



If water flows with a velocity of 10m/s in section A, what would be the velocity of water in section B ? **(3 marks)**

7. Determine the spring constant of a spiral spring whose length changes from 10cm to 18cm when a load of 10.0N is suspended from its lower end. **(3 marks)**

8. Figure 6.0 below shows a wooden sphere with a nail hammered into it as shown.

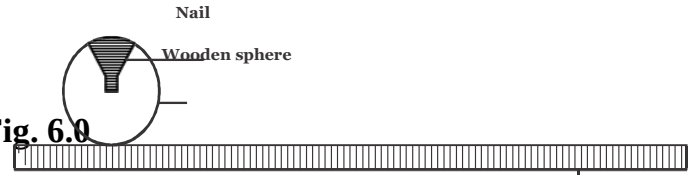


Fig. 6.0

The sphere is rolled on a horizontal ground and comes the rest after sometime at point Y. Draw the sphere after it comes to rest at point Y. **(1 mark)**

9. When the temperature of an enclosed gas at constant pressure is raised, the volume of the gas increases. Explain how the molecules of the gas causes the increase in volume. **(2 marks)**

……

……

……

10. It is easier to stop a saloon car than a bus when both are moving with the same velocity. Explain.

(2 mrks)

……

……

……

……

11. Figure 7.0 (a) shows a displacement-time graph. Sketch a velocity-time graph on fig. 7.0(b)

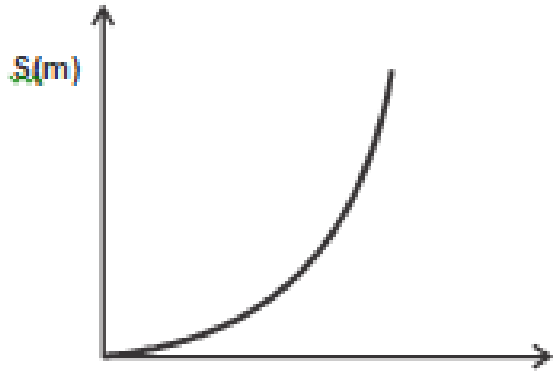


Figure 7.0(a)

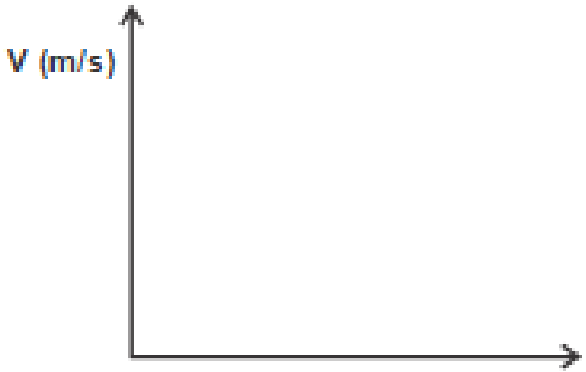


Figure 7.0(b)

12. State the law of conservation of energy. **(1 mark)**

……

……

SECTION B (55 MARKS)

Answer ALL the questions in the spaces provided

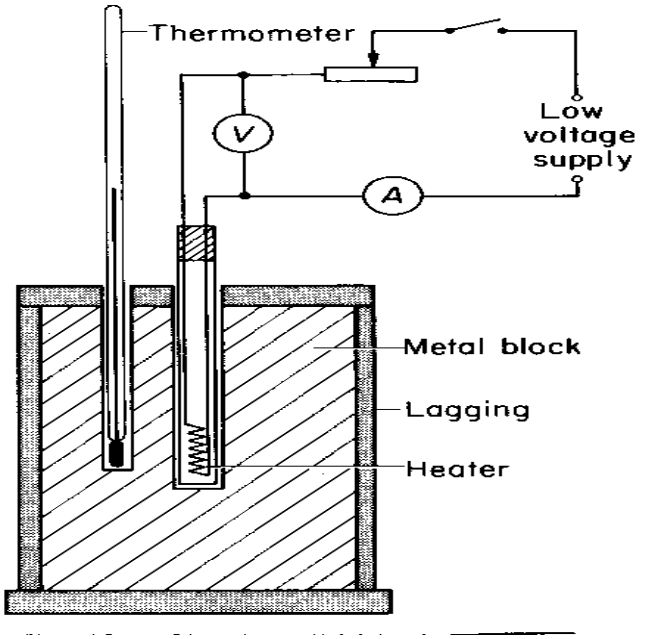
14(a) Define specific heat capacity **(1 mark)**

……

……

……

b) The figure below shows apparatus that a student uses to make an estimate of specific heat capacity of iron. The power of the heater is known



i) State four readings the student must take to find the specific heat capacity of iron. **(2 marks)**

……

……

……

ii) How could you use the measurements above to find the specific heat capacity of iron. **(2 marks)**

……

……

……

ii) Explain why the value obtained above with this apparatus is higher than the actual value. **(1 mark)**

……

……

iv) State one addition to the apparatus that would help improve the accuracy of the value obtained.

(1 mark)

……

……

……

c) 20g of a certain fuel produces $3.5x10^7$ J/kg of heat when burnt in a plentiful supply of oxygen. This mass of fuel was burnt and the heat obtained was used without loss to heat 400g of a liquid originally at 10^oc. After all the heat has been absorbed by the liquid , 140g of it remained as a liquid. The specific heat capacity of the liquid was $2.5x10^3$ J/KgK and its boiling point was 80^oc . Calculate the specific latent heat of vapourization of the liquid. (ignoring heat losses , the thermal capacity of the container and any liquid evaporated before reaching boiling point). **(4 marks)**

……

……

……

……

……

……

15(a) Define the term velocity ratio **(1 mark)**

……

……

b) Draw a labeled diagram of a block and tackle system which has a velocity ratio of 7. (**2 marks)**

b) This pulley system has an efficiency of 70%. Calculate.

i) Its mechanical advantage **(2marks)**

……

……

……

ii) Effort required to raise a load of 122N **(2 marks)**

……

……

……

iii) The work done by a man using this machine in raising the load through a vertical distance of 3.0m.

(3 marks)

……

……

……

……

iv) The time taken to do this if his average rate of working is 150W. **(2marks)**

……

……

……

16(a) i) State Archimedes principle **(1 mark)**

……

……

ii) Explain one application of Archimedes principle in real life **(2 marks)**

……

……

b) The mass of the fabric of a large balloon is 700kg. The balloon is inflated with 2000$m^3$of helium. The balloon is attached to a cable fixed to the ground and released to still air (density of air and helium are 1.25kg/m^3 and 0.18kg/m^3 respectively)

i) Draw the forces acting on it **(2 marks)**

ii) Determine the tension in the cable **(3 marks)**

iii) What would be the acceleration of the balloon if the cable is cut? **(3 marks)**

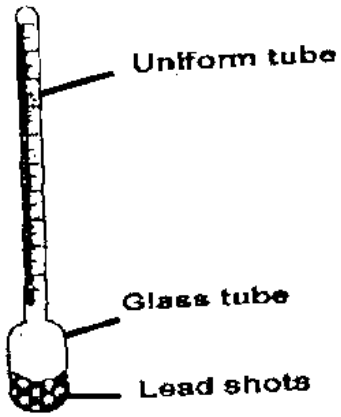
……

……

……

……

c) The figure below shows a simple hydrometer



i) State the purpose of the lead shots in the glass bulb **(1 mark)**

……

……

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

……

……

iii) Describe how the stem is calibrated to measure relative density **(2 marks)**

……

……

……

……

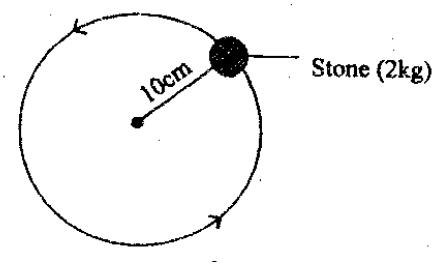
17(a) Define centripetal force **(1 mark)**

……

……

b) The figure below shows a stone moving with uniform speed in a horizontal circle

Indicate on the figure the centripetal force(T) **(1 mark)**



……

……

……

c) If the stone takes 15 seconds to describe an arc length of 5cm. Calculate

i) The angle it subtends at the centre **(2 marks)**

……

……

……

……

ii) The angular velocity ω **(2marks)**

……

……

……

……

(v). Linear velocity V of the stone **(2 marks)**

……

……

……

……

iv) The centripetal force (T) **(2 marks)**

……

……

……

……

18. A block of mass 200g rests on a rough a horizontal table. A force of 0.6N pulls the block so that it moves with a constant acceleration of $1m/s^2$ calculate

i) The time it takes to travel a distance of 200m **(2 marks)**

……

……

……

……

ii) the frictional force between the block and the table **(2marks)**

……

……

……

……

iii) The coefficient of kinetic friction between the two forces **(2marks)**

……

……

……

……

iv) Apart from the normal reaction and frictional force, name other force **(1mark)**

……

……

……

KCSE 2025 NAIROBI CLUSTER MOCK

KCSE EXAM SERIES 2

PHYSICS

232/2

PAPER 2 (THEORY)

TIME: 2 HOURS

NAME……

SCHOOL…… SIGN……

INDEX NO…… ADM NO……

INSTRUCTIONS TO CANDIDATES

(i) *Write your* ***name, admission number*** *and* ***class*** *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 sections* ***A*** *and* ***B*** *in the spaces provided.*

(v) ALL *working* ***MUST*** *be clearly shown.*

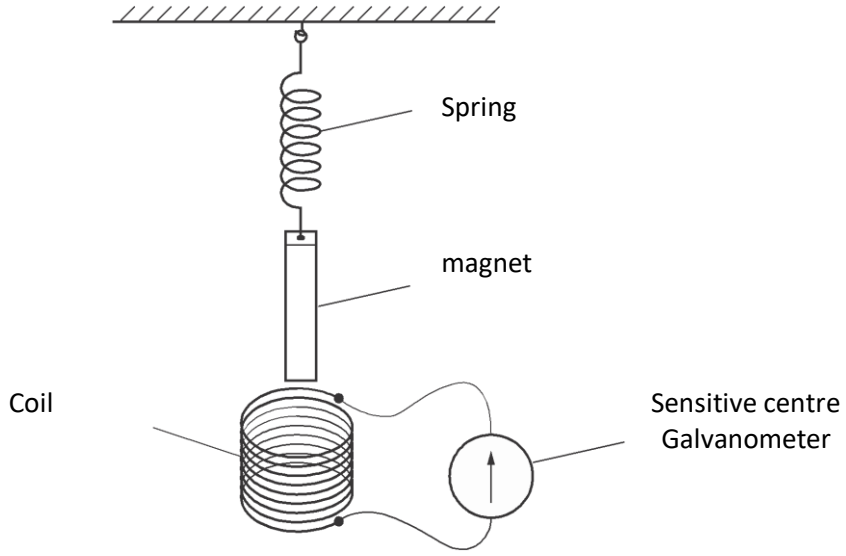
(vi) *Non-programmable silent electronic calculators and KNEC mathematical tables may be used.*

FOR EXAMINER'S USE ONLY:

Section	Question	Maximum Score	Candidate's Score
A	1 – 13	25	
	14	07	
	15	12	
B	16	12	
	17	13	
	18	11	
Total Score		80	

Section A (25 marks)

1. The figure below shows a magnet suspended above a coil of wire.



The end of the magnet is pushed into the coil and released, so that it bounces repeatedly in and out of the coil. Describe what is seen on the sensitive centre-zero galvanometer **(2 mks)**

……

……

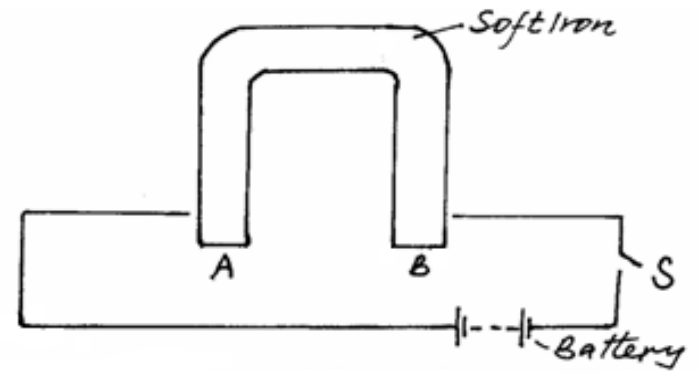
……

2. State two advantages and one disadvantage of a convex mirror when used as a driving mirror **(2mks)**

……

……

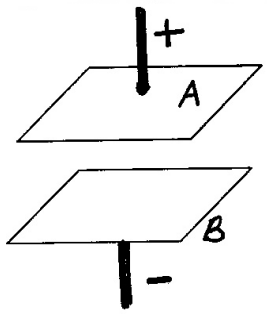
3. The figure below shows an incomplete circuit of an electromagnet.



Complete the circuit by drawing the windings on the two arms of the core so that A and B are both north poles when the switch S is closed. Indicate the direction of the current of the windings drawn. **(1 mark)**

4. The plates A and B of a parallel capacitor shown in the figure (i) below were first charged and then placed parallel to each other and at distance d.

(i)



(ii)

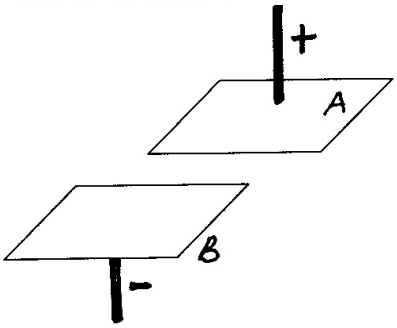


Plate A is moved slightly to the right, figure (ii). State with a reason what effect this change will have on the capacitance of the capacitor. **(2 marks)**

……

……

……

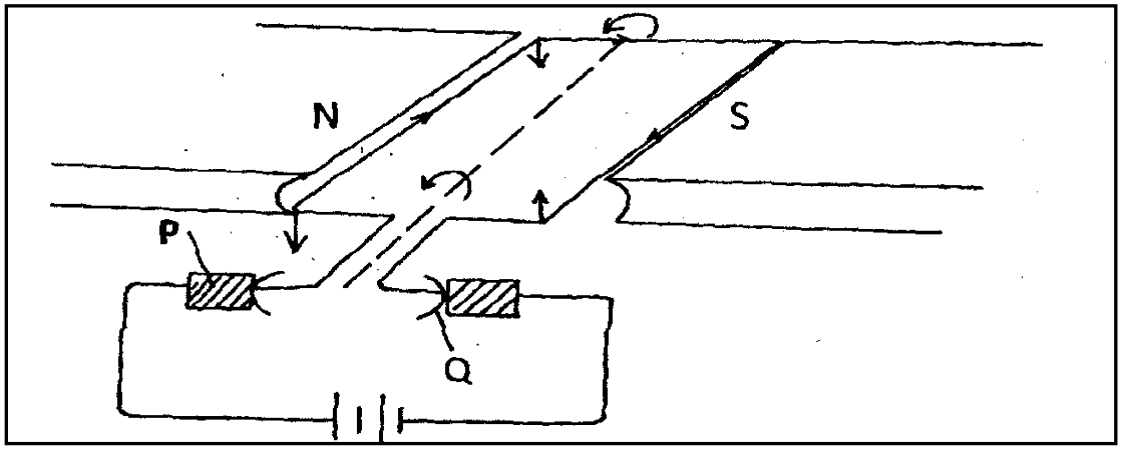
5. The chart below shows an arrangement of different parts of electromagnetic spectrum:

Radio	**Infra-red**	**Visible**	**A**	**X-Rays**	**Gamma Rays**

Name the radiation represented by A. **(1mark)**

……

6. The figure below shows a simple d.c. motor;



(i) Name the parts labeled P and Q

p …… **(1mark)**

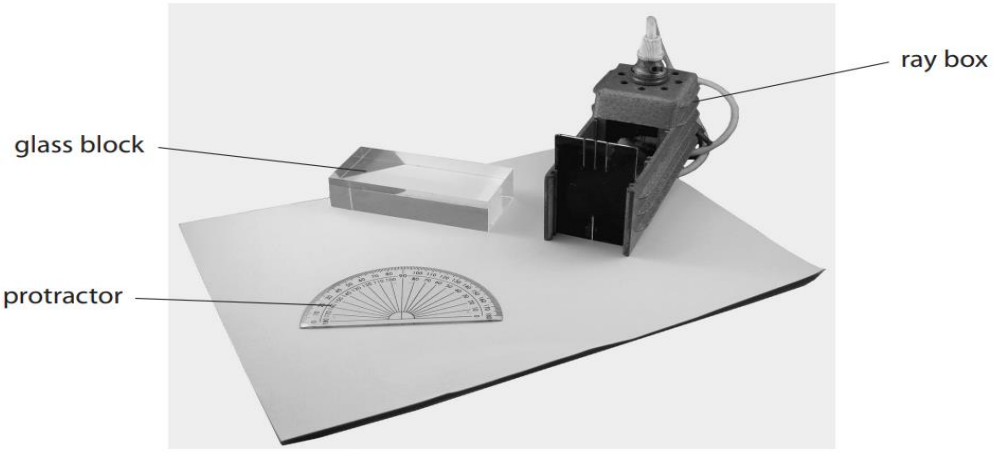
Q…… **(1mark)**

(ii) Explain why the pole pieces are curved **(1mark)**

……

……

7. The student wants to find the refractive index of the glass. The photograph shows the apparatus the student has available.



Describe how the student should carry out the experiment. **(4 mks)**

You should include:

- what the student should measure
- how the measurements should be made
- how the student should use a graph to find the refractive index

……

……

……

8. James rubbed a glass rod with a cloth to give it a positive charge. His effort to charge an aluminum rod using the same method didn't work out. Explain this observation **(1mark)**

……

……

……

9. A student set-up the two circuits in fig. A and fig B as shown below. If the bulbs and cells were identical, state with a reason which bulb will be brighter. **(2 marks)**

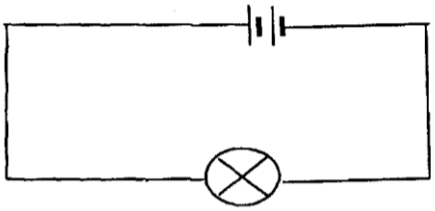


Fig a

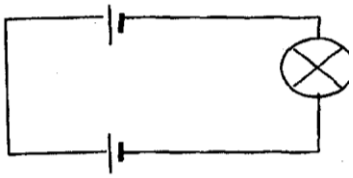


Fig b

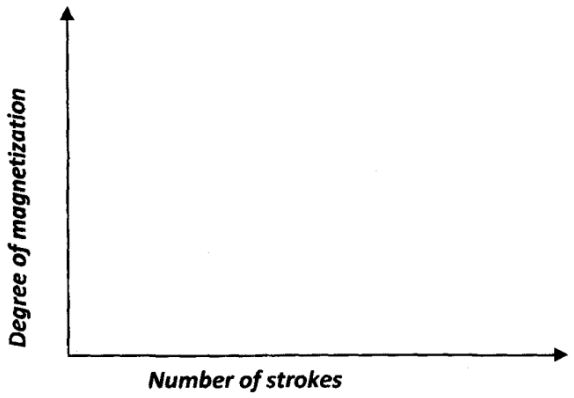
……

……

……

10. An iron rod placed on a bench is stroked several times using on ole of a bar magnet. Sketch a graph showing the degree of magnetization against the number of strokes on the axes below.

(2mks)



11. State one similarity between the human eye and the lens camera. **(1 mark)**

……

……

12. A soldier standing at some distance from a wall blows a whistle and hears its echo 1.8 seconds later. How far is the soldier from the wall? (speed of sound in air is $330ms^{-1}$) **(3marks)**

13. Distinguish between transverse and longitudinal waves. **(1mark)**

……

……

……

Section B (55 marks)

Answer all questions in this section and on the spaces provided

14. Figure 7 is a diagram of cathode ray tube. M and N are parallel vertical plates.

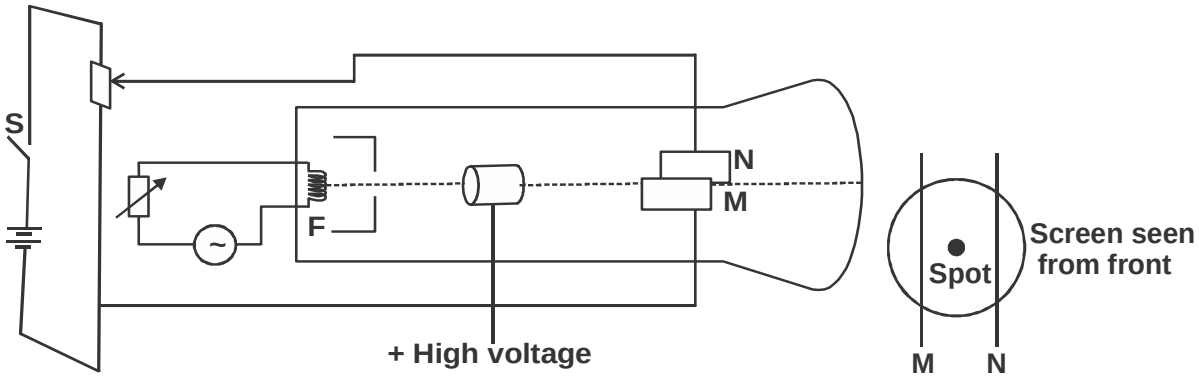


Figure 7(a) **Figure 97b)**

a) When switch S is open, spot is seen at the centre of the screen as shown in figure 9.

i) State what happens to the spot when S is closed. **(1 mark)**

……

……

ii) State what would happen to the spot if the potential difference across MN is increased.

(1 mark)

……

……

iii) State what would be seen on the screen if the battery is replaced with an alternating e.m.f of;

I) a low frequency of about 1HZ **(1 mark)**

……

……

II) a high frequency of about 50HZ. **(1 mark)**

……

……

b) Explain the process by which electron are produced at F. **(2 marks)**

……

……

……

c) State with a reason how the brightness of the spot can be increased. **(2 marks)**

……

……

……

d) The accelerating voltage of the tube is 1000V and the electron current in the beam is 1.5mA. Determine the energy to the screen per second. **(3 marks)**

……

……

……

……

15. a) State two differences between the image formed when the object is between C and F and the one formed when the object between F and P by a concave mirror. **(2 marks)**

……

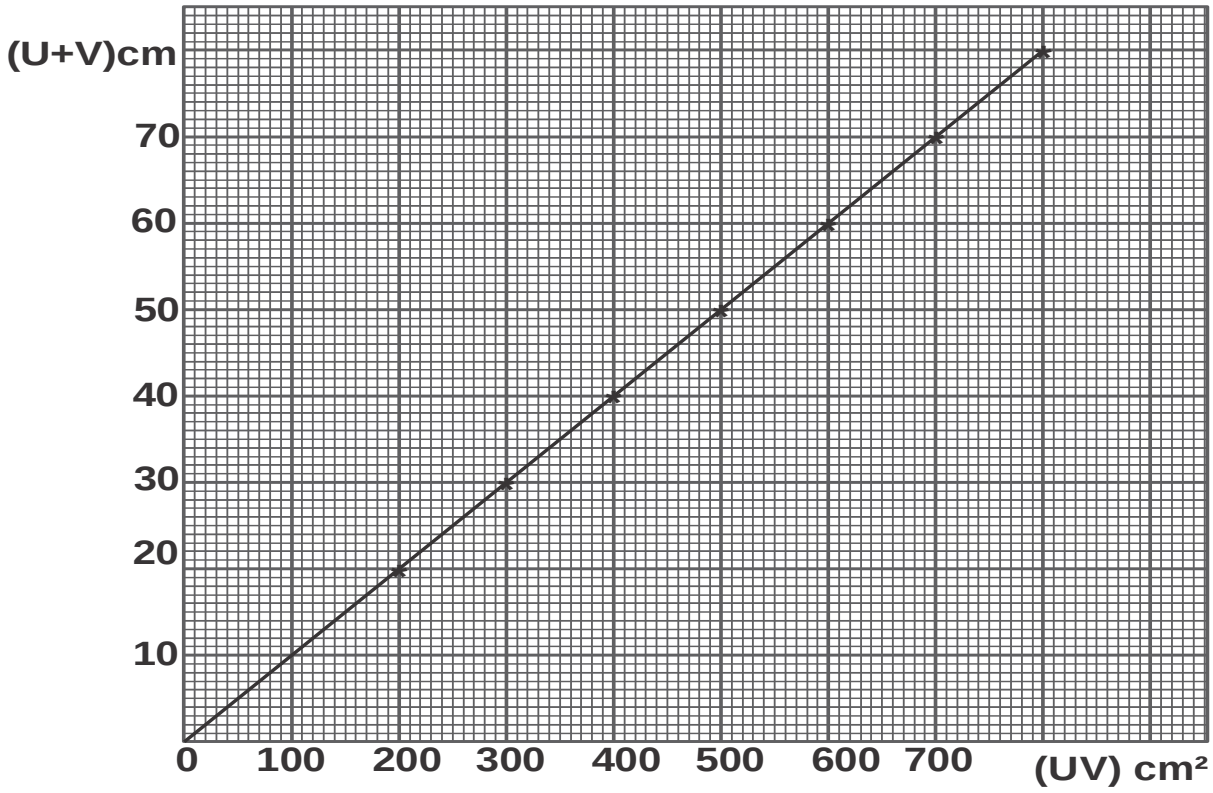
……

……

……

b) An object is placed 60cm from of a concave lens of focal length 40cm. Determine the position of the image. **(3 marks)**

c)Figure 8 chows a graph drawn from an experimental data to determine the focal length of a convex lens.



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

……

……

……

……

ii) Determine the focal length of the lens. **(3 marks)**

……

……

……

……

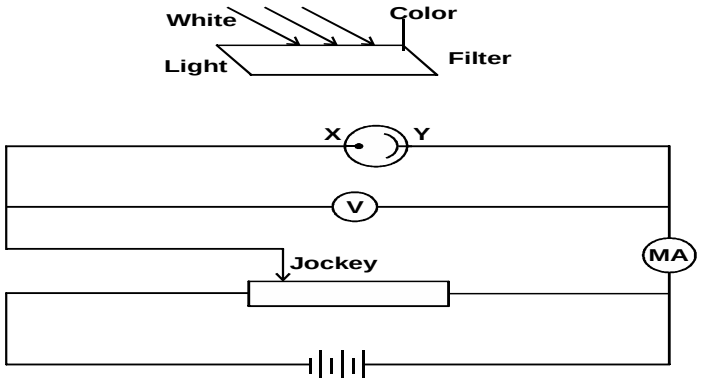
16.a) What is meant by the term photoelectric effect. **(1 mark)**

……

……

……

b)The figure below shows an arrangement used to investigate photoelectric effect.



i)Name the parts X and Y **(2 marks)**

……

……

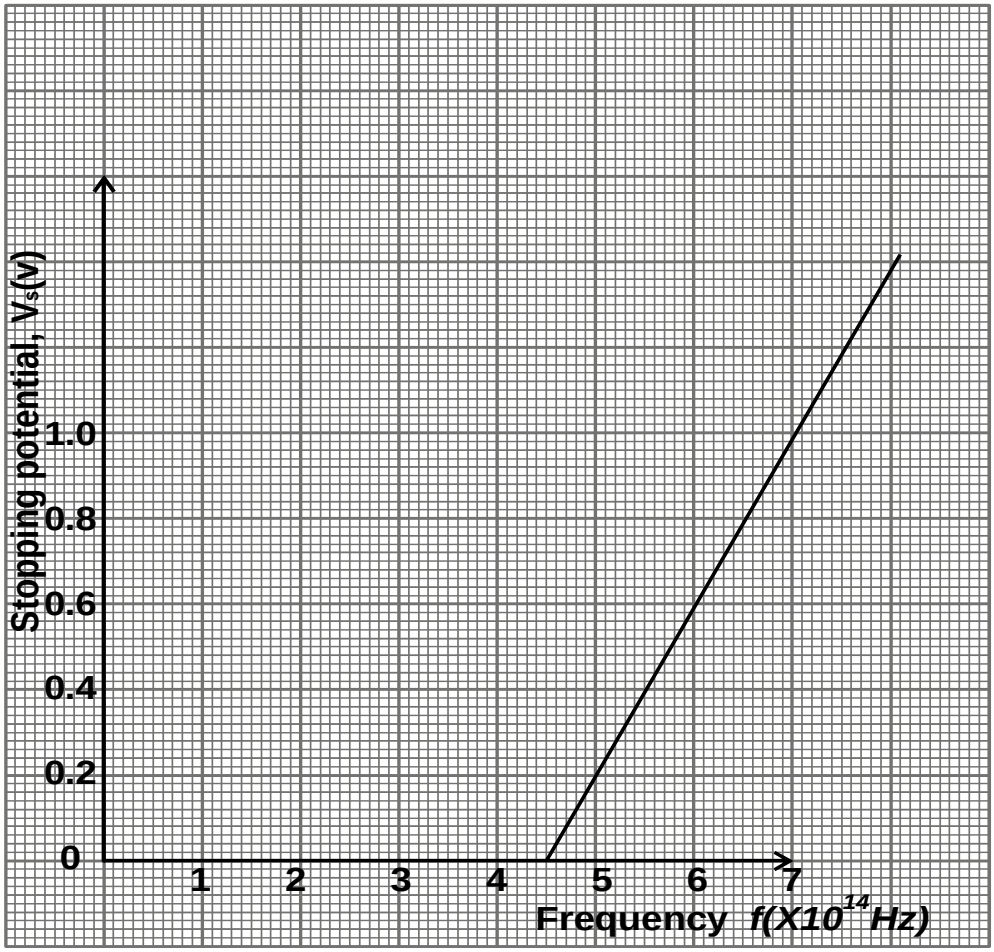
ii)State how the intensity of light affects the photo current. **(2 mark)**

……

……

……

c) The result obtained from experiment with different colours are shown graphically below.



From the graph determine;

i)Threshold frequency. **(2 marks)**

……

……

……

ii) The work function of the metal **(3 marks)**

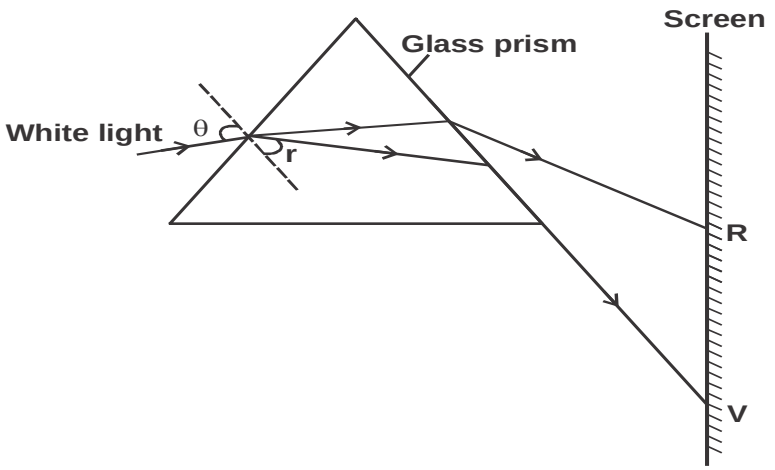
……

……

……

……

17.. The figure below shows a ray of white light dispersed in a triangular prism. The speed of violet light in the prism is 1.88 x 10^8m/s.



a) Explain how glass disperses white light into read and violet bands. **(2 mark)**

……

……

……

b) Determine the refractive index of the prism material for violet light. (Take speed of violet light in vacuum = 3.0 x 10^8m/s) **(3 marks)**

……

……

……

……

c) Show on the figure the critical angle, c, for violet light and determine its value. **(3 marks)**

d) Given that r = 21.5^{o} determine the angel □. **(3 marks)**

……

……

……

……

e)On the same figure, sketch the part of red light after white light strikes the prism if the prism was replaced by another of similar shape but lower refractive index. (use dotted line for the answer) **(2 marks)**

……

……

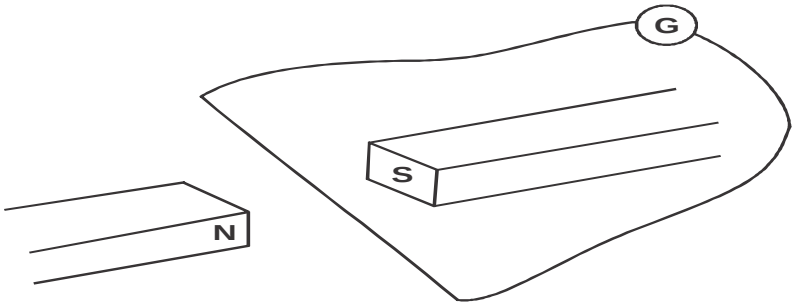
……

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

……

……

b) A wire placed between the poles of two permanent magnets is connected as shown in figure 10.



i)State and explain what is observed when the wire is moved up and down. **(2 marks)**

……

……

……

ii) Suggest two ways of altering the magnitude of the effect you have stated in (i) above.**(2 marks)**

……

……

……

c) Explain why the core of a transformer is :

i) laminated **(1 mark)**

……

……

……

ii) Made of soft iron **(1 mark)**

……

……

……

d) A heater rated 3KW is used for 30 minutes every day for 30 days. Calculate the cost of the electricity consumed in the 30 days given that its charged at Ksh.7.00 per unit. **(3 marks)**

THIS IS THE LAST PRINTED PAGE

KCSE 2025 NAIROBI CLUSTER MOCK

KCSE EXAM SERIES 2

PHYSICS

232/3

PAPER 3 (PRACTICAL)

TIME: 2½ HOURS

SCHOOL…… SIGN……

Kenya Certificate of Secondary Education.

CONFIDENTIAL

INSTRUCTIONS TO SCHOOLS

- This report is highly confidential and therefore should not be exposed to persons who are not concerned with the preparation of the requirements.
- The report should therefore be handled in strict confidence of the following.

a) The head of institution
b) The H.O.D sciences
c) The Physics subject head

- Any leaked information to the unconcerned parties may lead to a strict penalty to the above
- The teacher in-charge should do the experiments (and hand in the sample results with the scripts, during moderation exercise)
- The teacher should write a brief report on the practical.

REQUIREMENTS FOR QUESTION 1

- Complete retort stand
- Wooden wedge (knife edge)
- Two pieces of thread (40 cm and 20 cm long)
- Mass Q
    - Metre rule
    - A single pulley
    - A spring
    - Two 10g masses
    - Two 20g masses
    - Two 50g masses

Question II

REQUIREMENTS FOR QUESTION 2 (a)

- Metre rule
- Lens on a lens holder
- Cardboard with cross-wires.
- Screen
- Source of light
-

REQUIREMENTS FOR QUESTION 2 (b)

- Volt metre
- Ammeter
- Nichrome wire 10cm long gauge 32
- One cell
- A switch

KCSE 2025 NAIROBI CLUSTER MOCK

KCSE EXAM SERIES 2

PHYSICS

232/3

PAPER 3 (PRACTICAL)

TIME: 2½ HOURS

NAME……

SCHOOL…… SIGN……

INDEX NO…… ADM NO……

Kenya Certificate of Secondary Education.

INSTRUCTIONS

- *Write your name, admission number, class and signature in the spaces provided.*
- *Answer all the questions in the spaces provided in this paper.*
- *You are supposed to spend the first 15 minutes of the 2 ½ hours allowed for this paper reading the whole paper carefully before your start.*
- *Marks will be given for clear record of observations actually made, for their suitability and accuracy, and the use made of them.*
- *Candidates are advised to record their observations as soon as they are made.*
- *Electronic calculators and mathematical tables may be used.*

FOR EXAMINER'S USE ONLY

Question(s)	Maximum Score	Candidate's Score
1	20	
2	15	
	5	
TOTAL	40	

Question 1.

1. You are provided with the following apparatus

- Complete retort stand
- Wooden wedge (knife edge)
- Two pieces of thread (40 cm and 20 cm long)
- Mass Q
    - Metre rule
    - A single pulley
    - A spring
    - Two 10g masses
    - Two 20g masses
    - Two 50g masses

Proceed as follows;-

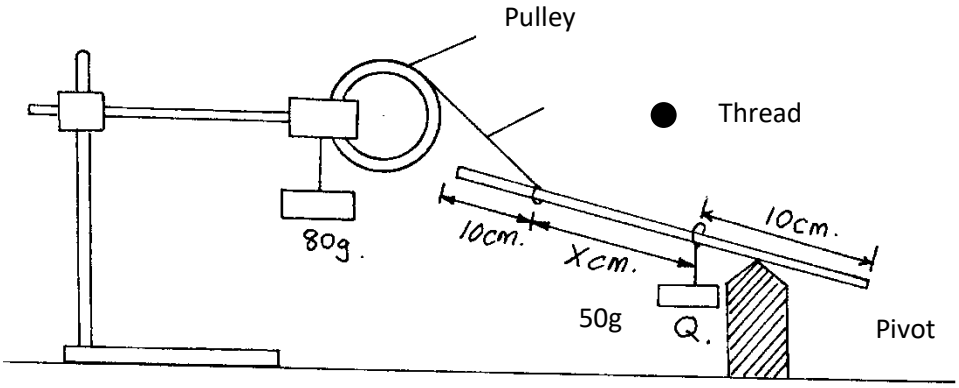
(a) Balance the metre rule on the wedge. Note and record the point, G, where the metre rule balances

G = _____ cm (1mk)

(b) Measure the mass m of the metre rule using the spring balance.

M = _____kg (1mk)

(c)Arrange the apparatus as shown in figure 1 below



(d) Hang the mass Q on the metre rule and adjust its position so that the metre rule is in equilibrium. The thread over the pulley must always be kept perpendicular to the metre rule.

(e) Measure the distance,x, between the point of suspension of the mass, Q and the thread.

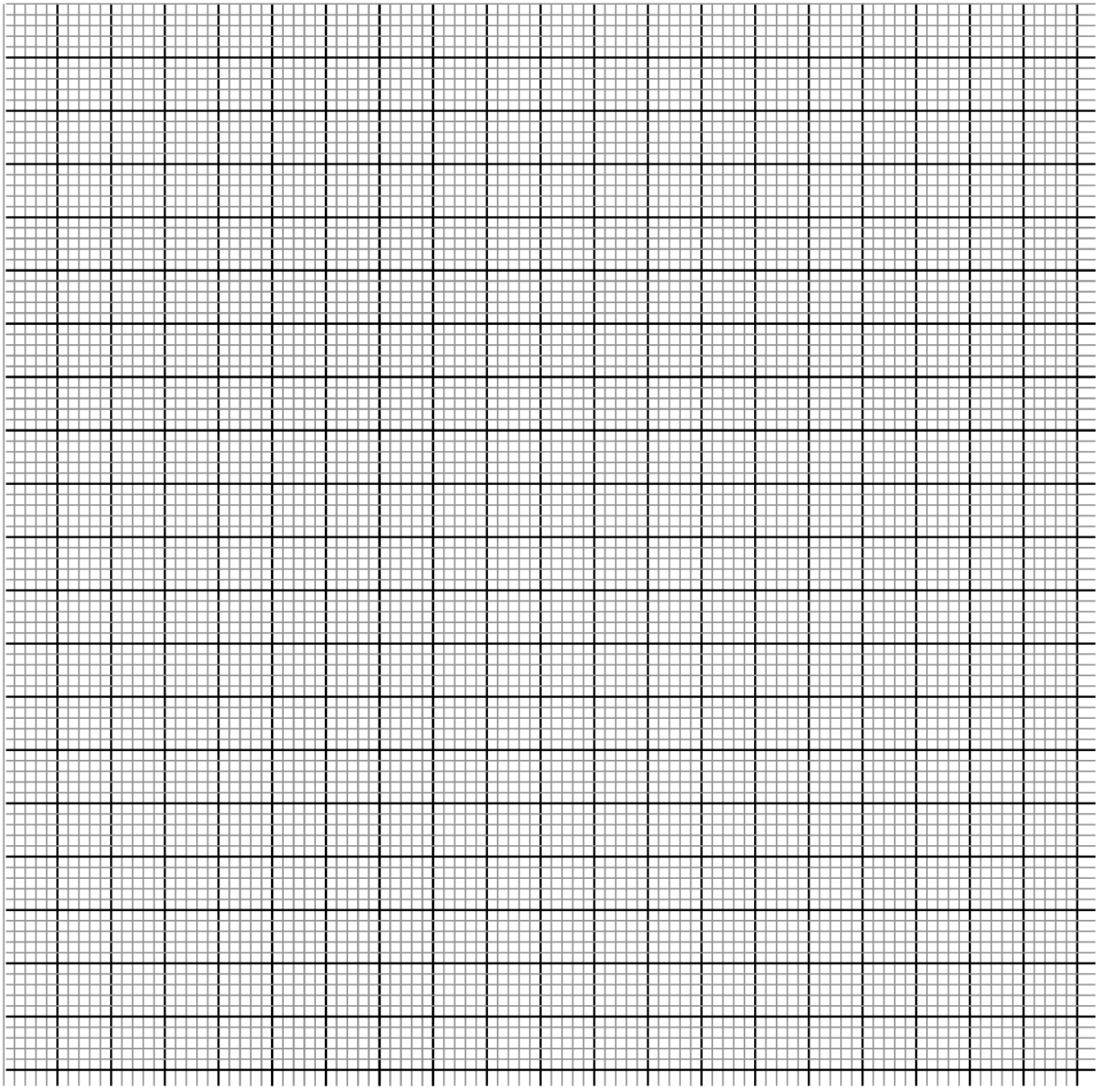
Repeat for masses 90g, 100g, 110g and 120g instead of the 80g mass and each time note(x)

Complete table 1 below

Mass(g)	50	60	70	80	90	100
Tension, T(N)						
Distance,X(m)						

(5marks)

(f) On the grid provided, plot a graph of distance x (y-axis) against the tension, T**.(5marks)**



g)Calculate the slope (s) of the graph **(2marks)**

(h) Measure L, the distance between G and the thread.

L = _____(m) **(1marks)**

(i) Given that $X = \frac{0.8y + Lz}{y} - \frac{0.8T}{y}$ obtain the values of y and z from the graph **(4mks)**

(j) Determine the maximum load the beam balance can measure. **(1mark)**

……

……

……

Question 2:

a) Your are provided with the following apparatus

- Metre rule
- Lens on a lens holder
- Cardboard with cross-wires on a hole.
- A white Screen
- Source of light

Procedure.

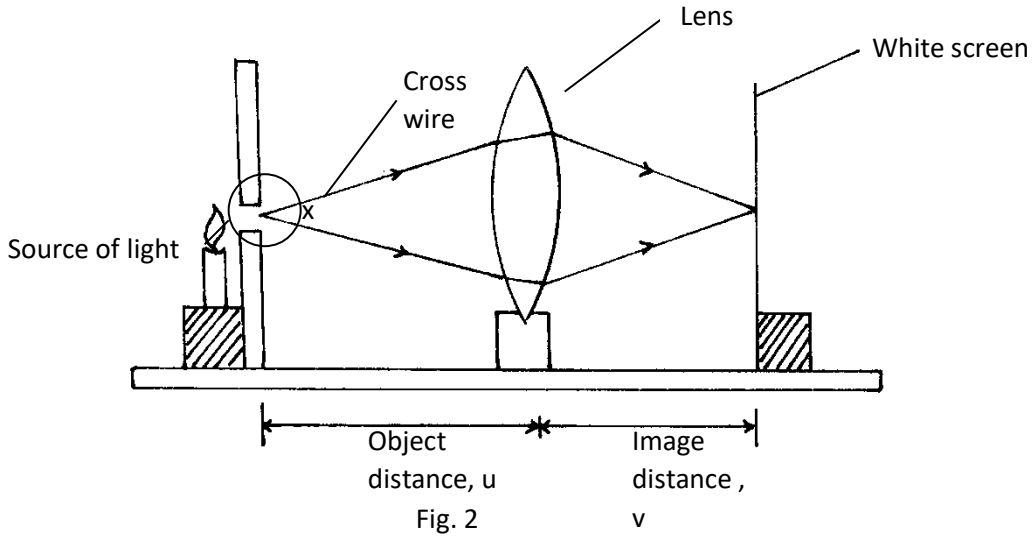


Fig. 2

- Set up the apparatus as shown above in figure 2
- Place the object (cross wires & screen) at the zero centimetre mark of a

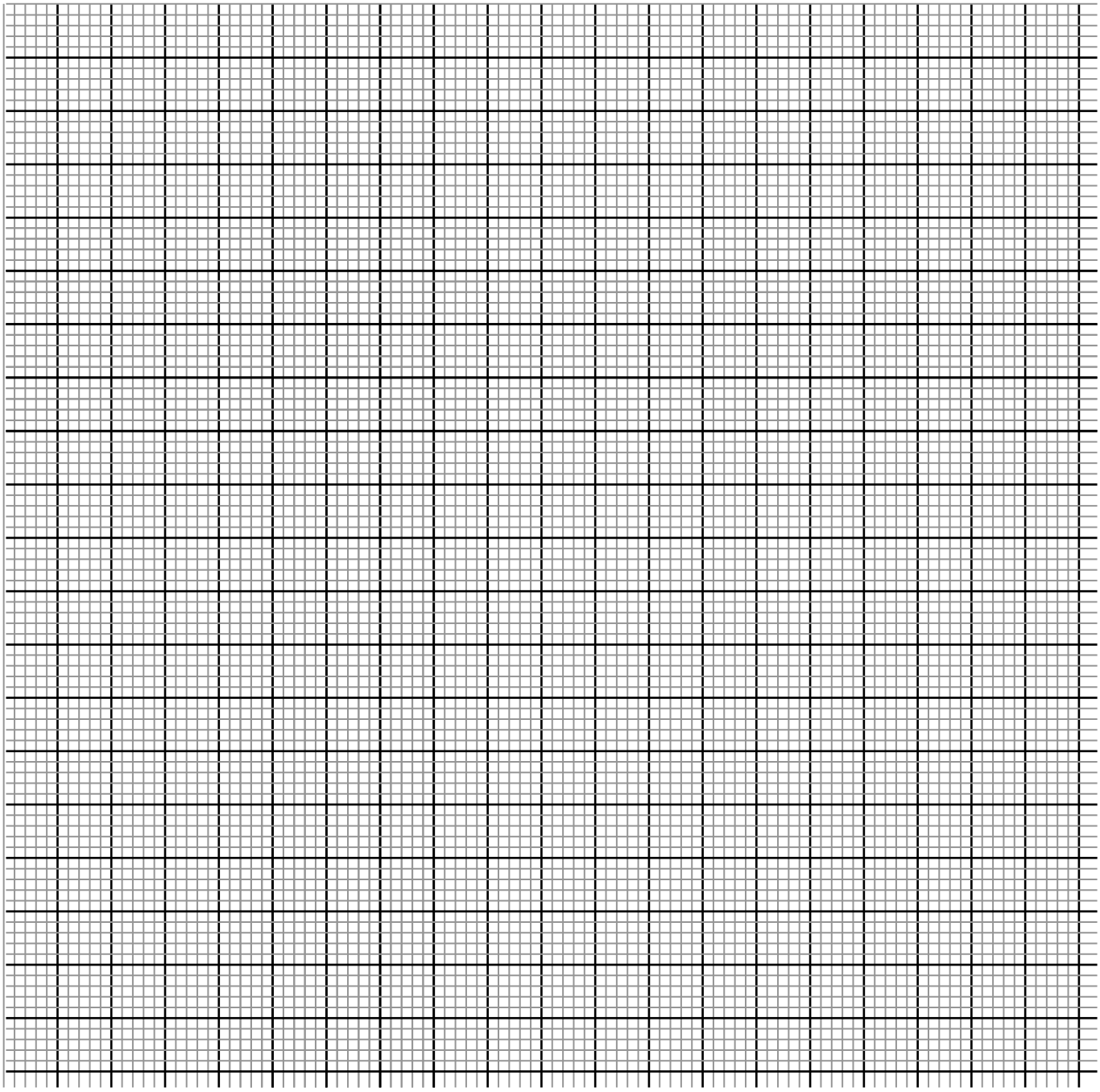
metre rule

- Set the object distance u, by placing the lens at the 70cm mark of the metre rule
- Adjust the screen until a sharp image is obtained
- Determine the corresponding image distance v.
- Repeat the procedure above for values of u=60cm, 50cm, 40cm and 30cm.

i) Record your results as shown below **(7 marks)**

Object distance u (cm)	Image distance, v, (cm) 3ml	1/u (cm^{-1}) (2mks)	1/v (cm^{-1}) (2mks)
30			
40			
50			
60			
70			

ii) Use the table to plot a graph of $^1/_v$ against $^1/_u$ ($^1/_v$ vertical axis) **(5mks)**



iii) Using the graph; determine the focal length of the convex lens **(3mks)**

……

……

……

……

……

……

Question 2

PART B

You are provided with

- Voltmeter
- Ammeter
- Nichrome wire 10cm long gauge 32
- one cell and cellholder.
- A switch

Procedure:

Set up the apparatus as shown in figure 3 below

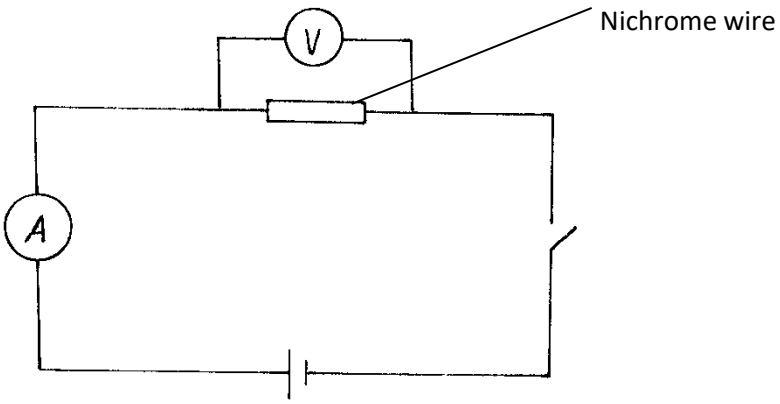


FIG 3

i) Complete the table below for the values of the current passing through the Nichrome wire and the pd across it.. **(3mks)**

Current (A)	
p.d volts (V)	
$^{V}/_{I}$	

ii) What is the resistance of the nichrome wire____ Ω **(2mks)**

KCSE 2025 NAIROBI CLUSTER MOCK

KCSE EXAM SERIES 2

AGRICULTURE

443/1

PAPER 1

TIME: 2 HOURS

NAME……

SCHOOL…… SIGN……

INDEX NO…… ADM NO……

Kenya Certificate of Secondary Education.

Instructions to candidate

(a) *Write your name and Admission number in the spaces provided at top of the page.*

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

(c) *This paper consists of section **A, B** and **C**.*

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

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

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

FOR EXAMINER`S USE ONLY

Section	Question	Maximum Score	Candidates Score
A	1 – 17	30	
B	18 - 21	20	
C		20	
		20	
TOTAL SCORE		**90**	

SECTION A (30 MARKS)

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

1. Give **two** roles of agriculture in industrial development. **(1mk)**

……

……

2. Differentiate between **mixed cropping** and **intercropping**. **(1mk)**

……

……

……

3. List **four** physical weathering agents in soil formation process. **(2mks)**

……

……

……

……

4. List **four** farming practices that destroy soil structure. **(2mks)**

……

……

……

……

5. Outline **four** effects of siltation in dams. **(2mks)**

……

……

……

……

6. (a) Give **two** main methods of classifying weeds **(1mk)**

……

……

(b) State **two** disadvantages of controlling weeds by tillage method. **(1mk)**

……

……

(c) State **four** factors that affect selectivity and effectiveness of herbicides. **(2mks)**

……

……

……

……

7. Outline **two** methods used by farmers to harden-off seedlings in a nursery bed. **(1mk)**

……

……

8. Give **four** disadvantages of minimum tillage. **(2mks)**

……

……

……

……

9. State **four** characteristics of tree recommended for agro-forestry. **(2mks)**

……

……

……

……

10. State **three** reasons for staking tomatoes in the field. **($1\frac{1}{2}$mk)**

……

……

……

……

11. Give the use of each of the following financial document.

(i) **An invoice** **(1mk)**

……

……

(ii) **A local purchase order** **(1mk)**

……

……

12. Give **four** disadvantages of using farm yard manure. **(2mks)**

……

……

……

……

13. Give **four** reasons why seed selection is important in crop production. **(2mks)**

……

……

……

……

14. Outline **four** advantages of mixed stand pasture. **(2mks)**

……

……

……

……

15. (a) Give a reason why manure application is not recommended in **carrot production**.**(1/2mk)**

……

……

(b) Name **two** pests that affect cabbages. **(1mk)**

……

……

16. Give a reason why striga weed is referred to as a parasitic weed. **($1/2$mk)**

……

……

17. State **three** advantages of organic mulch in crop production **($1\ 1/2$mk)**

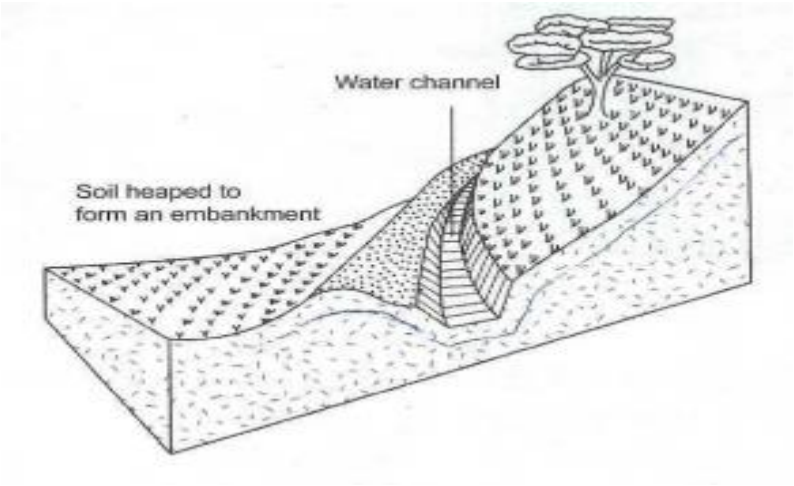
……

……

……

SECTION B (20 MARK)

18. The illustration below indicate a type of soil and water conservation measure. Study it and answer questions that follow.



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

……

(b) State **two** areas where the structure above discharge its water to **(2mks)**

……

……

(c) A part from the above name two other structural physical soil and water conservation measures.

(2mks)

……

……

19. Study the farm record illustrated below and answer questions that follow.

Name of person	Pay roll no.	Days					Days worked	Rate of pay (Ksh)	Total pay (Ksh)	Signature of workers
		1	2	3	4	5				
Mrs X	08						25	@ 100/=	2500/=	
Mr Y	09						25	@ 100/=	2500/=	

(a) Identify the type of record illustrated above. **(1mk)**

……

(b) Give **four** pieces of information contained in invoice. **(4mks)**

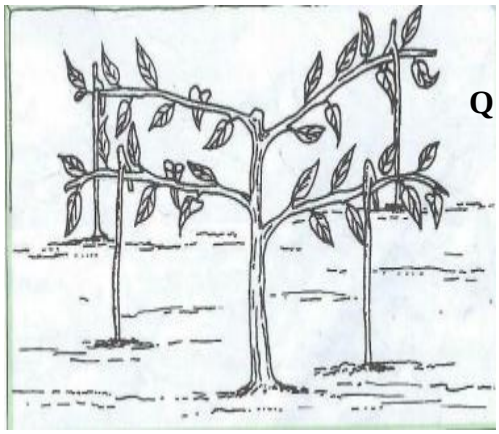
……

……

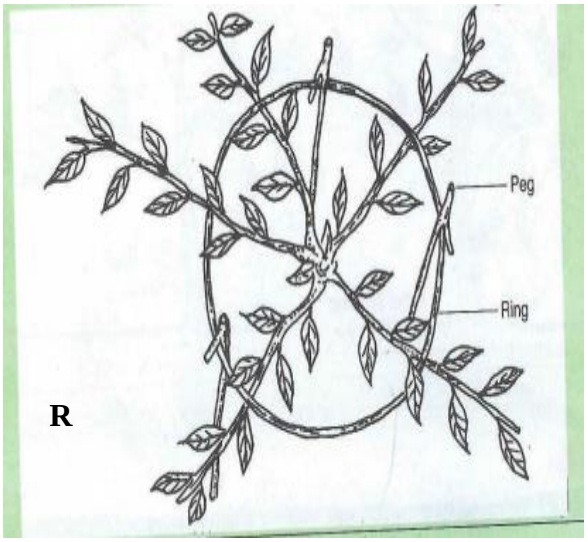
……

……

20. Study the illustration of a field practice illustrated below and answer questions that follow.



Q



R

(a) Identify the illustrations labeled **Q** and **R** above **(2mks)**

(i) Q

……

(ii) R

……

(b) Give reason for carrying out the practice above. **(1mk)**

……

……

(c) Name **two** methods of pruning coffee. **(2mks)**

……

……

21. A farmer was asked to apply fertilizers as follows **200kg/hac** of **DSP (40%P_2O_5, 150kg/hac** of Muriate of potash **60% K_2O, 150kg/hac** of sulphate of ammonia **20%N**.

(a) How much **P_2O_5** did the farmer apply per acre? **(1mk)**

……

……

……

(b) How much **K_2O** did the farmer apply per acre? **(1mk)**

……

……

……

(c) How much Nitrogen (N) did the farmer apply per hectares? **(1mk)**

……

……

……

(i) Calculate the amount of filler material in the double superphosphate (DSP) used above. **(1mk)**

……

……

……

……

(ii) Differentiate between **complete** and **incomplete** compound fertilizer. **(1mk)**

……

……

……

……

SECTION C (40 MARKS)

22. (a) Describe the production of beans under the following sub-headings.

(i) **Planting** **(3mks)**

(ii) **Field Management practices** **(4mks)**

(b) (i) Describe the procedure of **harvesting pyrethrum**. **(3mks)**

(ii) Give one precaution observed when harvesting pyrethrum. **(1mk)**

(c) Give **five** importance of grafting oranges. **(5mks)**

(d) Explain **five** factors that determine the choice of type of irrigation method. **(5mks)**

23. (a) Explain **five** ways in which biotic factors influences crop production negativity. **(5mks)**

(b) Outline **seven** functions of a farm manger. **(7mks)**

(c) Explain **eight** cultural measures of controlling pests. **(8mks)**

24. (a) State and explain **four** factors that determine elasticity of demand. **(8mks)**

(b) State **five** advantages of timely planting. **(5mks)**

(c) Explain **seven** effects of fragmentation and sub-division of land in Agriculture. **(7mks)**

KCSE 2025 NAIROBI CLUSTER MOCK

KCSE EXAM SERIES 2

AGRICULTURE

443/2

PAPER 2

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 the spaces provided above.*
- *Sign and write the date of examination in the spaces provided above.*
- *This paper consists of three sections A, B and C.*
- *Answer **all** the questions in section A and B.*
- *Answer any **two** questions in section C.*
- *All answers should be written in the spaces provided.*
- *Candidates should answer all the questions in English.*

For Examiner's Use Only:

SECTION	QUESTIONS	MAXIMUM SCORE	CANDIDATES SCORE
A	1-19	30	
B	20-23	20	
C		20	
		20	
	TOTAL SCORE	**90**	

For Marking Schemes Contact 0746 222 000 / 0742 999 000

SECTION A (30 MARKS)

1. Give the appropriate term used to refer to each of the following.

a) Young one of a rabbit. $(\frac{1}{2}\boldsymbol{mk})$

……

b) Mature female cattle. $(\frac{1}{2}\boldsymbol{mk})$

……

2. State **three** factors that determine the effectiveness of an acaricide. $(\mathbf{1}\frac{\mathbf{1}}{\mathbf{2}}\boldsymbol{mk})$

……

……

……

3. Outline **four** factors considered when formulating a livestock ration**.** **(2mks)**

……

……

……

……

4. List **three** methods used in selection of breeding stock in livestock production**.** $(\mathbf{1}\frac{\mathbf{1}}{\mathbf{2}}\boldsymbol{mk})$

……

……

……

5. State how each of the following practices help to control livestock diseases.

a) Quarantine $(\frac{1}{2}\boldsymbol{mk})$

……

……

b) Prophylactic measures. $(\frac{1}{2}\boldsymbol{mk})$

……

……

6. State **four** reasons for seasoning timber**.** **(2mks)**

……

……

……

……

……

7. Give **two** processes carried out by a combine harvester when harvesting wheat**.** **(1mk)**

……

……

8. State **two** functions of lubrication system in a tractor. **(1mk)**

……

……

9. State **four** factors that stimulate milk let-down in a lactating cow. **(2mks)**

……

……

……

……

10. Give **two** reasons for using litter in a poultry house. **(1mk)**

……

……

……

11. Give **four** conditions that reduce the quality of eggs for hatching. **(2mks)**

……

……

……

……

12. State **four** ways of restraining cattle during routine management. **(2mks)**

……

……

……

……

13. Give the use of each of the following workshop tools.

a) Cold chisel. $(\frac{1}{2}\boldsymbol{mk})$

……

……

b) Rip saw. $(\frac{1}{2}\boldsymbol{mk})$

……

……

14. Give **four** reasons why colostrum is important in calf feeding. **(2mks)**

……

……

……

……

……

15. State **four** harmful effects of lice in pigs. **(2mks)**

……

……

……

……

16. Give **four** reasons for swarming of bees. **(2mks)**

……

……

……

……

17. State **four** factors that lead to an increase in the respiratory rate of livestock**.** **(2mks)**

……

……

……

……

18. Outline **four** signs of heat in rabbits**.** **(2mks)**

……

……

……

……

19. Name **two** nutritional diseases in cattle**.** **(1mk)**

……

……

SECTION B (20 MARKS)

20. The photograph below represents an external parasite of livestock. Study it carefully and answer the questions that follow.



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

……

b) What is the economic importance of the parasite to a livestock farmer? **(1mk)**

……

……

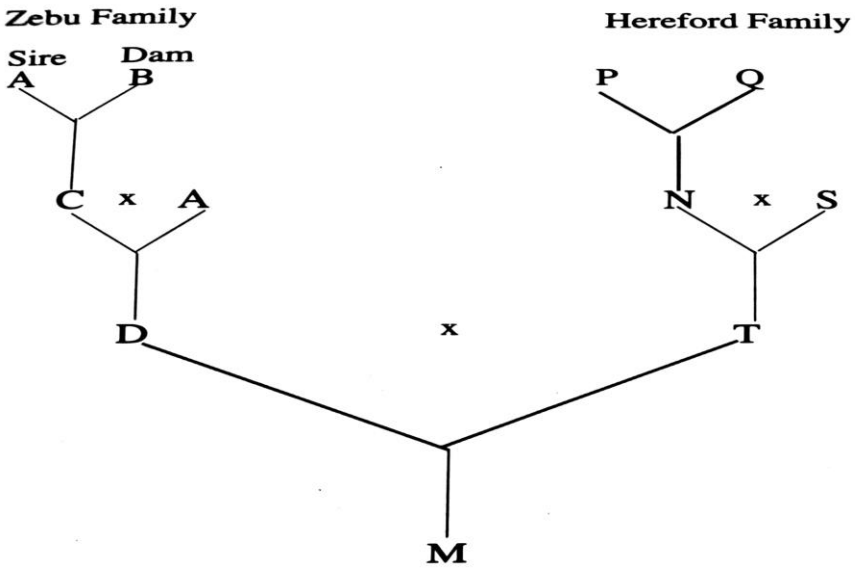
c) State **three** non-chemical methods of controlling the above parasite. **(3mks)**

……

……

……

21. The illustration below shows two different livestock families. Use it to answer the questions that follow.



a) Identify the breeding system between

i) C and A **(1mk)**

……

ii) D and **T** **(1mk)**

……

b) State **two** advantages of the breeding system identified in a) ii) **above** **(2mks)**

……

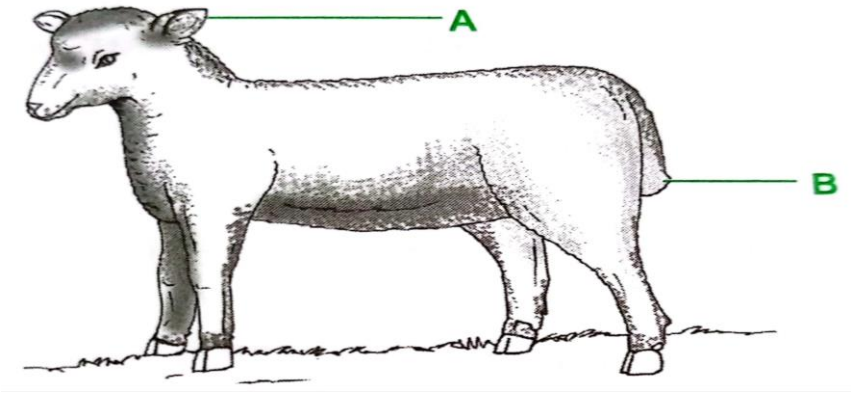
……

c) What name is given to offspring M. **(1mk)**

……

……

22. Below is a diagram of sheep. Study it carefully and answer the questions that follow.



a) Name the management practice carried out in the part labelled B if the sheep is an ewe.

(1mk)

……

b) Name one tool in each case that can be used to carry out operations on the parts labelled A and B.

(2mks)

A……

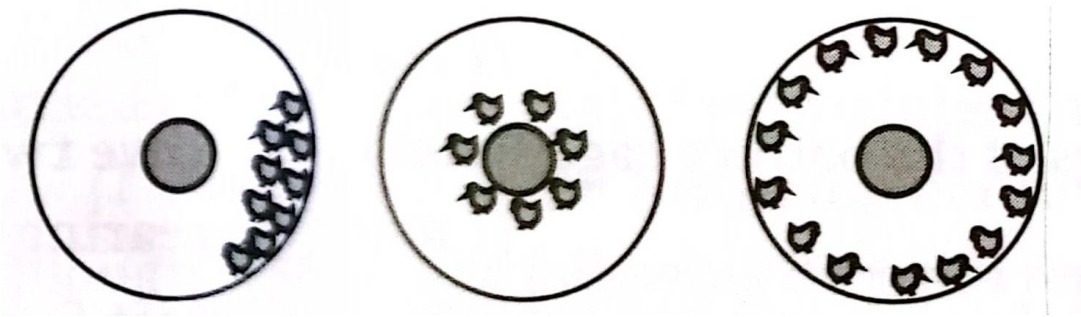
B…….....

c) What is raddling as used in the management of sheep**.** **(1mk)**

……

……

23. The following illustration show the behavior of chicks at different temperatures in a brooder



C D E

a) Explain the temperature conditions in each of the four diagrams C, D, E **(3mks)**

C…….

D……

E……

b) Draw a diagram to show the behavior of the chicks if the temperature in the brooder is the right one**.** **(1mk)**

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

……

……

SECTION C (40 MARKS)

24. a) Discuss foot and mouth disease under the following sub headings:

i) Causal organism **(1mk)**

ii) Livestock species attacked **(2mks)**

iii) Symptoms of attack. **(4mks)**

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

b) Explain **five** factors that affect digestibility of food in livestock. **(5mks)**

c) State **five** advantages of a four stroke cycle engine. (**5mks)**

25. a) Explain the procedure of establishing a fish pond. **(5mks)**

b) Outline **five** differences between exotic cattle breeds and indigenous cattle breeds. **(5mks)**

c) State the features of an ideal calf pen. **(5mks)**

d) Outline **five** symptoms of round worm infestation in cattle. **(5mks)**

26. a) Describe the preparation and management of a brooder before and after the arrival of day old chicks. **(5mks)**

b) Describe the uses of various equipment that are used in honey harvesting. **(5mks)**

c) Give **five** advantages of farm mechanization. **(5mks)**

d) Outline **five** factors considered when selecting construction materials. **(5mks)**

KCSE 2025 NAIROBI CLUSTER MOCK

KCSE EXAM SERIES 2

BUSINESS STUDIES

565/1

PAPER 1

TIME: 2 HOURS

NAME……

SCHOOL…… SIGN……

INDEX NO…… ADM NO……

Kenya Certificate of Secondary Education.

Instructions to Candidates

1. Write your name, admission number, class and school in the spaces given above.
2. Sign and write the date of the examination in the spaces provided above
3. Answer all the questions.
4. All answers should be written in the space provided below each question.
5. Candidates should check the question paper to ascertain that all the questions are printed.
6. All questions should be answered in English.

For official use only.

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

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

TOTAL

For Marking Schemes Contact 0746 222 000 / 0742 999 000

1. Classify the following resources as renewable or non-renewable resources. **(4 Marks)**

a) Hydro-electric power _____

b) Building stones _____

c) Gasohol _____

d) Soda ash _____

2. Highlight **four** ways in which the economic environment may positively influence the operations of a business **(4 Marks)**

……

……

……

……

3. The following items relates to Subukia Traders as at 30th March 2023.

	Ksh.
Buildings	250,000
Creditors	30,000
Five year loan	180,000
Stock	100,000
Cash in hand	60,000
Cash at bank	45,000
Debtors	15,000
Bank overdraft	24,000

Determine Subukia Traders capital as at 30th March, 2023. **(4 Marks)**

4. Outline **four** circumstances under which air transport may be used by a trader. **(4 Marks)**

……

……

……

……

……

……

5. Identify the book of original entry related to the following source documents. **(4 Marks)**

	Source Document	Book of original entry
(a)	Invoice issued	
(b)	Credit note received	
(c)	Receipt issued	
(d)	Invoice received	

6. Outline **four** roles played by intermediaries in the chain of distribution. **(4 Marks)**

……

……

……

……

7. The Kenyan government has increased taxes on various products. Outline **four** reasons for this trend. **(4 Marks)**

……

……

……

……

8. Outline **four** features of property insurance. **(4 Marks)**

……

……

……

……

9. State **four** functions of the entrepreneur in production of goods and services**.** **(4 Marks)**

……

……

……

……

10. Give a brief description of the following trends in forms of business units. **(4 Marks)**

a) Franchising

……

……

b) Amalgamation

……

……

c) Check-off system

……

……

d) Privatization

……

……

11. Highlight **four** circumstances under which a Chief Executive Officer may decide to use to letters in communicating to his staff. **(4 Marks)**

……

……

……

……

12. Outline **four** effects of an increase in demand for a commodity when supply remains constant. **(4 Marks)**

……

……

……

……

13. Highlight **four** limitations of using per capita income to compare standards of living between Kenya and China**.** **(4 Marks)**

……

……

……

……

14. State the effect of the following transactions on the balance sheet totals. **(4 Marks)**

Business transaction	Effect on balance sheet total
a) The sole proprietor brought additional capital to the business.	
b) Sold goods by cash.	
c) Paid outstanding loan by cheque	
d) Disposed an outdated computer at a loss	

15. The following balances relates to the retail business of Naisula for the month of April 2021

Sales 120,000
Expenses 20% of sales
Cost of goods sold 80,000

Calculate:

(i) Mark up. **(1 Mark)**

(ii) Margin. **(1 Mark)**

(iii) Total expenses. **(1 Mark)**

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

16. The inflation levels vary from one country to another. State any **four** levels that can be experienced in different economies of the world**.** **(4 Marks)**

……

……

……

……

……

17. List **four** forms of open trade credit. **(4 Marks)**

……

……

……

……

18. State **four** reasons why many organizations prefer an open office plan for employees **(4 Marks)**

……

……

……

……

……

19. Highlight **four** duties performed by commercial attaches in trade **promotion** **(4 Marks)**

……

……

……

……

20. State **four** benefits of bonded warehouses to the government **(4 Marks)**

……

……

……

……

21. Outline **four** measures that the government of Kenya can implement so as to encourage the establishment of firms in different counties across the country**.** **(4 Marks)**

……

……

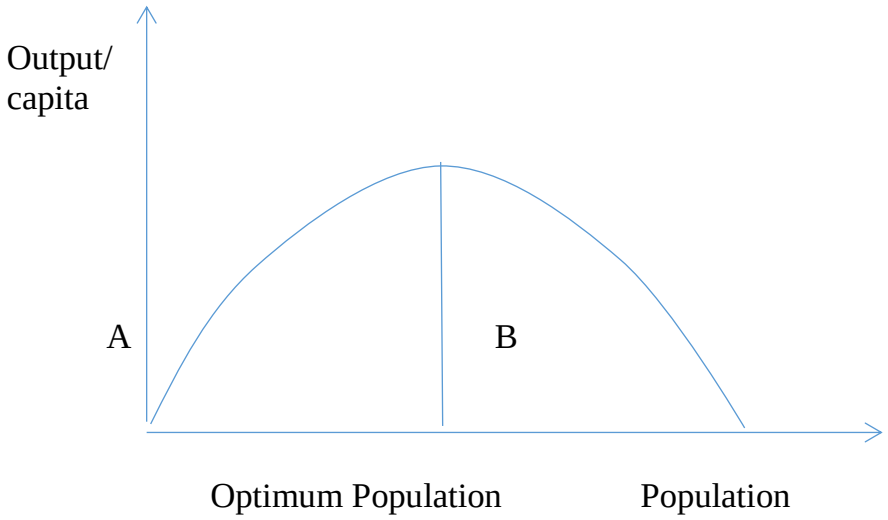
……

……

……

……

22. Study the following diagram.



Mention **four** challenges facing a country whose population is in the part marked B **(4 Marks)**

……

……

……

……

……

23. Give the name of the type of ledger where the accounts given below are **kept** **(4 marks)**

Account	**Type of Ledger**
a) Purchases	
b) Gilanis (Supplier)	
c) Salaries & Wages	
d) Drawings	

24. State **four** factors that influences the amount of money one can hold for transaction motive

(4 marks)

……

……

……

……

25. Describe the following documents as used in International trade **(4 marks)**

a) Import license

……

……

b) Certificate of origin

……

……

c) Bill of lading

……

……

d) Letter of credit

……

……

KCSE 2025 NAIROBI CLUSTER MOCK

KCSE EXAM SERIES 2

BUSINESS STUDIES

565/2

PAPER 2

TIME: 2½ HOURS

NAME……

SCHOOL…… SIGN……

INDEX NO…… ADM NO……

Kenya Certificate of Secondary Education.

INSTRUCTIONS TO STUDENTS

- *This paper consists of **six** questions.*
- *Answer any **FIVE** questions*
- *All questions carry equal marks.*

For official use only

Question	*Candidates score*

1. **(a)**Explain ***five*** importance of a business plan to an entrepreneur. **(10 marks)**

   (b) Explain ***five*** factors that may hinder development of a country. **(10 marks)**

2. **(a)**Explain ***five*** functions of commercial banks in an economy. **(10 marks)**

   (**b)**Outline the differences between co-operatives and partnership. **(10 marks)**

3. **(a)**Explain ***five*** reasons for government involvement in business. **(10 marks)**

(b) On 1st September 2020, Kiptala Traders had cash in hand of Shs.100,000 and a bank overdraft of Shs.15,000. The following transactions took place during the month.

Sept. 2: Bought goods in cash Shs.15,000.

Sept. 5: Received the following cheques from debtors after allowing a 2% discount in each case: Larry Kshs.9800 and Moryn Shs.14,700.

Sept. 7: Paid the following accounts by cash in each case deducting a 5% cash discount: Silas Shs.30,000 and Brayo Kshs.12,000.

Sept. 9: Sold goods on credit to Kimutai Sh. 12,000

Sept. 12: Kipsang settled his account of Kshs.20,000 in cash after deducting 2% cash discount.

Sept. 13:The cheque received from Larry was dishonoured

Sept. 14:Made net sales Shs.25,000 where cash Sh. 15,000 was received And the balance to be paid later

Sept. 15: Received a cheque from Abdul Shs.29,100 after allowing him a 3% cash discount.

Sept.16: Deposited all cash into the bank account except Shs.16,700.

<u>Required</u>:

Prepare a **three** column cashbook and balance it off. **(10 marks)**

4(a)Explain ***five*** types large scale retailer. ` **(10 marks)**

(b) Kenya's trade with Singapore indicates a Balance of payment deficit against Kenya. Explain ***five*** measures that Kenya can take to correct such balance of payment disequilibrium **(10 marks)**

5.(a) Rashid Holdings, a Steel selling business intends to promote her products around the country. Explain ***four*** factors that it must consider when choosing an appropriate method of product promotion. **(8 marks)**

(b) The following trial balance relates to progressive traders as at 31st Dec 2022

PROGRESSIVE TRADERS
TRIAL BALANCE
AS AT 31ST DEC 2022

Particulars	Dr	Cr
Purchases/sales	349,000	582,000
Debtors/Creditors	51,000	62,000
Motor vehicle	600,000	
Drawings	30,000	
Returns	22,000	19,000
Carriage in	10,000	
NCBA loan		170,000
Furniture and fittings	45,000	
Discounts	25,000	36,000
Stock (1/1/2022)	40,000	
Carriage outwards	7,000	
Rent		24,000
Advertising	13,000	
Land and Buildings	500,000	
Access Bank loan		210,000
Interest on loans	48,000	
Cash at bank	150,000	
Cash in hand	28,000	
Capital		815,000
Totals	**1,918,000**	**1,918,000**

Additional information.
Stock as at 31st December 2022 was valued at Kshs.30,000

Required.

i. Prepare a trading, profit and loss account for the year ended 31st December 2022. **(7 Marks)**

ii. Develop a balance sheet for Progressive traders as at 31st December 2022. **(5 Marks)**

6.(a) Explain ***five*** factors influencing the type of goods and services to be produced. **(10 marks)**

(b)Outline ***five*** features of monopolistic competition market structure. **(10 marks)**

KCSE 2025 NAIROBI CLUSTER MOCK

KCSE EXAM SERIES 2

ENGLISH

101/1

PAPER 1

TIME: 2 HOURS

(Functional Writing, Cloze Test and Oral Skills)

NAME……

SCHOOL…… SIGN……

INDEX NO…… ADM NO……

Kenya Certificate of Secondary Education.

INSTRUCTIONS TO STUDENTS

- *Write your **name, admission number** and **class** in the spaces provided.*
- *Sign and write the date of the examination in the spaces provided.*
- *Answer **all** questions in the spaces provided*
- *All your answers must be written in the spaces provided in this question paper.*
- *Candidates must answer all questions **in English***

Question	Maximum Score	Student's Score	Examiner's Initials
1	20		
2	10		
3	30		
TOTAL	60		

FUNCTIONAL WRITING (20MARKS)

1. Imagine that you are the council member in charge of health and sanitation in your school. A number of students in the school have complained of severe stomachaches. The Principal has appointed you the chair to a committee of 4 members that is meant to investigate the likely causes of the stomachaches and come up with recommendations to curb the problem. Your investigation should focus on the kitchen, water and general cleanliness around the school. You are expected to submit the report in a week's time. Write the report you will submit to the principal. **(20 marks)**

……

……

……

……

……

……

……

……

……

……

……

……

……

……

……

……

……

……

……

……

……

……

……

……

……

……

……

……

……

2. CLOZE TEST (10 MARKS)

Read the passage below and fill in each blank with an appropriate word.

Intense rainfall has affected various regions (i) ... …… Kenya, including the Coastal area, Central areas including Nairobi, the Western Highlands, Rift Valley, Lake Victoria Basin, South-eastern lowlands and North-eastern regions.

Since the (ii)..... of the March-April-May (MAM) rains, multiple counties have felt its (iii)....., resulting in households being affected, displacements, establishment of displacement (iv)....., submerged arable land, impacted businesses and livestock deaths.

The Kenya Red Cross Society has proactively prepared for (v)..... challenges by ensuring (vi)..... emergency responses, conducting search and (vii)...……..... missions, prepositioning shelter kits and distributing essential (viii).....

The Kenya Red Cross has also actively ……..(ix) in risk efforts to raise public (x)..... and promote preparedness.

3. ORAL SKILLS (30 MARKS)

(a) Read the poem below and answer the question that follow:

If we must die [Claude Mackay]

If we must die_ let it not be like hogs;
Hunted and penned in an inglorious spot,
While round us bark the mad and hungry dogs,
Making their mock at out accursed lot.
If we must die_ oh let us nobly die,
So that our precious blood may not be shed
In vain. Then even the monster we defy
Shall be constrained to honour us though dead!
Oh, kinsmen! We must meet our common foe;
Though far outnumbered, let us show us brave.
And for their thousand blows deal one deathblow!
What though before us lies the open grave?
Like men we'll face the murderous, cowardly pack
Pressed to the wall, dying, but fighting back!

QUESTIONS

i. Describe the rhyme scheme of the poem above. **(2marks)**

……

……

……

……

ii. How would you say line 14 of this poem? **(2marks)**

……

……

……

……

iii. Apart from rhyme Identify any other sound devices used in the poem above**. (2marks)**

……

……

……

(b) Never put off until tomorrow what you can do today.

i. Identify the genre above. **(1mark)**

……

ii. Who are the appropriate audience for the above piece? And why. **(1mark)**

……

……

iii. What are the functions of the above genre? **(1mark)**

……

……

(c) Place stress in the following words **(3marks)**

i. Mis.use

ii. Me.ssage

iii. a.larm

(d) Kimkum was to attend a graduation ceremony for his daughter in Mombasa. Being his first time in the city he asked Joel his son-in-law to give him directions to the graduation venue .But it turned out that Kimkum did not reach his destination which important details did Joel fail to include when giving directions**.** **(4marks)**

……

……

……

……

……

……

(e) Two of your classmates have disagreed over a certain issue leading into a conflict. As the student in charge of the class, you decide to arbitrate, which three negotiation skills will you use to ensure that an agreement is arrived at**.** **(3marks)**

……

……

……

……

……

(f) Pick the old one out according to the pronunciation of the vowel sounds in the words below. **(3marks)**

i. Cat , about ,mat , apple…….

ii. Cup ,up ,busy , money……..

iii. Bed ,said ,dead ,because……

(g) Write another word pronounced the same way as the following. **(3marks)**

i. Curb……

ii. Symbol…….

iii. Idle……

(h) ***Read the conversation below and then answer the questions that follow.***

Otieno : Hello. Is that Mamba School?

Secretary 1: Yes, what is your name?

Otieno : Otieno Juma.

Secretary 2: What do you want?

Otieno : May I speak to the head teacher?

Secretary 3: She went to the market what do you want to tell her?

Otieno : Sorry, it is confidential, may I speak to the deputy?

Secretary 4: She is attending a pre-wedding meeting, in fact she is never in school.

Otieno : Oh! I shall call later.

Secretary 5: Okay

Otieno : Thank you. bye

The secretary lacks telephone conversation etiquette, write the corrections on how she would have responded below. **(5marks)**

1. ……
……

2. ……
……

4. ……
……

4. ……
……

5. ……
……
……

KCSE 2025 NAIROBI CLUSTER MOCK

KCSE EXAM SERIES 2

ENGLISH

101/2

PAPER 2

TIME: 2½ HOURS

(*Comprehension, Literary Appreciation and Grammar***)**

NAME……

SCHOOL…… SIGN……

INDEX NO…… ADM NO……

Kenya Certificate of Secondary Education.

INSTRUCTIONS TO STUDENTS

- *Write your **name, admission number** and **class** in the spaces provided.*
- *Sign and write the date of the examination in the spaces provided.*
- *Answer **all** questions in the spaces provided in **blue ink.***
- *All your answers must be written in the spaces provided in this question paper.*
- *Candidates must answer all questions in **English***

Question	Maximum Score	Student's Score	Examiner's Initials
1	20		
2	25		
3	20		
4	15		
TOTAL	80		

1. COMPREHENSION

Read the following passage and answer the questions that follow. (20 marks)

Somalia's climate crisis and security nexus is a complex issue exacerbated by environmental challenges, social upheaval and resultant security threats.

Somalia is highly vulnerable to climate-related disasters such as droughts and floods, which often occur in a cyclical pattern. For instance, prolonged droughts parch the land, making it prone to flash floods when the rains finally come. This leads to widespread devastation and permanent displacement of agro-pastoral communities in the affected areas.

The communities in this quandary are vital to food production in Somalia. The agro-pastoralist hamlets and villages along and between the Jubba and Shabelle rivers, which produce most of the food crops consumed in Somalia and sometimes exported, encounter an arduous task in managing the impacts of the climate crisis. Extended periods without rain or destructive floods compel them to abandon their herds and farms and seek shelter in nearby urban areas. This influx then pressures larger towns and, if not intervened, strains the capital city, Mogadishu.

In the rare intervals when rainfall becomes stable, rainy seasons are back on schedule, and flood risks are reduced, repatriating internally displaced persons from Mogadishu to their original villages is nearly impossible. This results in the permanent loss of food production for the country and, with it, the communities' traditional way of life.

Despite Somalia's minimal contribution to greenhouse gas emissions the country faces disproportionate impacts from the climate crisis, resulting in frequent humanitarian crises and revolving threats to its stability and security.

Additionally, the climate crisis in Somalia has indirect regional and international security implications, notably in the context of recruitment by armed groups such as Al Shabaab. High unemployment and school dropout rates resulting from the climate crisis provide fertile ground for recruitment by armed groups and criminals seeking to exploit disenfranchised Somali youth. Al Shabaab, in particular, benefits from the pool of jobless and vulnerable young people, leveraging their frustrations, to perpetuate its agenda of extremism and violence.

The climate crisis-induced erratic movements of pastoralist communities in Somalia, Kenya, Ethiopia and Djibouti pose a regional security challenge as they have the potential to wreak havoc on the largely unmanned **porous** borders between these countries.

This movement of people and animals can overwhelm the already meagerly-resourced border police, local administrations and customs officials, creating vulnerabilities that can be exploited by criminal elements and armed groups, further destabilizing the already unstable region.

On the international scale, the sudden disruptions and severe loss of lives and livelihoods resulting from the climate crisis in Somalia and the Somali-inhabited neghbouring regions in Djibouti, Ethiopia and Kenya have the potential to instigate large-scale migrations of populations, particularly the youth, who seek refuge in other countries. This includes dangerous journeys on

foot and by boat, with near-suicidal will to reach Europe, the Americas, and, to a lesser extent, the Middle East.

Addressing the complex climate-insecurity nexus in Somalia and its immediate neighbourhood necessitates a comprehensive strategy that considers the interconnectedness of environmental issues, societal vulnerabilities and large-scale security threats.

Commitments and assurances made regarding compensating for the loss and damage suffered by nations impacted by global warming at the most recent handful of Conference of Parties(COPs) notwithstanding, there appears to be little substantial change in the crisis landscape, particularly in Somalia, where the impact is most severe.

Instead of serving as a means to achieve a goal, the COPs seem to have morphed into an end in themselves. It has become a continuous cycle of one COP leading to another, with no concrete solutions.

To effectively address this crisis, it is essential to convert the declarations and pledges into dollars and projects. In addition, the cumbersome bureaucracy and barriers to accessing global funding for climate crisis **mitigation** and adaptation must be greatly reduced, if not eliminated entirely.

In this light, policy practitioners in Somalia and relevant international institutions must work together to conceive and implement well-informed initiatives that aim to lessen the negative impacts of climate change, promote tailored sustainable economic opportunities, and strengthen community resilience.

Furthermore, prioritizing investments in education, employment generation, and conflict resolution mechanisms can play a vital role in tackling the root causes that facilitate the manipulation of marginalised populations by terrorists, pirates and other criminal outfits. Only by developing and implementing a realistic and comprehensive strategy that integrates efforts in environmental preservation, social advancement and crisis identification and management can those who hold the hilt and purse strings bring about sustainable solutions that protect the welfare and safety of not only the Somali population, but also that of the **broader** region and the global community. Forewarned is forearmed. ***Adapted from the S/N of May 19th, 2024***

QUESTIONS

(a)What according to the passage has compounded the climate and security problem in Somalia?

(1 mark)

……

……

(b) Explain the irony captured in paragraph twelve? **(2 marks)**

……

……

……

……

(**c)** In not more than 30 words, summarize the main challenges posed by the climate crisis in Somalia. **(4 marks)**

……

……

……

……

……

……

(d) Apart from the solutions the writer of the article gives to combat the environmental crisis in Somalia, explain one intervention strategy you think can work for Somalia's climate crisis? **(1 marks)**

……

……

(e) Explain the overall tone of this passage. **(2 marks)**

……

……

……

……

(f) It has become a continuous cycle of one COP leading to another, with no concrete solutions. Begin the sentence with: With… **(1 mark)**

……

……

(g) How do criminal gangs such as Al Shabaab capitalize on the climate crisis in Somalia? **(2 marks)**

……

……

……

……

(h) Which comprehensive statergy is needed to deal with the complex climate insecurity connection involving Somalia and its neighbours? **(3 marks)**

……

……

……

……

(i) Explain what this idiom means: "to be forewarned is forearmed" **(1 mark)**

……

……

……

(j) Explain the meaning of the following words and expressions as used in the passage. **(3 marks)**

(i) Porous borders ..……

(ii) Mitigation …….

(iii) Broader ……..…….

2. EXCERPT (25 MARKS)

2. Read the following excerpt and then answer the questions that follow (25 mks)

Bembe: *(Interrupting Nicole)* The matter of *The Samaritan* is weighty. It can destroy lives.it is threatening the lives of many powerful people. They are fighting back and they will destroy your life. I am giving you a chance to secure your life. I am an officer whose duty is to protect lives. Just do what the Mayor told you. You should never fight a losing battle.

Nicole: *(Firmly)* I have made a choice to do what is right. That is not negotiable. And besides, I have no control over the App. The National Information and Communications Technology Corporation is now in charge of that App.

Bembe: *(Interrupting Nicole)*I understand that to mean you are ready for a fight. And to get us started, are you aware that the signal of your phone was at one time located at the scene of murder?

Nicole*: (In horror and rising to her feet)* That`s preposterous! *(Moves towards the door)* I need to see the Principal now!

Bembe: *(Blocking the way)* And what about last night?

Nicole: What?

Bembe: The school generator.

Nicole: School generator? What about it?

Bembe: Who sold it?

Nicole: That is ridiculous!

Bembe: I thought so, too.

Nicole: *(Trying to find a way past Inspector Bembe)* I have nothing to do with the school generator!

Bembe: *(Blocking her every move)* The generator has been stolen, and you and I know who stole it!

Nicole: Listen, Mr. Officer, do not try to fabricate anything against me. It will get you nowhere.

And if you insist, this will become the darkest day in your career!

Bembe: What? Are you threatening a police officer?

Nicole: *(With a sharp and firm voice)* You must not break the law by accusing me of crimes I have not committed!

Bembe: You`re just confirming some of the other accusations that have been made against you.

Nicole: Which allegations?

Bembe: You have a reputation for being too strong-willed to be suitable for a school teacher. You`re as stubborn as a mule.

Nicole: What crime is that?

Bembe: Well, it is not a crime as such; but don`t you think it is a bad influence to the students? *(Bangs the table violently and shouts an order. Two police officers enter.)* Handcuff her! *(There is a commotion as the officers reach out to Nicole. She resists but is overpowered. There is an interval of silence as Bembe begins to rummage through papers on Nicole`s table. Nicole refuses to move and sits down on the floor. The officers drag her on the floor)* Stop. *(The officers stop. There is silence Then Bembe moves behind Nicole`s table and starts pulling the drawers open, one after the other, removing and throwing papers all over the floor.)* Where have you hidden it?

Nicole: Hidden What?

Bembe: The Samaritan! *(Nicole is visibly surprised at the answer but remains silent.)* I will tell

you this, whenever you see me personally involved in an arrest, you must know it`s a serious matter, as serious as death. And you should be afraid. Very afraid!

Nicole: I am not guilty of anything, and I refuse to be intimidated!

Bembe: *(Inspector Bembe bangs the table violently with his gun. Nicole recoils with a start.)* Woman! Show some seriousness! This is no laughing matter. Are you willing to talk?

Nicole: About what? *(There is silence as Inspector Bembe wears his beret and places his scepter under his armpit.)*

a) Briefly explain what Nicole was told to do by the Mayor. **(3marks)**

……

……

……

……

b) Summarize the circumstances that makes Bembe interrupt Nicole at the beginning of the excerpt **(3marks)**

……

……

……

……

c) Describe the following characters as seen in the excerpt **(4marks)**

i) Bembe

……

……

……

ii) Nicole

……

……

……

d) Describe the mood portrayed in the excerpt. **(3 marks)**

……

……

……

……

e) From your knowledge of the text, explain how the Samaritan works **(3 marks)**

……

……

……

……

f) Identify and state the effectiveness of two styles used in the excerpt**.** **(4 marks)**

……

……

……

……

……

g) Identify and illustrate one theme from the excerpt. **(2 marks)**

……

……

……

……

h) You cannot fabricate crimes against me! (Begin: Crimes …) **(1 mark)**

……

……

i) Explain the meaning as used in the excerpt**.** **(2 marks)**

i) a losing battle

……

ii) prepositions

……

3. POETRY (20 MARKS)

PASSED LOST PAST

Wistful of how simple life was then,
I took a trip down memory lane;
A long trip to my emerald childhood
And thought fondly and dearly of a passed lost past
And longed for the long stretches of lush green.
Longed for the pleasant site in a meadow;
Complete with sparkling stream
Where I gulped times of yore.
And took my first dip.

I yearned for the good old
For the return of an irrecoverable past
For the experience of what once was
When green jungle roared with life
But there are no roars here anymore.
Only chainsaws grumbling incessantly
Over our plaid flannel shirts and steel-toe boots

Wild jungle meets wild man;
and someone must give way.
I yearned for the good old
When birds built cheery nests and chirped long and hard
Atop my grandmother's misty hut
But there are no cheery nests there anymore
Something seems to have given way
And another seems to be at risk of being forgotten
Yet many others we have bulldozed into oblivion

Now wooded areas are intermittent
Winters much warmer
And somehow, the place is ominously different.
Even flowers don't smell like they used to
And giant concrete is taking over;
a bite every day,
One great oak after another.
Thunderclouds creepily loom overhead
like pitiless vultures
Waiting to zoom in and unflesh

I so badly want things to be
As they had always been;
Before we ever set foot here
Before this god forsaken expedition:
Cleaner, greener, fresher, tastier.
Yet, in this jungle man eats man
And there is no resurrection of the grand old
The delightful ambiance of olden place of plenty long gone

Questions

a) Who is the persona in the poem above? **(2marks)**

……

……

……

b) What is the subject matter of the poem? **(4marks)**

……

……

……

……

……

c) Comment on use of imagery in the poem. **(6marks)**

……

……

……

……

……

……

……

……

d) Why do you think the persona says wooded areas are intermittent? **(1mark)**

……

……

……

e) Describe the mood of the poem. **(3marks)**

……

……

……

……

……

f) Comment on the suitability of the title. **(2marks)**

……

……

……

g) Give the meaning of the following lines as used in the poem: **(2marks)**

i) Where I gulped times of yore

and took my first dip

……

……

……

4. GRAMMAR (15 MARKS)

(a) Rewrite the following questions as instructed. **(4 marks)**

i) It is healthy to run in the morning. (Rewrite using a **gerund**)

……

ii) Mwadime sat in class for four hours. He finished his reading The Samaritan. (Combine using the **present participle.)**

……

……

iii) She argued the case so convincingly that the jury gave her consent.

(Begin with: So...)

……..

iv) She arranged her rings, necklaces, and bracelets in the closet.

(Replace the underlined words with one word)

……

b) ***Complete the following sentences with a phrasal verb that starts with the word inbrackets.***

(3 marks)

i. When he..... , he was in a hospital. (come)

ii. You need to .....with your classmates. (get)

iii. The candidates need to.....their notes before they sit for any examination. (run)

c) ***Fill in each blank space with the most appropriate pronoun from the words in brackets*****(3 m**

a) Between you and.....(me/i) who is taller?

b) Tyra and… ..... (she/her) left for Mombasa.

c) The teacher asked Austin and ..... (I/me) to carry the books.

d) Fill in the blank spaces with the correct preposition (3 marks)

(i) We danced..... rhythm of their drums

(ii) I have placed the table.....the shade of that tree

(iii).....The thief dashed the house when he saw the police officers.

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

John and Alice looked at the restaurant with a menu.

……

……

KCSE 2025 NAIROBI CLUSTER MOCK

KCSE EXAM SERIES 2

ENGLISH

101/3

PAPER 3

TIME: 2½ HOURS

(Creative Composition and Essays Based on Set Texts)

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 provide above.

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

c) Answer three questions only.

d) Each of your essays must not exceed 450 words.

e) All answers should be written in the answer booklet provided.

f) Candidates must answer the questions in English.

For Examiner's Use Only

Question	MaximumScore	Candidate'sScore
1	20	
2	20	
3	20	
Total Score		

1. IMAGINATIVE COMPOSITION (20 marks)

Either

(a) Write a composition beginning:

As the man approached, I knew I had seen him somewhere…

Or

(b) Write a composition on the following topic:

Ways of eliminating drug abuse among the youth.

2. FATHERS OF NATIONS By PAUL B. VITTA (20 marks)

Individuals' tribulations in a country are usually caused by inept leadership. With clear illustrations from Paul B. Vitta's *Fathers of Nations*, write a composition to validate this statement.

3. The Optional Set Text (20 marks)

Answer any one of the following three questions.

Either

a) A SILENT SONG AND OTHER STORIES Edited by Godwin Shiundu

Urban people face various challenges. Prove how true this statement is basing your illustrations on Meja Mwangi's *Incident in the Park.*

Or

b) AN ARTIST OF THE FLOATING WORLD By Kazuo Ishinguro

Write an essay on the negative effects of war as portrayed in the novel.

Or

c) PARLIAMENT OF OWLS By Adipo Sidang

Write an essay on oppression as brought out in Parliament of Owls.

KCSE 2025 NAIROBI CLUSTER MOCK

KCSE EXAM SERIES 2

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

a) Andika jina lako na nambari ya usajili kwenye nafasi ulizoachiwa hapo juu.
b) Tia sahihi yako kisha uandike tarehe ya mtihani katika nafasi ulizoachiwa hapo juu.
c) Andika insha **mbili**. Insha ya kwanza ni ya **lazima.**
d) Kisha chagua insha nyingine moja kati ya hizo tatu zilizobakia.
e) Kila insha isipungue maneno **400**.
f) Kila insha ina alama **20.**
g) Kila insha lazima iandikwe kwa lugha ya **Kiswahili.**

Kwa matumizi ya mtahini pekee

Swali	Upeo	Alama
1	20	
2	20	
3	20	
4	20	
Jumla	40	

1.Lazima

Wewe ni katibu wa Shirika la Umoja wa Vijana Kudumisha Mazingira. Mmekuwa na kikao kujadili hatua ambazo zimechukuliwa kuhifadhi mazingira nchini. Andika kumbukumbu za mkutano huo.

2.Mitandao ya kijamii ina faida nyingi. Jadili

3.Tunga kisa kitakachodhihirisha maana ya methali ifuatayo:

“Mkono mmoja hauchinji ng’ombe.

4. Andika insha itakayoanza kwa :

Nilipomtazama tu, alishusha uso wake kutokana na maovu aliyonitendea…

KCSE 2025 NAIROBI CLUSTER MOCK

KCSE EXAM SERIES 2

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 usajili shuleni katika nafasi ulizoachiwa hapo juu.*

*(b) Jibu maswali **yote.***

(c) Majibu yote yaandikwe kwenye nafasi ulizoachiwa katika kijitabu hiki cha maswali.

*(d) Majibu yote ni **lazima** yaandikwe kwa **lugha ya Kiswahili.***

(e) Usitoe ukurasa wowote kutoka kwenye kijitabu hiki.

KWA MATUMIZI YA MTAHINI PEKEE

SWALI	UPEO	ALAMA
1. UFAHAMU	15	
2. MUHTASARI	15	
3. SARUFI	40	
4. ISIMUJAMII	10	
JUMLA	80	

For Marking Schemes Contact 0746 222 000 / 0742 999 000

1. UFAHAMU (Alama 15)

Soma kifungu hiki kisha uyajibu maswali yanayofuata.

Muhula wa kwanza ulipoanza, kama ilivyokuwa desturi katika shule ya Askofu Timotheo, wanafunzi walichunguzwa hali na Sista. Sista akaandika nakala ya matokea ya uchunguzi wake na kumkabidhi mwalimu mkuu wa shule Bi. Margaret. Mwalimu Mkuu naye akafanya lililomjuzu. Akaandikia waraka wazazi wa wasichana walikuwa katika nakala ya matokeo ya Sista.

Jumatatu ya juma la tatu la muhula ilianza kama siku nyinginezo. Wanafunzi walijumuika gwarideni. Maombi ya asubuhi yalifanywa. Mwalimu wa zamu akawakumbusha wanafunzi majukumu Yao na bendera ikapandishwa. Zamu ya mkuu wa shule ilitimia. Aliwakumbusha wanafunzi umuhimu wa kuwajibikia vitendo vyao. Baada ya hilo,aliita majina ya wanafunzi watatu na akatangaza kwamba baada ya kufumukana wafike ofisini mwake. Vicheko vya chini vilianguliwa. Sababu ya kuitwa kwao wanafunzi wale ilikuwa dhahiri.

Sela na wenzake wawili walipofika ofisini walielekezwa wasubiri katika chumba cha mapokezi. Ingawa walifahamu sababu ya kuitwa pale,mpango uliokuwepo ulikuwa usiku wa giza. Hakuna aliyezungumza na mwenziwe kutokana na muemeo wa mawazo mzo. Wote waliinamisha nyuso zao.

Baada ya nusu saa hivi, ofisini mliingia wazazi wawili; wa kike na kiume. Walikuwa wazazi wa Sela; Mzee Butali na mkewe. Wao walionekana kuemewa na fikra. Kutokana na urasimu wa muktadha ule,hapakuwa na mazungumzo baada ya salamu. Mara kwa mara,Mzee Butali alimtupia bintiye jicho la uhasama kabla ya mhazili kumfahamisha mwalimu mkuu kuhusu mjo wa wazazi wale.

Ofisini,Bi. Margaret alitia udibaji, " Asanteni kwa kuja. Sisi kama wazazi na walimu hukabiliana na mengi. Tukio lililowaleta hapa ni la kawaida kwetu. Ingawa sisi hufanya tuwezayo kuwalinda wanetu,mara nyingi tabia zao hutupiga chenga..."

Wakati huu wote wazazi wa Sela walikuwa wamenyamaza. Mama yake Sela alikuwa akimtazama Bi. Margaret huku Mzee Butali akiwa ameinama. Bi. Margaret alipokamilisha usemi wake,Mzee Butali aliinua uso wake na kumtazama mwalimu mkuu.

"Mwalimu,nina swali moja ambalo ningetaka unijibu. Je,kwa nini sisi huwaletea watoto shuleni? " Mzee Butali aliuliza kwa sauti iliyojaa uchungu.

Baada ya mazungumzo kati ya mwalimu mkuu na wazazi wa Sela, uamuzi ulitolewa. Sela na wenzake wawili hawangeweza kusoma pamoja na wengine baada ya hali zao kubainika. Bi. Margaret alipendekeza watafutiwe shule za kutwa karibu na watokako ili waendelee kusoma huku wazazi wakiwatunza. Alikuwa amewaandikia barua za mapendekezo ili wapokelewe katika shule ambazo wangechagua. Sela aliondoka shuleni na wazazi wake.

Boma la Mzee Butali liligeuka jahanamu baada ya kutoka shuleni. Mzee Butali aliwazulia majojo Sela na mama yake. Majirani nao walishuhudia bughudha hizo kwa mbali.

Mzee Butali alichanganyikiwa asijue la kufanya. Hakuwahi kufikiria kama ile ingetokea nyumbani kwake.

"Leo ndio mtanitambua. Mama gani anayemtazama mwana akigeuka afriti? Sikutumia pesa zangu mimi katika elimu yake hadi nikaitwa pangu pakavu? Mtwae kilicho chenu kisha mniondokee!" Mzee Butali aliwafokea Sela na mama yake.

"Baba Sela ,ni nani kasema huu msimba ni wangu? Tutautwaa pamoja. Huyu ni mtoto wetu,sio maradhi. Tutaondoka ndio;lakini elewa uchungu wa mwana ajuaye mzazi. " Mama yake Sela alitoa kauli yake.

Vilio vya Sela na mama yake havikusaidia kitu. Bembeleza za wanakijiji nazo hazikufaa kitu. Mzee Butali hakuelekea kulegeza msimamo wake. Ilibidi Sela na mama yake watorokee kwa jamaa yao aliyeishi karibu. Hapo ndipo walikaa kwa muda wa majuma matatu kabla ya Mzee Butali kubadili nia.

Kutokana na ushawishi wa wazee wa kijiji,Mzee Butali alielewa kuwa maji yakimwagika hayazoleki. Huruma zilimwingia na hasira zikapungua. Aliwarudisha jamaa zake nyumbani kwa majuto makuu. Wazee wawa hawa ndio waliomsihi Mzee Butali afanye alivyoelekezwa na mwalimu mkuu wa shule aliyotoka Sela.

SHULE ilipopatikana,Sela alihudhuria masomo hadi pale ilishindikana;siku zake za kujifungua zilipokaribia. Alijifungua kitoto cha kike. Nyanya ya mtoto akaelekeza kitoto hicho kiitwe Kadogo.

Sela alikaa nyumnani kwa muda wa miezi mitatu akikitunza kitoto chake. Katika ufukara wa pale nyumbani,mama yake Sela hangeweza kukinunulia kitoto viguo. Ilibidi matambara yatumiwe kukivisha kitoto.

MASWALI

a) " Aliwakumbusha wanafunzi umuhimu wa kuwajibikia vitendo vyao" Thibitisha kauli hii.

(Alama 1)

……

……

……

b) Ingawa sisi hufanya tuwezayo kuwalinda wanetu, mara nyingi tabia zao hutupiga chenga. Eleza jinsi ambavyo walipigwa chenga. **(Alama 1)**

……

……

……

c) Kwa mujibu wa kifungu hiki,eleza madhara ya ujauzito wa mapema shuleni. **(Alama 4)**

……

……

……

……

……

……

d) Ni mambo gani yalimfanya Mzee Butali kubadili nia yake ? **(Alama 2)**

……

……

……

e) Eleza jinsi taasubi ya kiume inayojitokeza katika kifungu hiki. **(Alama 2)**

……

……

……

f) " Uchungu wa ajuaye mzazi". Eleza jinsi ukweli wa methali hii ilivyotimia hatimaye. **(Alama 2)**

……

……

……

……

g) Eleza maana ya maneno yafuatayo kama yalivyotumika katika kifungu hiki. **(Alama 3)**

i) lililomjuzu.....

ii) mojojo.....

iii) pangupakavu.....

UFUPISHO: (ALAMA 15)

Soma kifungu kifuatacho kisha ujibu maswali.

Usafiri katika nchi nyingi za kiafrika ni tatizo sugu. Baadhi ya watu hutembea kwa muda mrefu kwa miguu kwa kuukosa usafiri wa haraka. Wengine hupanda hata ngamia ili wapige hatua. Pia punda hutumiwa kusafirisha mizigo. Kwa wale waliodiriki kujinunulia magari, muda haupiti kabla ya ukarabati kuhitajika. Mamilioni ya magari ya aina hiyo huwa tu ni ya kubebewa nyundo na parafojo kila wakati. Hali hii imezidishwa na barabara ambazo hazijatiwa lami au hata zikiwa zimetiwa, hupachikwa kiholela tu. Mashimo barabarani yanaharibu magurudumu na hata magari yenyewe. Isitoshe, ukata katika jamii unachangia uhaba wa magari mazuri na hata ubovu wa hayo machache. Hii ni kwa sababu watu hawana ngwenje za kununulia vipuri vifaavyo au kujinunulia magari mapya.

Wengine hujikidhia mahitaji yao ya usafiri kwa kutumia baiskeli. Hizi zina nafuu kifedha kuliko magari, lakini haziwezi kubeba mizigo mingi na mizito.

Wachache sana hutumia eropleni na meli ambapo wengi huweza kuyatumia magari moshi. Magari moshi hubeba watu na vitu kwa wingi. Gharama za ukarabati wa reli, mabehewa ya magari hayo na injini zao, zimesababisha ongezeko kubwa la nauli katika miaka ya hivi karibu. Watu wengi wanashindwa kuulipia usafiri huu. Baadhi yao huyadandiadandia magari hayo hadi paani mwa mabehewa na mabogi ili tu wakwepe kulipa nauli. Mtindo huu hautatizi tu shirika la reli bali huzua hatari kwa wasafiri. Baadhi ya wadandiaji huporomoka na kujivunjia viungo, jambo ambalo huongeza idadi ya walemavu bure bilashi.

Matatu na mabasi ni aina ya uchukuzi ambao ni maarufu nchini Kenya. Uchukuzi huu umekuwa ukiwafaa watu wengi sana kwa miaka na Dahari, hasa wale wa kima cha chini na wastani. Jambo linalowaudhi abiria zaidi ni ukosefu wa kudhibiti mambo mengi yanayohusiana na hiyo ya usafiri. Mathalani, kudhibiti mwendo wa magari hayo, tabia za utingo na dereva na kujaza watu garini kama makopa. Zaidi ya hayo, imekuwa ni shida kuzidhibiti tabia za wale wapendao kurambishwa asali katika sekta hii.

Hivi maajuzi, waziri wa usafiri na wamasiliano alifanya juu chini akaibuka na mikakati kabambe ya kuondoa udhia mwingi katika sekta ya usafiri. Aliwataka wenye magari kuweka vidhibiti mwendo, abiria kuitumia mikanda ya usalama, utingo na madereva kuvaa sare na magari kutobeba abiria kupita kiasi. Kwa kuwa wenye magari wengi hawakuweza kutimiza masharti hayo kwa muda uliowekwa, ilibidi magari mengi yasitumike kwa muda.

Abiria ambao walikuwa wamechoshwa na vituko barabarani walipiga moyo konde na kujisemea, “si hoja, hata itabidi tutembee kwa miguu kwa muda ni sawa, mradi tupate suluhisho la kudumu”

Kulingana na matokeo ya uchunguzi uliofanywa muda mfupi uliopita, imegunduliwa kuwa tayari ajali zimepungua, usafiri umekuwa wa utulivu na nidhamu ya utingo na madereva imeimarika. Zogo la “kama hutaki kubanwa nunua lako” limekwisha kabisa.

a)Fupisha aya mbili za kwanza kwa maneno 45-55**.** **(alama 8)**

Matayarisho

……

……

……

……

……

……

……

……

……

Jibu

……

……

……

……

……

……

……

……

……

b)Usafiri katika nchi nyingi za kiafrika ni tatizo sugu. Jadili kwa kutumia maneno 40-50 **(Alama 7)**

……

……

……

……

……

……

……

……

……

……

Jibu

……

……

……

……

……

……

……

……

……

MATUMIZI YA LUGHA (ALAMA 40)

(a) Andika neno lenye mpangilio ufuatao wa sauti: kikwaruzo ghuna cha menoni, irabu tandazwa ya kati, kizuiwa hafifu cha ufizi na irabu ya tandazwa ya juu**.** **(al 2)**

……

……

……

(b) Zitumie mofimu hizi kuunda neno: Mofimu ya unominishaji, mofimu ya mzizi, kiishio, kiambishi cha mazoea**.** **(al 2)**

……

……

……

(c) Ainisha sentensi hii kiuamilifu: Huenda mgeni afike mapema**.** **(al 1)**

……

(d) Fuata maagizo yaliyo mabanoni:

i) Joka hilo liuawa kwa gongo. (Andika kwa wingi) **(al 2)**

……

……

i**i)** Mwanamme huyo alichukua kikombe. (Badilisha iwe katika ukubwa) **(al 2)**

……

(e) Tumia kistari kirefu katika sentensi ili kuonyesha msemaji. **(al.2)**

……

……

……

(f) Andika katika usemi wa taarifa. **(al.2)**

"Mike! Mike! Njoo hapa umwone farasi nitakayesafiri naye, " mjomba akaita kwa bashasha.

……

……

(g) Kamilisha pengo kwa kugeuza neon lililo kwenye mabano kulingana na maagizo**.** **(al.2)**

Wagombanaji hao ……. radhi baada ya ugomvi. (wa – tendeana)

(h) Tunga sentensi yenye muundo ufuatao wa maneno. **(al.2)**

KN(N+RH) + KT(t+E)

……

……

(i) Tunga sentensi mija kutofautisha maana ya **bawaba** na **bawabu**. **(al.2)**

……

……

(j) Timamu ni kwa kamilifu/fusuli, chizi ni kwa …… huku bahili ni kwa…… **(al.2)**

(k) Ayefiwa huambiwa makiwa, unapotaka mtu akupishe utamwambia……., anapoapa mtu husema walahi! Na unataka kuonyesha mtu dharau unamwambia **……** **(al 2)**

(l) Tumia kivumishi kinachotokana na kitenzi "adilisha" katika sentensi. **(al 2)**

……

……

(m) Changanua sentensi ifuatayo kwa kutumia jedwali: **(al 3)**

" Wewe ukija mapema utanipata nikikusubiri afisini."

……

……

……

……

……

……

(n) Tunga sentensi yenye kihusishi cha mtendaji. **(al 2)**

……

……

(o) Tambulisha dhima ya vishazi tegemezi katika tungo zifuatazo:

(i) Ambaye amenusurika atapelekwa katika hospitali ya rufaa. **(al 1)**

……

……

(ii) Nazangi aliigiza alivyoleekezwa na mwalimu wake. **(al 1)**

……

……

(p) Tunga sentensi mbili; mojawapo ikiwa na neno '**mpaka**' kama nomino na nyingine ikiwa nalo kama kihusishi. **(al 2)**

……

……

……

(q) Tumia nomino maja ya makundi katika ngeli ya I-ZI kutungia sentensi. **(al 2)**

……

……

……

……

(r) Bainisha yambwa na chagizo katika sentensi ifwatayo: **(al 2)**

Awali, Kanini alikuwa amewapikia wanawe Sarah pilau kwa gesi.

……

……

……

……

(s) Andika sentensi ifuatayo upya ukizingatia kinyume cha maneno yaliyopigiwa mstari. **(al.2)**

Utulivu wao uliwawezesha kuwajibikia majukumu yao.

……

……

……

……

4. ISIMU JAMII (Alama 10)

a) Soma kifungu kifuatacho kisha ujibu maswali.

"Asante sana Bwana spika kwa fursa hii. Naichukuwa fursa hii kuipinga hoja ya mheshimiwa wa Maweni kuhusu kuongeza ushuru kwa bidhaa za urembo.....

(i) Hii ni sajili gani? Thibitisha jibu lako. **(alama 2)**

……

……

……

(ii) Tambua sifa nyingine za sajili hii ambazo zingetumika katika muktadha huu **(alama 3)**

……

……

……

……

……

b) Umealikwa shuleni mwako ili kuzungumza na wanafunzi wa kidato cha nne baada ya kuibuka mwanafunzi bora nchini katika mtihani wa kitaifa mwaka uliopita. Eleza sifa za lugha utakayotumia. **(alama 5)**

……

……

……

……

……

……

……

……

……

……

……

HUU NDIO UKURASA WA MWISHO ULIOPIGWA CHAPA.

KCSE 2025 NAIROBI CLUSTER MOCK

KCSE EXAM SERIES 2

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

(i) *Andika jina lako, nambari ya usajili na mkondo kwenye nafasi ulizopewa hapo juu.*

(ii) *Tia sahihi yako kisha uandike tarehe ya mtihani katika nafasi ulizopewa hapo juu.*

(iii) *Jibu maswali **manne** pekee.*

(iv) *Swali la **kwanza** ni la **lazima**.*

(v) *Maswali hayo mengine yachaguliwe kutoka sehemu nne zilizobaki; yaani Riwaya Tamthilia, Hadithi Fupi na Fasihi Simulizi*

(vi) *Usijibu maswali **mawili** kutoka **sehemu moja**.*

(vii) *Majibu yote **lazima** yaandikwe kwa lugha ya Kiswahili.*

(viii) *Majibu yote **sharti** yaandikwe kwenye nafasi ulizoachiwa kwenye kijitabu hiki cha maswali.*

Swali	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**Jumla**

For Marking Schemes Contact 0746 222 000 / 0742 999 000

SEHEMU YA A: NGUU ZA JADI **(ALAMA 20)**

1. SWALI LA LAZIMA

"Ndugu zangu, ukabila ni sumu ya nyoka. Ukabila huangamiza maendeleo ya nchi hata kama imestawi kiasi gani."

a) Yaweke maneno haya katika muktadha wake. **(alama 4)**

b) Eleza umuhimu nne wa msemaji wa kauli hii. **(alama 4)**

c) Onyesha mbili za uandishi zinazojitokeza katika dondoo hili. **(alama 2)**

d) Kwa kutumia hoja zisizopungua kumi, jadili maudhui ya ukabila yanavyojitokeza katika riwaya hii. **(alama 10)**

SEHEMU YA B: BEMBEA YA MAISHA

JIBU SWALI LA 2 AU LA 3

2. Wanasema kuwa Mungu hamtupi mja wake. Kweli iliyoje!

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

(b) Fafanua sifa za msemaji. **(alama 4)**

(c) (i) Eleza umuhimu wa mandhari ya dondoo hili. **(alama 6)**

(ii) "Lakini inakujuzu uelewe kuwa dunia ni nyumba ya mtihani." Onyesha ukweli wa kauli hii kwa kurejelea tamthilia ya *Bembea ya Maisha*. **(alama 6)**

AU

3. (a) ***Changanua mbinu za kimtindo katika dondoo lifuatalo***. **(alama 8)**

Maskini mke wangu! Kumbe ugonjwa haukumsaza mwaka baada ya mwaka. Umemla bila huruma. Awali niliona kama mchezo. Kumbe ilikuwa kweli! Kauli yake ninaona imesimama. Ni mwele hakika. Laiti ningejua, jana ningeishi tofauti. Silesi zetu za maisha tungezila zilivyokuja kwa furaha. (Kimya). Siku hazigandi wala jana haitarudi. Sasa jana imebaki kuwa kumbukizi baada ya kusombwa na wakati mfano wa mafuriko msimu wa masika. (Kimya). Kwa bahati nzuri bado tupo. Ninaweza kuiachia dunia tabasamu iwe silesi kwa vizazi vijavyo na kila mwenye nia njema. (Kimya). **Siwezi kuendelea kuishi hivi. Sasa nimekata shauri. Lazima niache njia ya zamani na kuifuata mpya**. Maisha mapya. Pombe! (kama anayesemea pombe). Umenichezesha kama mwanasesere kwa muda mrefu. Umeninyima fursa ya kuielewa familia yangu.

(b) Kauli iliyokolezwa wino katika dondoo inadokeza nia ya kubadilika kwa mzungumzaji. Kwa kurejelea tamthilia nzima, onyesha jinsi mwandishi alivyoshughulikia suala la mabadiliko.

(alama 12)

SEHEMU YA C: MAPAMBAZUKO YA MACHWEO

JIBU SWALI LA 4 AU LA 5

4. MSIBA WA KUJITAKIA **(ALAMA 20)**

"Tayari alikuwa amefanya kosa. Kosa ambalo alifahamu lilikuwa la kujitakia."

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

b) Bainisha toni inayodokezwa na dondoo hili. **(alama 2)**

c) Hadithi ya *Msiba wa Kujitakia* ina matukio mengi yanayoonyesha kinaya. Thibitisha. **(alama 6)**

d)"Tamaa mbele mauti nyuma." Jadili ukweli wa kauli hii kwa kurejelea hadithi: Nilitamani. **(alama 8)**

AU

5. Jadili jinsi maudhui ya **usaliti** yanavyojitokeza katika hadithi zifuatazo: **(alama 20)**

i.Toba ya Kalia

ii. Kifo cha Suluhu

iii. Fadhila za Punda

iv. Mapambazuko ya Machweo

SEHEMU YA D: USHAIRI

6. SHAIRI HURU **(ALAMA 20)**

Soma shairi lifuatalo kisha uyajibu maswali

Nimeyaandika maneno haya
Kwa niaba ya:
Mamilioni wasio malazi
Wabebao vifurushi vilivyo wazi
Wazungukao barabarani bila mavazi
... milki yao ya Maisha.
Kwa niaba ya:
Maelfu wanouawa bila haki
Wiki baada ya wiki
leo sumu au spaki
leo kamba au bunduki
na kwa wale wanosubiri kunyongwa.

Kwa niaba ya:
Vijana walio mitaani
wale mayatima wa maskini
wazungukao mapipani
kila pembe mjini
kuokota sumu kutia tumboni
kujiua bila kujua
ili kupata kuishi.

Kwa niaba ya:
Wakongwe wasiojiweza
walao chakula kilichooza
wachukuao choo wakijipakaza
polepole wakijiangamiza
katika vyumba vyao
baridi na giza
kwa sababu hawana watazama
wala wauguza.

Kwa niaba ya:
Waishi na nyingi hofu
Kwa sababu ya madawa tifutifu
yatiwayo vyakulani yakitufanya wafu
bila ya mtu kuona
kama kwamba sote tu vipofu,

Na kwa niaba yete sote;
Tuliofungwa vifungoni, duniani
Tuliosukumwa kingoni, maishani
Tuliopokonywa maoni, machoni
Tuliotiliwa sumu, malishoni
Tuliodidimizwa kinyesini
ili 'maendeleo'
yaendelee kwenda njiani
huku yakitema machicha ya roho zetu.

Maswali

a) Hili ni shairi la aina gani? Tetea jibu lako. **(alama 2)**
b) Bainisha toni ya shairi hili . **(alama 2)**
c) Tambua aina tatu za urudiaji zinazojitokeza katika shairi. **(alama 3)**
d) **Huku** ukitoa mifano eleza namna mtunzi alivyotimiza arudhi za kishairi. **(alama 3)**

e) Eleza matumizi ya.
i) Mistari mishata **(alama 1)**
ii) Mistari kifu **(alama 1)**
f) Bainisha nafsi neni katika shairi hili. **(alama 2)**
g) Tambua aina za taswira katika shairi hili. **(alama 2)**
h) Mshairi anazungumza kwa niaba ya watu mbalimbali. Jadili.: **(alama 4)**

AU

7. *Soma shairi hili kisha ujibu maswali.*

Ulimwengu ulimwengu, ulimwengu naratibu
Yaliyo kichwani mwangu, nataka kuyahutubu
Wayasome ndugu zangu, wa mbali na karibu
Cha wenye raha na taabu, ulimwengu ni kiwanja.

Ulimwengu ni kiwanja, chenye raha na tabu
Wengine wanajikonja, kwa wengine ni adhabu
Kuta na kucha twahanja, kutafuta matulubu
Cha wenye raha na tabu, ulimwengu ni kiwanja.

Ni uwanja wa *balaa,* aliniusia babu
Mna mambo yamejaa, ya faraja na kusibu
Na machache ya kufaa, ila mengi ya udubu
Cha wenye raha na tabu ulimwengu ni kiwanja.

Ni kiwanja cha Amina, Saidi Ali Rajabu
Wengune kitu hatuna, tunaishia kababu
Wale wamejaza sana, wanashindwa kuhesabu
Cha wenye raha na tabu, ulimwengu ni kiwanja.

Ni uwanja wa urongo, na kweli pia ajabu
Kichwa hudanganya shingo, tumbo kiuno chasibu
Usitumai ubongo, wa nduguyo na swahibu
Cha wenye raha na tabu, ulimwengu ni kiwanja.

Ni uwanja wa walevi, pombe kwao ni dhahabu
Mara vile mara hivi, wakilewa majudhubu
Maneno ya kiujuvi, hujipaka hata shabu
Cha wenye raha na tabu, ulimwengu ni kiwanja.

Ni kiwanja wenye dini, watiio Wahabu
Mashekhe misikitini, humo hufanya muhibu
Mapadri kanisani, huvihubiri vitabu
Cha wenye raha na tabu, ulimwengu ni kiwanja.

Ni uwanja wa malofa, lofa mtu mwenye tabu
Kusema sana kashifa, na moyo *kisebusebu*
Tunakaribia kufa, kwa kushindwa kujimudu
Cha wenye raha na tabu, ulimwengu ni kiwanja.

Ni uwanja wa faraja, alowajali habibu
Na mengine sitotaja, msinambe nina gubu
Ni uwanja wa viroja, vigumu kuvikutubu
Cha wenye raha na tabu, ulimwengu ni kiwanja.

Maswali

a) Eleza mambo yanayojitokeza katika shairi hili. **(alama 3)**

b) Ainisha bahari katika shairi hili kwa kuzingatia vigezo vifuatavyo. **(alama 3)**

(i) Mpango wa maneno

(ii) Vipande

(iii) Vina

c) Onyesha jinsi mbinu alizotumia mshairi kukidhi mahitaji ya kiarudhi. **(alama 3)**

d) Onyesha umbo la ubeti wa 3. **(alama 3)**

e) Andika ubeti wa sita kwa lugha tutumbi **(alama 4)**

f) Mshairi huyu ni bingwa kwa kutumia lugha. Thibitisha. **(alama 2)**

g) Fafanua toni katika shairi hili. **(alama 1)**

h) Eleza maana ya neno ***kisebusebu*** kama lilivyotumiwa katika shairi **(alama 1)**

8. SEHEMU YA E: FASIHI SIMULIZI (ALAMA 20)

Mtoto wetu lala

Mtoto wetu lala

Mama ameenda sokoni

Kununua ndizi, atakuja na ndizi nyingi

Ndizi kubwa itakuwa yako

Utakula yote mtoto wetu

Kwa sababu mama anakupenda

Mama anakupenda

Mtoto wetu lala

Baba ameenda shambani kuvuna

Mimi mlezi wako nitakutunza kwa upendo

Nitakuandalia samaki kama jana

Mtoto wetu lala

Mama anakupenda sana.

Maswali

a) Huu ni wimbo wa aina gani. Thibitisha. **(alama 2)**

b) Taja na uthibitishe shughuli zozote mbili za kiuchumi za jamii asili ya wimbo huu. **(alama 2)**

c) Ni nani mwimbaji wa wimbo huu na anaimbia nani? **(alama 2)**

d) Eleza mbinu ambazo mwasilishaji wa utanzu huu anaweza kutumia ili kufanikisha uwasilishaji wake**.** **(alama 2)**

e) Eleza wajibu wa nyimbo katika jamii. **(alama 5)**

f) Ijapokuwa nyimbo ni nzuri, zina ubaya wake. Thibitisha kauli hii **(alama 2)**

g) Umepewa wajibu wa kutafiti mbolezi katika jamii yako. Pendekeza mbinu ambazo ungetumia kutafiti kipera hiki. **(alama 5)**

KCSE 2025 NAIROBI CLUSTER MOCK

KCSE EXAM SERIES 2

CHRISTIAN RELIGIOUS EDUCATION

313/1

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.*

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

c) *Answer **any five** questions in the answer booklet provided.*

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

QUESTION	1	2	3	4	5	6	**TOTAL**
SCORE							

1 (a) Describe the second account of the creation. Gen 2:4-25 **(7marks)**

(b) Narrate the process of Bible translation from the original language to the local language **(7 marks)**

(c) Give **six** reasons why Christians read the bible **(6 marks)**

2 (a) Outline the background to the call of Abraham. **(7 marks)**

(b) Explain how God prepared the Israelites for the making of the covenant at Mt. Sinai. Exodus 19. **(7 marks)**

(c) List ***six*** reasons why the church leaders take vows before starting their mission. **(6 marks)**

3 (a) Outline reasons why Elijah faced danger and hostility as a prophet of God **(7marks)**

(b) Explain the significance of David as an ancestor of Jesus to Christians today **(7marks)**

(c) Outline the commandments that King Ahab and Jezebel broke from the story of Naboths vineyard **(6marks)**

4 (a) Explain ***six*** categories of true prophets in the Old Testament **(6 marks)**

(b) Outline ***seven*** ways in which God would punish Israel for her evils according to prophet Amos. **(7 marks)**

(c)Identify how Christians prepare themselves for the second coming of Jesus Christ.**(7 mrks)**

5 (a) Describe the meaning of the symbolic act of buying the land by prophet Jeremiah. **(7 marks)**

(b) Outline **seven** problems faced by Nehemiah. **(7marks)**

(c) In the resent few months, many families across the country were negatively affected by floods. In reference to such occurance, give **six** ways in which Christians can assist victims of disaster. **(6 marks)**

6 (a) Outline the teaching and meaning of life and its wholeness in Traditional African Societies. **(7 marks)**

(b)Identify ***six*** changes that have taken place in respect to African attitude towards land. **(6 marks)**

(c)State ways in which the government can minimize problems related to land today. **(7mks)**

KCSE 2025 NAIROBI CLUSTER MOCK

KCSE EXAM SERIES 2

CHRISTIAN RELIGIOUS EDUCATION

313/2

PAPER 2

TIME: 2½ HOURS

NAME……

SCHOOL…… SIGN……

INDEX NO…… ADM NO……

Kenya Certificate of Secondary Education.

INSTRUCTIONS TO CANDIDATES

(a) There are six questions in this paper.

(b) This paper has two pages.

*(c) Answer any **FIVE** questions.*

(d) Each student must verify that all pages and questions are present in the paper.

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

(f) All answers must be in English

FOR EXAMINERS USE ONLY

QUESTION	1	2	3	4	5	6	TOTAL
SCORE							

1.(a) Outline Jeremiahs prophecy concerning the messiah (Jeremiah 23:5-6**)** **(7 marks)**

(b) Describe the incident in which Jesus was left behind by His parents in the temple at the age of 12 years (Luke 2:) **(8 marks)**

(c)State ***five*** ways through which Christians show respect to places of worship today. **(5 marks)**

2.(a) Describe the incident when Jesus healed a man with evil spirits in Capernaum.Luke 4:31-37 **(8 marks)**

(b) Outline what Jesus said about John to his disciples. **(6 marks)**

(c) State lessons Christian learn about Jesus from the incident he healed a man with an evil spirit in Capernaum. **(6 marks)**

3.(a) Relate the parable of the Pharisee and the tax collector Luke18:9-14 **(7 mark)**

(b) Identify seven areas of conflict between Jesus and Jewish religious leaders. **(7marks)**

(c) There are many cases of conflicts among various members of the church today. From your Point of view, give **six** ways in which Christians can solve conflicts among themselves. **(6marks)**

4.(a)Explain how the unity of believers is expressed in the image of the People of God. **(7 marks)**

(b) Outline ways in which Christians can discern those who possess gifts of the Holy spirit. **(7 marks)**

(c) Give ***seven*** ways in which kindness as a fruit of the Holy Spirit is abused in Kenya today. **(6 marks)**

5. (a) Explain the Christian teachings on work. **(7 marks)**

(b) Give ***seven*** forms of leisure in Traditional African Communities. **(7 marks)**

(c) Give ***six*** reasons why Christians should not involve themselves in gambling. **(6 marks)**

6. (a) Explain how unfair distribution of wealth can lead to social disorder in Kenya today **(7 marks)**

(b) Outline seven problems related to maintenance of law and order in Kenya today. **(6 marks)**

(c) Give reasons why Christians in should pay taxes to the Government of Kenya. **(7 marks)**

For Marking Schemes Contact 0746 222 000 / 0742 999 000

KCSE 2025 NAIROBI CLUSTER MOCK

KCSE EXAM SERIES 2

HISTORY AND GOVERNMENT

311/1

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'S USE ONLY

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

SECTION A-25 MARKS

Answer all questions in this section in the spaces provided

1. What was the **main** source of information in the African societies during pre-colonial period? **(1 mark)**

2. Name **one** remnant of earliest inhabitants of Kenya who were found in Western Kenya. **(1 mark)**

3. State **two** religious functions of the Oloibon among the Maasai during pre-colonial period. **(2 marks)**

4. Identify **two** ways in which the knowledge in marine technology facilitated the coming of the early visitors to the Kenyan coast. **(2 marks)**

5. Give **one** circumstance that can make a citizen by birth to lose Kenyan citizenship.**(1 mrk)**

6. Identify **one** minority group whose rights were protected by the independence constitution. **(1 mark**)

7. Highlight **two** rights that the youth are guaranteed in the Constitution of Kenya. **(2 marks)**

8. Name **two** communities that showed mixed reaction to the establishment of colonial rule in Kenya **(2 marks)**

9. Identify **one** group that provided health service in Kenya during the colonial period. **(1 mark)**

10. State **two** characteristics of political parties formed in Kenya after 1945. (2 marks)

11. Give the **main** contribution made by Tom Mboya which improved the welfare of workers during the colonial period. **(1mark)**

12. Name **two** organs of the National Security in Kenya. **(2 marks)**

13. Identify the **main** voting system used during elections in Kenya. **(1 mark)**

14. Outline **two** sources of Nyayo philosophy. **(2 marks)**

15. Identify the political event that threatened the stability of Kenya in 1978. **(1 mark)**

16. What is the **main** function of the County Executive Committee? **(1 mark)**

17. State **two** disadvantages of relying on foreign aid as a source of revenue for the Kenyan government. **(2 marks)**

Section B (45 marks)

Answer any three questions from this section

18. (a) Identify **five** Eastern Cushitic communities in Kenya. **(5 marks)**

(b) Describe the political organization of the Ameru in Kenya in the 19th century. **(10 marks)**

For Marking Schemes Contact 0746 222 000 / 0742 999 000

19. (a) Identify **five** factors that led to the development of the Long Distance trade. **(5 marks)**

(a) Explain **five** reasons for decline of the Portuguese rule along the East African Coast.

(10 marks)

20. (a)State **five** causes of the Somali resistance against the British rule in Kenya. **(5 marks)**

(b) Explain **five** contributions of trade unions in the struggle for independence in Kenya

(10 marks)

21. (a)Give **five** contributions of Harambee philosophy in the development of health sector in Kenya.

(5 marks)

(b) Explain **five** roles of political parties in governance and nation building in Kenya. **(10 marks)**

SECTION C (30 MARKS)

Answer any two questions from this section

22. (a) Identify **three** symbols of National unity in Kenya. **(3 marks)**

(b) Explain **six** factors that enhance National Integration in Kenya. **(12 marks)**

23. (a) Give **three** functions of the Attorney General in Kenya. **(3 marks)**

(b) Explain **six** reforms that have been introduced by the government in the Correctional Service.

(12 marks)

24. (a) State the composition of the County Assembly in Kenya. **(3 marks)**

(b) Explain **six** importance of the national budget in Kenya. **(12 marks)**

For Marking Schemes Contact 0746 222 000 / 0742 999 000

KCSE 2025 NAIROBI CLUSTER MOCK

KCSE EXAM SERIES 2

HISTORY AND GOVERNMENT

311/2

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'S USE ONLY

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

SECTION A-25 MARKS

Answer all questions in this section in the spaces provided

1. Identify **one** form of early manuscripts. **(1 mark)**

2. Give **two** reasons that make human beings unique from other primates. **(2 marks)**

3. Identify the name tools used by man during the Middle Stone Age period. **(1 mark)**

4. State **two** advantages of land enclosure system in Britain during the agrarian revolution **(2 marks)**

5. Identify **one** kingdom in Western Sudan that participated in the Trans-Saharan trade. **(1 mark)**

6. Give **two** advantages of Macadam roads. **(2 mrks)**

7. Identify **one** advantage of using Steel over Iron during the industrial revolution. **(1 mark)**

8. Name the scientist who invented the Spinning Jenny? **(1 mark)**

9. State the **main** factor behind the growth of Meroe as an early urban centre. **(1 mark)**

10. Give **two** functions of the Katikiro among the Baganda in the 19thcentury. **(2 marks)**

11. State **two** terms of the Berlin conference of 1884-1885. **(2 marks)**

12. Name the company used by the British to govern Nigeria during the colonial period.**(1 mark)**

13. State **two** roles of Kwame Nkrumah during Ghana's struggle for independence. **(2 marks)**

14. Name **one** country that was a member of Triple-Alliance during the First World War.**(1 mark)**

15. Identify **two** organs of the League of Nations. **(2 marks)**

16. Give **two** treaties that made up the Treaty of Versailles. **(2 marks)**

17. Name **one** house of Congress in the United States of America (USA). **(1 mark)**

Section B (45 marks)

Answer any three questions from this section

18. (a) Give **five** reasons why man began early agriculture during the Neolithic period. **(5 mrks)**

(b) Explain **five** factors that led to the rise of Agrarian revolution in the United States of America (USA). **(10 marks)**

19. (a)Identify **five** trade items from Western Sudan during the Trans-Saharan trade. **(5 marks)**

(b) Describe **five** factors that led to the decline of the Trans-Atlantic trade. **10 marks)**

20. (a)Identify **five** challenges facing Johannesburg as a modern city. **(5 marks)**

(b) Discuss **five** contributions of Railway transport to the European industrialization. (**10 marks)**

21. (a)State **five** reforms introduced by the Germans in Tanganyika after the Maji Maji rebellion (1905-1907). **(5 marks)**

(b) Discuss **five** reasons why the Franco-Mandinka war was protracted. **(10 marks)**

For Marking Schemes Contact 0746 222 000 / 0742 999 000

Section C (30 marks)

Answer any two questions from this section

22. (a) Identify **three** factors that facilitated the application of the policy of Assimilation in French West Africa during the colonial rule. **(3 marks)**

(b) Explain **six** reasons behind the failure of the indirect rule system in Southern Nigeria. **(12 marks)**

23. (a) Give **three** objectives of the League of Nations. **(3 marks)**

(b) Discus **six** reasons why the Axis powers were defeated by the Allies in the Second World War. **(12 marks)**

24. (a) Identify **three** advantages of the federal system of government in the United States of America (USA). **(3 marks)**

(b) Explain **six** functions of the British Monarch. **(12 marks)**

For Marking Schemes Contact 0746 222 000 / 0742 999 000

KCSE 2025 NAIROBI CLUSTER MOCK

KCSE EXAM SERIES 2

GEOGRAPHY

312/1

PAPER 1

TIME: 2¾ 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) *Write your class, date of examination and sign in the spaces provided above.*

c) *This paper consists of two sections; **A** and **B**.*

d) *Answer **all** the questions in section **A**.*

e) *Answer question **6** and any other **two** questions from section **B**.*

f) *Answers must be written in the spaces provided at the end of question*

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

For Examiner's Use Only

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

SECTION A: (25 MARKS)

Answer all questions.

1 (a) Give **two** areas studied under practical geography **(2 marks)**

(b) Describe the relationship between geography and the following disciplines

(i) Biology **(2 marks)**

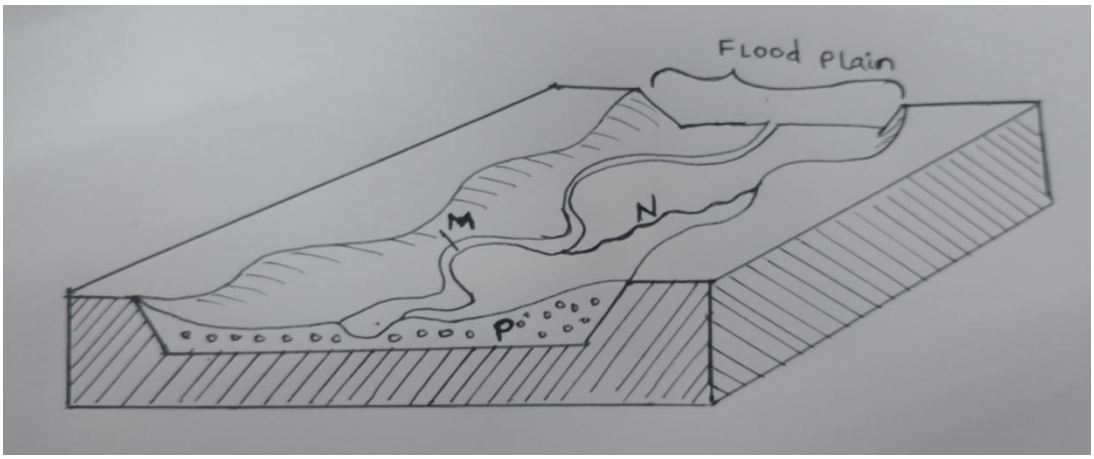
(ii) Medicine **(2 marks)**

2 . Describe the passing star theory **(5 marks)**

3 . (a)(i) Give **two** examples of plutonic rocks **(2 marks)**

(b) State **three** ways in which rocks are classified **(3 marks)**

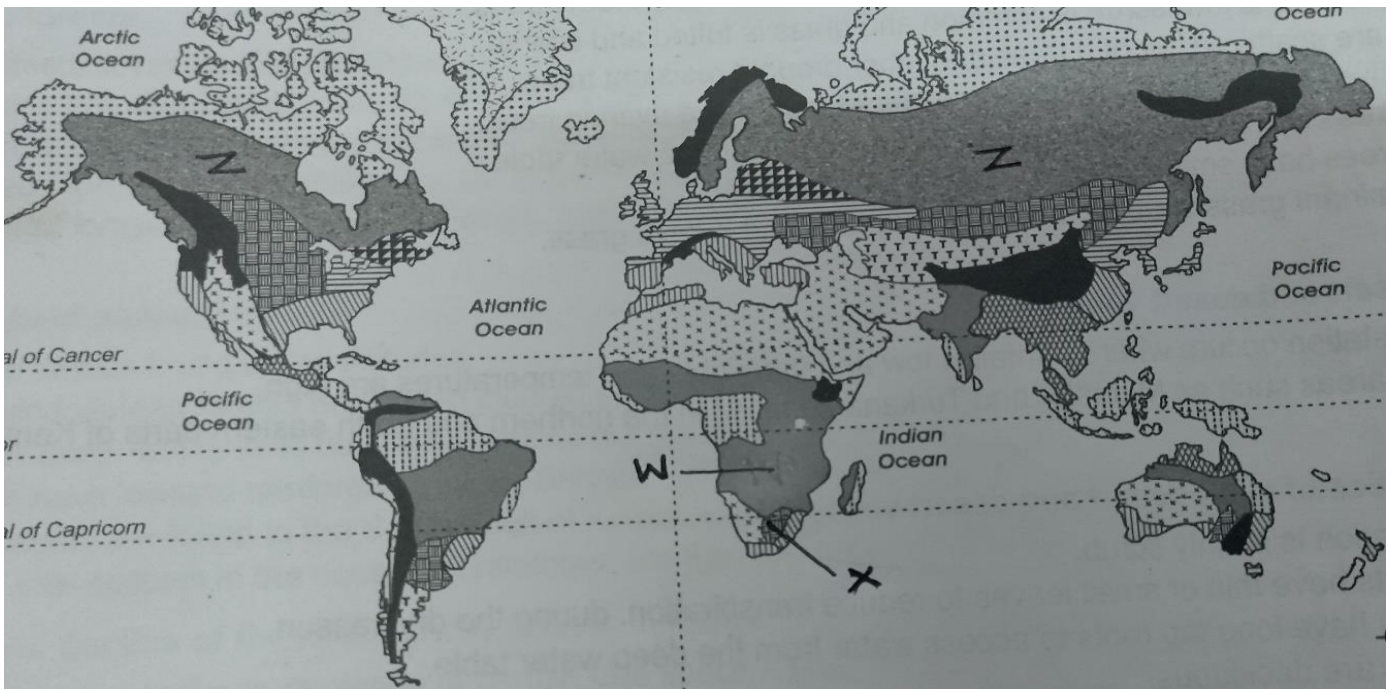
4. Study the diagram of the flood plain provided and answer the questions that follow



(a) Identify the parts labelled M,N and **O** **(3 marks)**

(b) Apart from a flood plain name **three** other river depositional features **(2 marks)**

5. Study the map of the world provided and answer the questions that follow



(i) Name the vegetation types marked W , X and Z **(3 marks)**

(ii) State **two** characteristics of desert vegetation **(2 marks)**

SECTION B: (75 MARKS)

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

6. Study the map of **Mumias** 1: 50,000 (Sheet 101/2) provided and answer the following questions .

(a) (i) What information is contained on the sheet title **(2 marks)**

(ii) Measure the distance of river Lusimu from the junction of river Nzoia to the bridge. **Give your answer in kilometres and metres.** **(2 marks)**

(iii) Name **two** drainage patterns found in the area covered by the map. **(2 marks)**

(iv) Identify **two** types of natural vegetation to the south of northing 36 **(2 marks)**

(b) Describe the distribution of settlement in the area covered by the map **(6 marks)**

(c) Citing evidence explain **three** factors that would favour cattle rearing in Mumias.**(6 marks)**

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

7 (a) (i) Apart from the rift valley name **two** other resultant features of faulting. **(2 marks)**

(ii) State **three** characteristics of Gregory rift valley. **(3 marks)**

(b) Explain **four** ways in which faulting influences drainage. **(8 marks)**

(c)Within the aid of a well labeled diagram describe how a block mountain is formed due to compressional forces. **(7 marks)**

(d) Students at MEC School intends to carry out a field study on a section of Rift valley

(i) State **three** preparation they will make before the study. **(3 marks)**

(ii)State **two** follow up activities that they would engage in after the study. **(3marks)**

8.(a) Distinguish between **vulcanicity** and **volcanicit**y. **(2 marks)**

(b)(i) A part from a plug volcano, name **three** other extrusive volcanic features **(2 marks)**

(ii) With the aid a well labeled diagram describe the formation of a plug dome **(8 marks)**

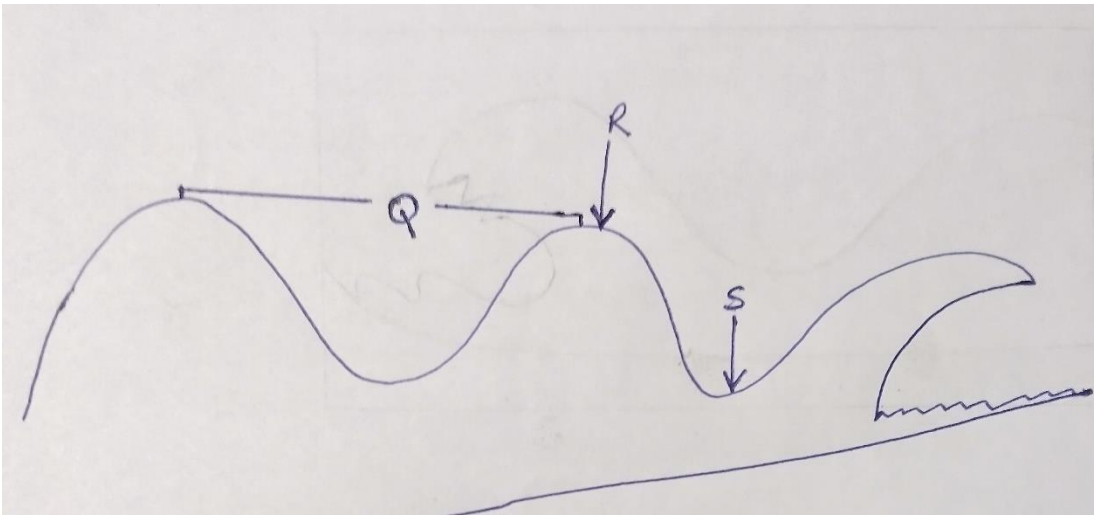
(c) (i)What are fumaroles? **(2 marks)**

(ii) Describe how a hot spring is formed **(6 marks)**

(e) Explain **two** ways in which volcanic features may influence the climate **(4 marks)**

9.(a)(i) Distinguish between a swash and backwash **(2 marks)**

(ii) The diagram shows the parts of a wave



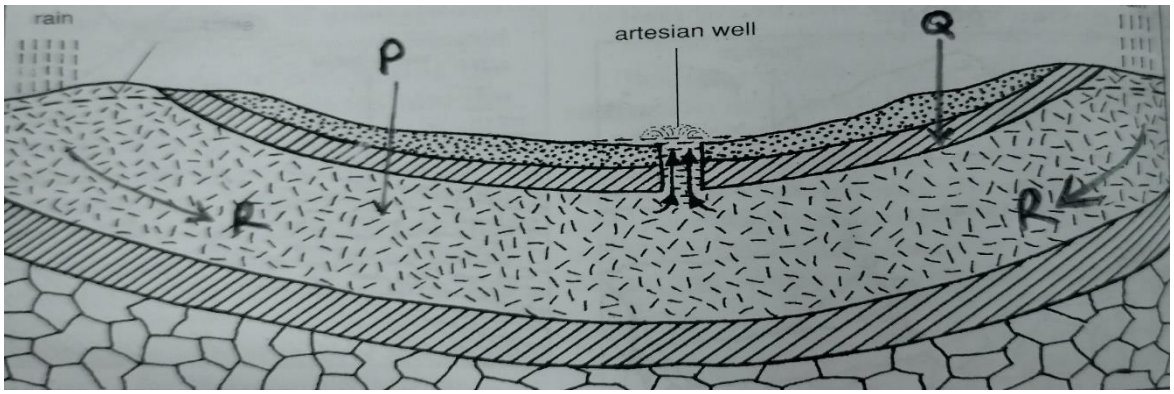
Name the parts labelled Q , R ,S and T **(4 marks)**

(b)(i) State **four** factors that determine the size of a wave **(4 marks)**

(ii) Using a well labelled diagram describe the formation of a cuspate foreland **(7 marks)**

(c) Describe **four** factors that influence wave erosion along the coast **(8 marks)**

10. (a) The diagram below shows an artesian basin. Use it to answer question (a).



(a)Identify ;

(i) the part marked **P.** **(1 mark)**

(ii) the layer marked **Q** **(1 mark)**

(iii) the process marked **R** **(1 mark)**

(iv) Describe how artesian basin forms **(3 marks)**

(b) State **three** ways springs form **(3 marks)**

(c) Explain **four** factors that influence the existence of underground water **(8 marks)**

(d) (i) What is karst Scenery? **(2 marks)**

(ii) State reasons why there are few settlements in karst regions. **(3 marks)**

(iii) Name **three** underground karst features **(3 marks)**

THIS IS THE LAST PRINTED PAGE.

For Marking Schemes Contact 0746 222 000 / 0742 999 000

KCSE 2025 NAIROBI CLUSTER MOCK

KCSE EXAM SERIES 2

GEOGRAPHY

312/2

PAPER 2

TIME: 2¾ 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) Write** your class, date of examination and sign in the spaces provided above.*
***c**)This paper consists of two sections; **A** and **B**.*
***d)** Answer **all** the questions in section **A**.*
***e)** Answer question **6** and any other **two** questions from section **B**.*
***f) Answers** must be written in the spaces provided at the end of question*
***i) Candidates** should answer the questions in English.*

FOR EXAMINER'S USE ONLY

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

SECTION A: (25 MARKS)

Answer all questions.

1. Describe dredging process as a method of mining. **(5marks)**

2. (a) Differentiate between horticulture and market Gardening. **(2marks)**

(b) Outline **two** reasons why horticultural products from Kenya are in high demand in Europe. **(2 marks)**

3. (a) Define invisible trade. **(2 marks)**

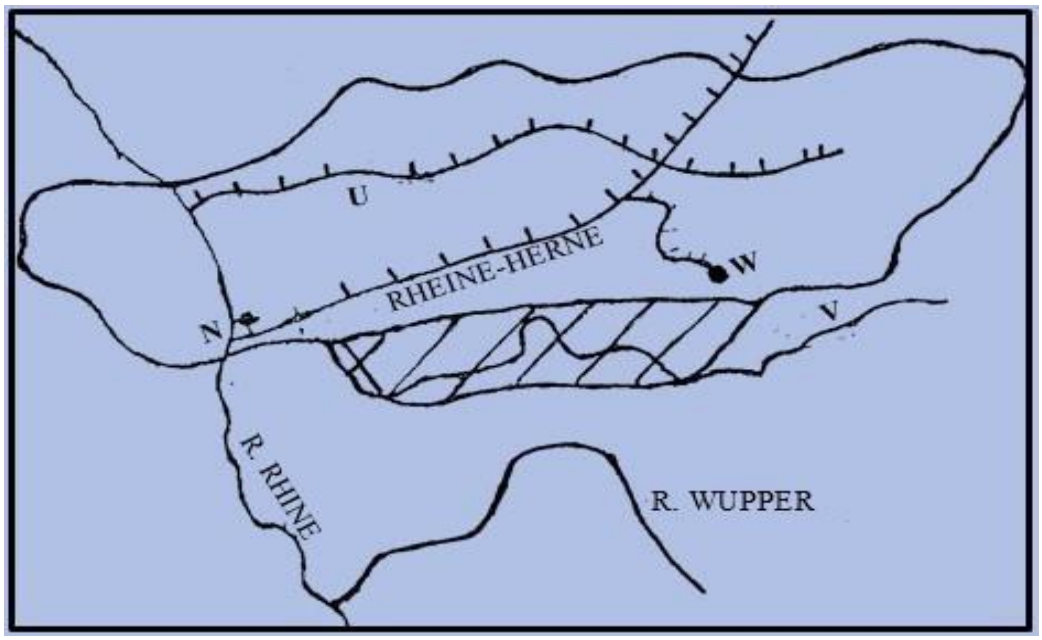
(b) (i) Give two reasons why Kenya is experiencing unfavourable balance of trade. **(2 marks)**

(ii) Name two visible exports from Kenya. **(2 marks)**

4. (a) Give **two** types of settlement patterns. **(2 marks)**

(b) State **three** benefits of hinterland to Thika. **(3 marks)**

5.(a) Below is a map of the Ruhr Industrial Region. Use it to answer the questions that follow.



Name

i) the canal marked U. **(1 mark)**

ii) the river marked V. **(1 mark)**

iii) the town marked W**.** **(1 mark)**

(b) Apart from coal , give **two** other sources of energy used in the Ruhr region**.** **(2 marks)**

SECTION B: (75 MARKS)

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

6. (a) The table below shows hypothetical size of laud in ***'000 acres*** for exotic trees grown in Kenya Between 2010 and 2011. Use the data to answer the following questions.

Year/Tree species	2010	2011
Pine	150	120
Cypress	100	84
Cedar	40	30
Fir	10	6
TOTAL	**500**	**240**

(i) Calculate the decline in total laud acreage lunar exotic between 2010 and 2011. **(2 marks)**

(ii) Using **a radius of 5cm**, draw a pie – chart to represent the data for 2010. **(7 marks)**

(iii) State **three** advantages of using a pie-chart to represent statistical data. (**3 marks)**

(b) State **four** likely reasons why there was a decline in total average of land under exotic tree in Kenya before 2010 and 2011. **(4 marks)**

(c) Give **three** characteristics of coniferous forests. **(3 marks)**

(d) Explain the differences between softwood forestry in Kenya and Canada under the following.

(i) Period of growth **(2 marks)**

(ii) Forest distribution **(2 marks)**

(iii) Transportation of logs. **(2 marks)**

7. (a) (i) What is beef farming **(2 marks)**

(ii) Give **two** types of beef farming **(2 marks)**

(b) (i) State **four** characteristics of beef farming **(4 marks)**

(ii) Apart from meat , hide and skin , identify **three** other products from beef farming **(3 marks)**

(c) Compare beef farming in Kenya and Argentina **(8 marks)**

(d) Your class intend to conduct a field study on a nearby ranch scheme

(i) Identify **three** problems you are likely to face in the field **(3 marks)**

(ii) State **three** methods used to record data collected **(3 marks)**

8. (a) What is population structure **(2 marks)**

(b) Explain **three** physical factors that influence population distribution in East Africa **(6 marks)**

(c) (i) State **four** effects of mortality on population in Kenya **(4 marks)**

(ii) Outline the information that can be derived from a population pyramid **(4 marks)**

(iii) Give **three** causes of low fertility rates in Sweden **(3 marks)**

(d) Explain **three** causes of rural - rural migration **(6 marks)**

9. (a) Define Eco- Tourism **(2 marks)**

(b) Apart from Wildlife , name three other tourist attractions found in the Kenyan Rift valley. **(3 marks)**

(c) Give four benefits of domestic tourism in Kenya. **(4 marks)**

(d) Explain four Reasons why tourism is more developed in Switzerland than Kenya.**(8 marks)**

(e) Explain is the future of Tourism in Kenya. **(8 marks)**

10. (a) What is environment conservation? **(2 marks)**

(b) (i) Name **three** rivers causing flooding in western Kenya **(3 marks)**

(ii) State **four** effects of floods on human settlements. **(4marks)**

(c) (i) Identify **three** natural causes of floods in Kenya **(3 marks)**

(ii) Explain **three** methods that can be used to control floods in Kenya. **(6 marks)**

(d) (i) Define pollution. **(2 marks)**

(ii) A part from air pollution, name **two** other types of pollution. **(2 marks)**

(iii) State **three** causes of air pollution in Kenya. **(3marks)**

THIS IS THE LAST PRINTED PAGE.

For Marking Schemes Contact 0746 222 000 / 0742 999 000

KCSE 2025 NAIROBI CLUSTER MOCK

KCSE EXAM SERIES 2

MATHEMATICS

121/1

PAPER 1

TIME: 2½ HOURS

NAME……

SCHOOL…… SIGN……

INDEX NO…… ADM NO……

Kenya Certificate of Secondary Education.

INSTRUCTIONS TO CANDIDATES

(a) Write your name, admission number class and index number in the spaces provided above.
(b) Sign and write the date of examination in the spaces provided above.
*(c) This paper consists of **two** sections**; Section I** and **Section II.***
*(d) Answer **all** the questions in **Section I** and any **five** questions from **Section II***
(e) Show all the steps in your calculations, giving your answers at each stage in the spaces provided below each question
(f) Marks may be given for correct working even if the answer is wrong.
(g) Non-programmable silent electronic calculators and KNEC Mathematical tables may be used, 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

Section II

17	18	19	20	21	22	23	24	TOTAL

For Marking Schemes Contact 0746 222 000 / 0742 999 000

SECTION I (50 MARKS)

Answer all questions in this section

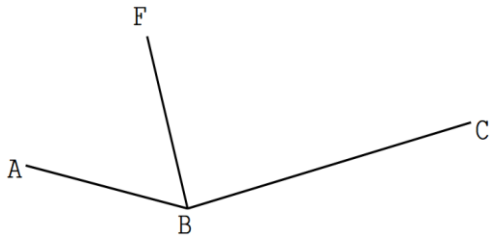
1. Evaluate without using tables or calculator: $\dfrac{-2\left(-3^2 + 5\right) - 12 \div 3 \text{ of } 4\times\left(-2\right)^2}{5^{-1} - 12 \div 10 + 6}$ correct to 3 decimal places **(3 marks)**

2. Two of the exterior angles of a polygon are each 63^o. The remaining exterior angles are each 26^0. Determine the number of sides of the polygon and hence the name. **(3 marks)**

3. Koech and Kigen began a 10000 m race together at the starting line. Koech and Kigen took 36 seconds and 48 seconds respectively to run a 400 m lap. The two athletes were together again at the starting line after some time. Determine the number of laps that Kigen had to run to complete the race after they were together. **(3 marks)**

4. In the figure below ABF is a uniform cross section of a solid. AB, BC and BF are some of the visible edges of the solid. Complete the sketch showing the hidden edges with broken lines.

(3 marks)

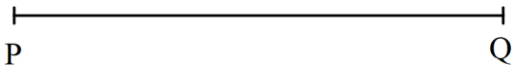


5. A Kenyan bank bought and sold Japanese Yen when the rate are as shown below.

Buying (Ksh)	Selling (Ksh) 100 Japanese Yen
84.00	85.50

A Kenyan businessman travelled to Japan and converted Ksh. 1 613 760 to Japanese Yen. He spends 75% of the amount and then converted the balance into Kenyan shillings at the bank when buying rate increased by 1.4% and selling rate increased by 1.3%. Calculate the amount of money in Kenyan shilling that he received. **(3 marks)**

6. (a) Line PQ given below is one of side of a parallelogram PQRS. Using a ruler and a pair of compass only, construct the parallelogram given that ∠SPQ = 75° **(2 marks)**



(b) Drop a perpendicular from R to PQ produced at T. Measure RT. **(2 marks)**

7. Six tractors each working 8 hours a day can plough a field in 5 days. Calculate the number of days that four tractors working 10 hours a day would take to plough the field**.** **(3 marks)**

8. Rina has several buses, each with a driver and a conductor. All her drivers earn the same wage and all conductors earning are also equal. Any three drivers and four conductors earn a total of Ksh. 7 500 per day and the difference in driver's earning and conductor's earning per day is Kshs. 400. Calculate the daily wage of a driver. **(3 marks)**

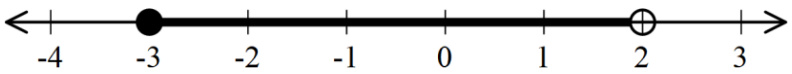
9. From a point Mary notices that the angle of elevation of the top of a tree is 28^0 , she then walks 10m towards the tree and finds that the angle of elevation of the top of the tree is now 34^0. Calculate the height of the tree to 1 decimal place given that Mary is 1.5m tall. **(3marks)**

10. Under an enlargement with scale factor -1.5, the point R (2, -8) is mapped onto R' (10, 5). By calculation, determine the coordinates of the center of enlargement. **(3marks)**

11. Use tables of squares, square roots and reciprocal to find the value of x if its given that

$$x= \frac{2}{\sqrt{0.4278}} + \frac{1}{6.04^2}$$ **(4marks)**

12. The number line below represents the solution for some given inequalities



Form the two inequalities represented above and write them as a compound statement **(3 marks)**

13. The coordinate of A (-2,5) and B(x, 0), calculate the value of x if the magnitude of AB is 13 units **(3 marks)**

14. Simplify completely $\left[\frac{(m+5n)^2+(m-5n)^2}{3m^2+75n^2}\right]^{-1}$ **(3 marks)**

15. Calculate the values of x and a in the equation $\frac{4^{2x}-2^{2x}}{2^{2x}-2^{x}} = 20$ **(3 marks)**

16. Find the equation of the normal to the curve $y = x^3 + 2x^2 - 4x$ when x = -1 **(3 marks)**

SECTION II (50 MARKS)

*Answer any **FIVE** questions in this section*

17. During a surveying exercise to establish a housing of affordable houses units, a surveyor marked out four points P, Q, R and S to represent an area to be left out for other social amenities. Point Q is 480m on a bearing of N75°E from P. Point R lie on a bearing of 150° at a distance 600m from Q. S is directly south of P a distance of 640m.

a) Draw a scale drawing to represent the relative position of the area under survey (Scale: 1cm represents 80 m**).(4 marks)**

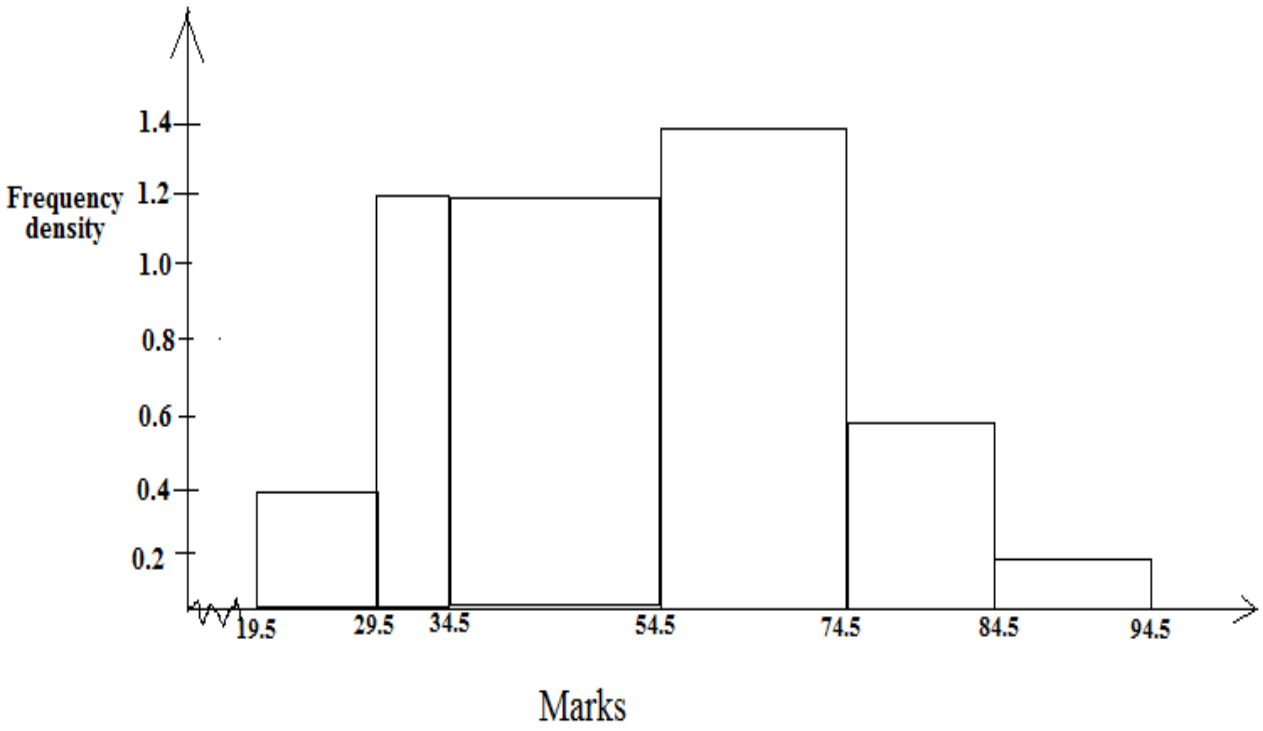
b) Using the scale in (a) above, determine

(i) the compass bearing of point R from S**(1 mark)**

(ii) the distance of point S from point Q**(2 marks)**

c) An emergency water point is located within the area marked such that it is equal in distance from line QR and RS. Locate the water point and measure its distance from point P. **(3 marks)**

18. The histogram below is drawn from marks obtained by students



(a)Use it to fill the table below **(4 marks)**

Classes	Midpoint	Frequency

(b) Calculate the mean mark. **(3 marks)**

(c) Calculate the median mark**(3 marks)**

19. (a) A Nissan travelling at a speed of 90 km/h left Nairobi for Nakuru at 9.00 a.m. Half an hour later, a bus left Nakuru for Nairobi at a speed of x km/h. The two vehicles met at a point 180 km from from Nakuru at 11.00 am. Find the value of x **(4 marks)**

(b) Given that the bus had a puncture that lasted 20 minutes to repair, determine which vehicle arrived at its destination first and by how long**(4 marks)**

(c) Find the distance between town A and B **(2 marks)**

.

20. (a) Given that $\mathbf{A^{-1}} = \begin{pmatrix} 2 & \frac{-5}{2} \\ -3 & 4 \end{pmatrix}$, find matrix A **(2 marks)**

(b) A student bought 16 exercise books and 10 pens at a total cost of Kshs. 1018. If she had bought 12 exercise books and 8 pens, she would have spent Kshs. 242 less.

(i) Form a matrix equation to represent the information **above** **(2 marks)**

(ii) Using the inverse of A in (a) above, determine the price of each item **(4 marks)**

(c) Find the total cost of 4 books and 5 pens by using matrices of orders 1×2 and 2×1 respectively **(2 marks)**

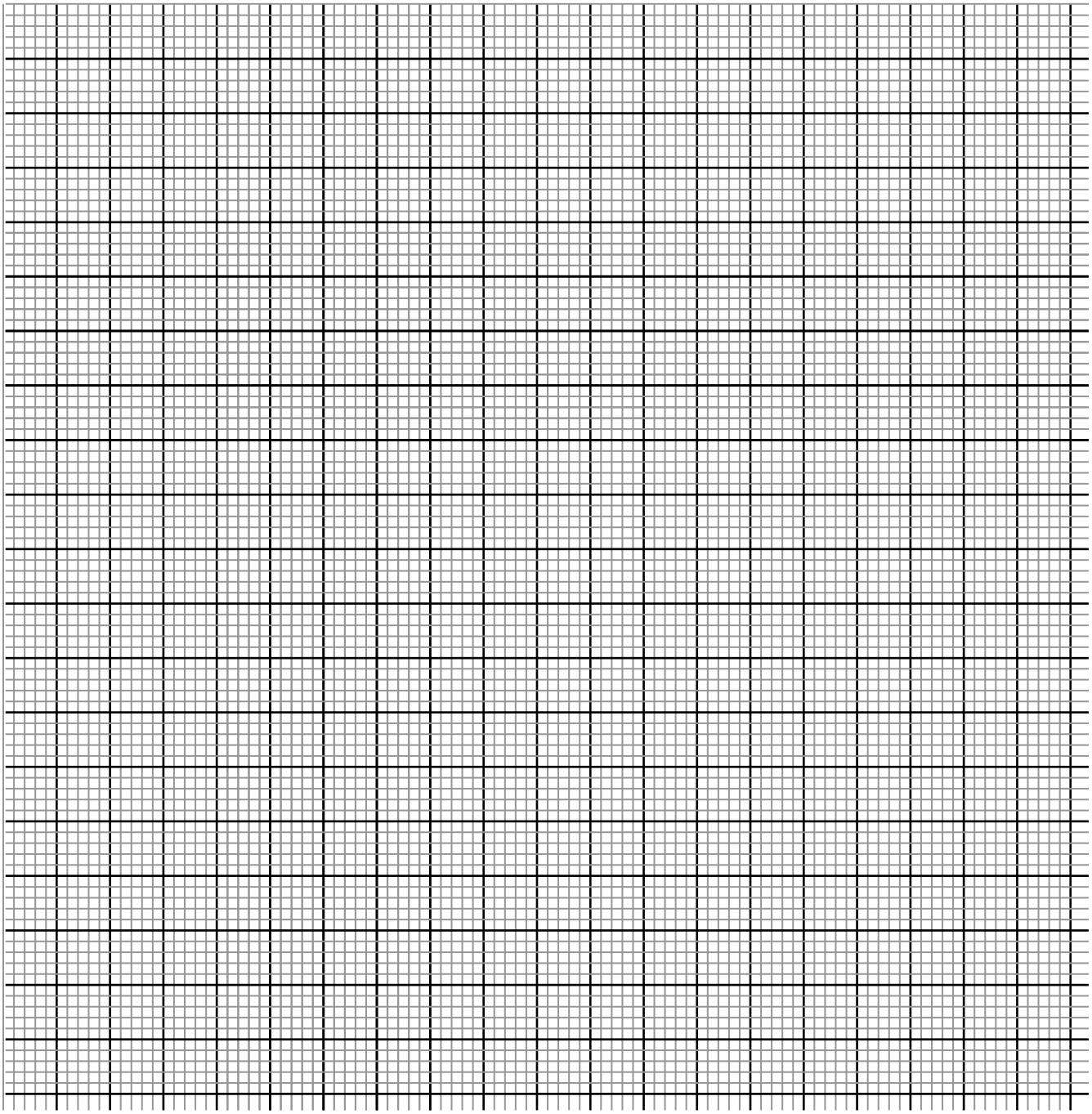
21. ABCD is a parallelogram with A(1,1) and C(8,10). The equation of AB is $4x - 5y = -1$ and the equation of BC is $5x - 2y = 20$. Determine

(a) The coordinates of M, where M is the point of intersection of the diagonals **(2 marks)**

(b) The coordinates of the vertices of B and D**(6 marks)**

(c) The length of AB correct to 3 significant figures **(2 marks)**

22. $A^1(-1,0)$ $B^1(-1,2)$ and $C^1(-4,0)$ is the image of A(2,1), B(4,1) and C(2,4) respectively under a rotation



(a) Plot the two triangles on the grid provided **(2 marks)**

(b) By construction find the center and angle of rotation **(3 marks)**

(c) $A''B''C''$ is the image of $A^1B^1C^1$ under enlargement, center (-2,-1) and scale factor -2. Plot $A''B''C''$ and state its coordinates (**3 marks**)

(d) $A^{111}B^{111}C^{111}$ is the image of $A''B''C''$ under reflection in the line $y + 2 = 0$. Plot $A^{111}B^{111}C^{111}$ on the same grid and state its **coordinates** (**2 marks**)

23. A bucket is in the shape of a frustum of a cone. The base radius of the bucket is 30 cm and it is filled with water to a height of 60 cm. The radius of the water level in the bucket is 40 cm. Taking π to be 3.142;

a) Calculate:

(i) The quantity of water in the bucket in litres.**(3 marks)**

(ii) The surface area of the bucket in contact with water**.(4 marks)**

b) Find the volume of water that if added into the bucket, would give a 20 cm rise in the water level. **(3 marks)**

24. The displacement of a particle is given as $S = t^3 - 6t^2 + 9t + 50$ metres.

Determine;

a) the displacement of the particle when $t = 2$ seconds. **(2 marks)**

b) the velocity of the particle when $t = 4$ **(2 marks)**

c) the acceleration of the particle when $t = 5$. **(2 marks)**

d) the time when the particle is at rest. **(2 marks)**

e) the minimum velocity **(2 marks)**

KCSE 2025 NAIROBI CLUSTER MOCK

KCSE EXAM SERIES 2

MATHEMATICS

121/2

PAPER 2

TIME: 2½ HOURS

NAME……

SCHOOL…… SIGN……

INDEX NO……ADM NO……

Instructions to candidates

(a) Write your name and admission number in the spaces provided above.
(b) Sign and write the date of examination in the spaces provided.
(c) This paper consists of two sections: **Section I** and **Section II**.
(d) Answer all questions in **section I** and **only five** questions from section **II**.
(e) **Show all the steps in your calculations, giving the answers at each stage in the spaces provided below each question.**
(f) Marks may be given for correct working even if the answer is wrong.
(g) **Non-programmable** silent electronic calculators and KNEC mathematical tables may be used, except where stated otherwise.
(h) **Candidates should answer the questions in English.**

For Examiner's Use Only

SECTION I

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	**Total**

SECTION II

17	18	19	20	21	22	23	24	**Total**

Grand Total

SECTION I (50 Marks)

Answer all the questions in this section

1. The base and height of a right angled triangle were measured as 6.4 cm and 3.5 cm respectively. Determine to 1 decimal place the percentage error in calculating the area of the triangle

(3 marks)

2. Find the value of x that satisfies the equation $\log(2x - 11) - \log 2 = \log 3 - \log x$ (**4 marks)**

3. Five men working 8 hours a day take 2 days to cultivate an acre of land. How many days would four men working 10 hours a day at double rate take to cultivate 3 acres of land? **3 marks)**

4. Simplify the expression below leaving your answer in the form $a + b\sqrt{c}$ where a, b and c are integral values. **(3 marks)**

$$\frac{\sqrt{48}}{\sqrt{5} - \sqrt{3}}$$

5. Two parallel chords of dimensions 15.6 cm and 13 cm are such that they are on the same side of the centre of a circle centre O and radius 12 cm. Calculate the perpendicular distance between the two chords, correct to 2 decimal places. **(3 marks)**

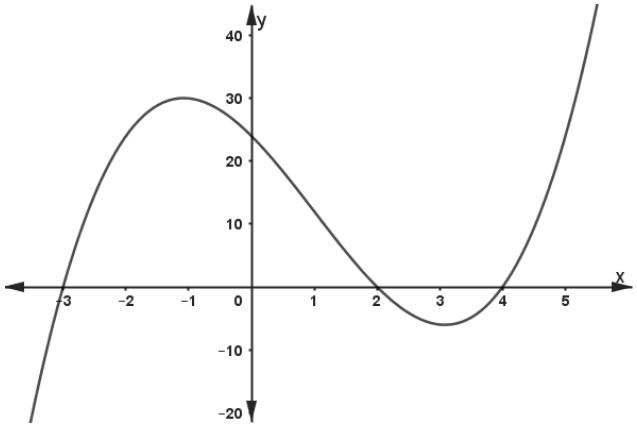
6. Frank bought a motor cycle on hire purchase terms. The cash price of the motor cycle was Kshs. 125000. He paid 15 equal monthly installments of Kshs. 13500 each. Calculate the monthly rate at which compound interest was charged. **(4 marks)**

7. Make n the subject of the formula **(3 marks)**

$$Q = \frac{\sqrt[3]{P^2 - n^3}}{n}$$

8. A bag has 3 red balls, 6 blue ball and some green balls of the same shape and size. The probability of picking a green ball is 0.5. Find the probability of picking either a green or a blue ball. **(3 marks)**

9. The figure below shows the graph of a cubic function.



Write the equation of the function in the form $y = x^3 + ax^2 + bx + c$, where a, b and c are constants. **(3 marks)**

10. Given that $\mathbf{A} = \begin{pmatrix} 1 & k \\ 3 & 3 \end{pmatrix}$ and $\mathbf{B} = \begin{pmatrix} -3 & 5 \\ 1 & -2 \end{pmatrix}$, find k if the determinant of **AB** is 9 **(3 marks)**

11. Determine the independent term in the expansion of **(2 marks)**

$$\left(2x - \frac{1}{3x^2}\right)^6$$

12. A trader bought two grades of rice; grade A at Ksh.109 per kilogram and grade B at Ksh. 81.50 per kilogram. She blended the two grades of rice in the ratio $5:n$ and by selling the blend at Ksh. 112.80 per kilogram, a profit of 20% was realised. Determine the value of n. **(3 marks)**

13. Use trigonometric identities to show that: **(3 marks)**

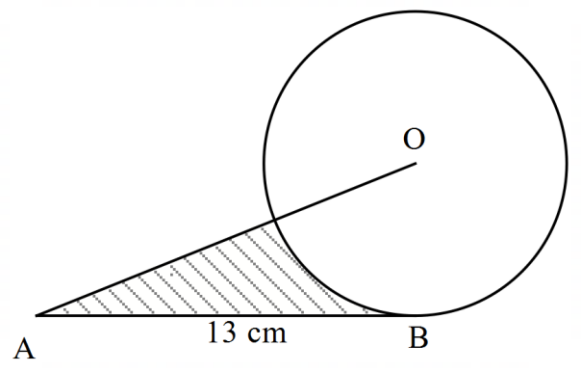
$$\frac{\tan^2\theta + 1}{\tan^2\theta} = \frac{1}{1 - \cos^2\theta}$$

14. Draw a line PQ=9 cm. On the upper side of line PQ, construct the locus of a point T such that the area of triangle ATB = 13.5 cm^2. On the locus of T, locate and label points T_1 and T_2 such that $\angle PT_1Q = \angle PT_2Q = 90^0$ **(4 marks)**

15. Determine the centre and radius of a circle whose equation is given by; **(3 marks)**

$2x^2 + 2y^2 - 32x + 48y + 254 = 0$

16. In the figure below, AB is a tangent to the circle centre O at B. The radius of the circle is 5 cm and AB = 13 cm.



Calculate the shaded area. Use $\pi = 3.142$. **(3 marks)**

SECTION II – 50 Marks

Answer any *five* questions in this section.

17. The table below shows income tax rates for the year 2020

Taxable income (Ksh. per month)	**Tax Rate (% per Ksh)**
1 – 15000	0
15001 – 27000	10
27001 – 37000	15
37001 – 45000	20
45001 – 50000	25
Above 50000	30

In June 2022, Eric earned a basic salary of Ksh. 34320. In addition, he was entitled to a house allowance of Ksh. 12000 per month and medical allowance of Ksh. 6450. He also has a non-taxable risk allowance of Ksh. 6000 per month. He contributes to a provident fund of Ksh. 7500. He also has tax relief of Ksh. 1180 monthly.

(a) Calculate Eric's taxable income in that month. **(2 marks)**

(b) Calculate Eric's Pay As You Earn for June 2022. **(5 marks)**

(c) In the month of July 2022, Eric's tax in the last band was Ksh. 2556. Calculate his net salary in July. **(3 marks)**

18. The table below shows the frequency distribution of the heights of 100 seedlings in a tree nursery.

Height (cm)	umber of seedli (f)	Midpoint (x)	$d = \frac{x - 55.5}{10}$	fd	fd^2
1 – 10	3				
11 – 20	5				
21 – 30	8				
31 – 40	11				
41 – 50	12				
51 – 60	18				
61 – 70	20				
71 – 80	10				
81 – 90	7				
91 – 100	6				
	$\Sigma f = 100$			$\Sigma fd =$	$\Sigma fd^2 =$

(a) Complete the table **(4 marks)**

(b) State the modal class **(1 mark)**

(c) Calculate

(i) Mean **(2 marks)**

(ii) standard deviation **(3 marks)**

19. A farm is quadrilateral in shape with vertices at A, B, C and D such that B is 160 metres from A on a bearing of 090^0. C is 140 metres from A on a bearing of 130^0, and D is 260 metres to the west of C and on a bearing of 240^0 from A

(a) Sketch the relative positions of A, B, C and D. **(1 mark)**

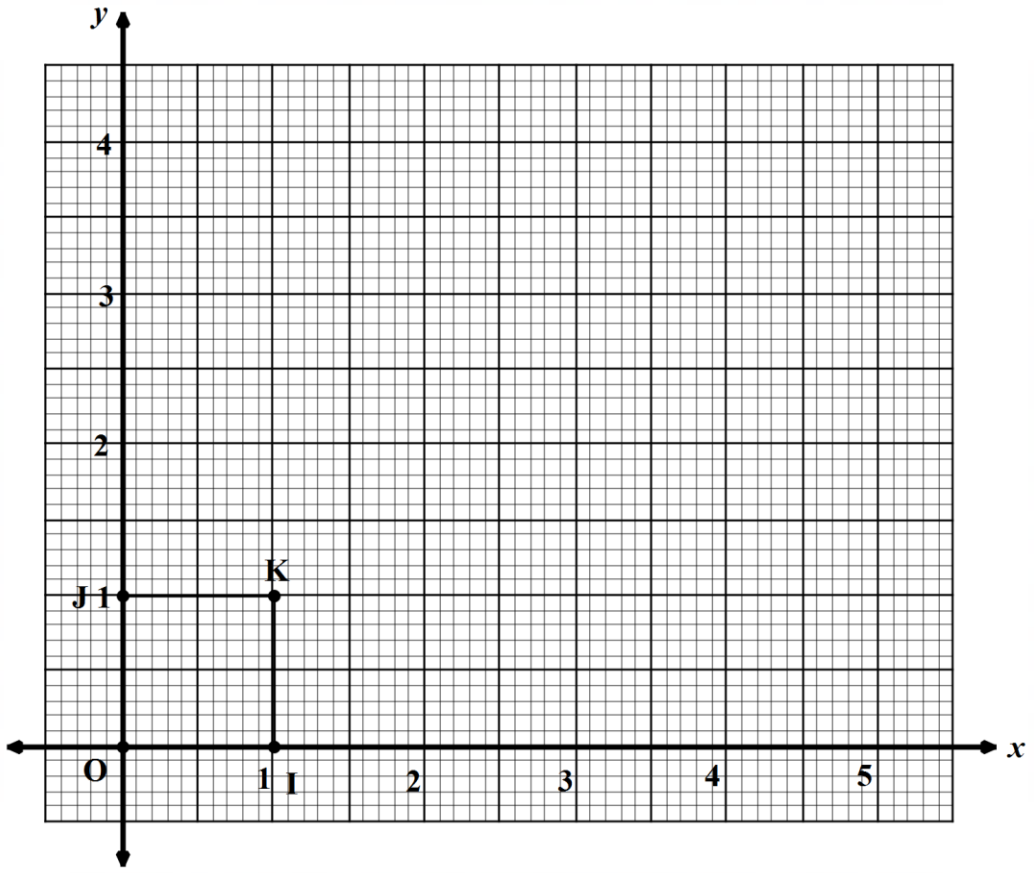
(b) Calculate:

(i) The distance BC, correct to 1 decimal place. **(3 marks)**

(ii) The bearing of C from D to the nearest degree. **(3 marks)**

(c) Find the area of the farm in hectares, correct to 3 significant figures. **(3 marks)**

20. The grid below shows the unit square OIKJ such that O(0, 0), I(1, 0), K(1, 1) and J(0, 1)



(b) $O'I'K'J'$ is the image OIKJ after a transformation **M** such that $O'(0, 0)$, $I'(4, 0)$, $K'(4, 1)$ and $J'(0, 1)$

(i) On the same grid, draw $O'I'K'J'$ **(1 mark)**

(ii) Describe fully the transformation **M**. **(3 marks)**

(iii) Find the matrix of **M**. **(1 mark)**

(c) $O''I''K''J''$ is the image of $O'I'K'J'$ under a transformation described by the matrix $\begin{pmatrix} 1 & 0 \\ 0 & 4 \end{pmatrix}$

(i) Find the coordinates of $O''I''K''J''$ **(2 marks)**

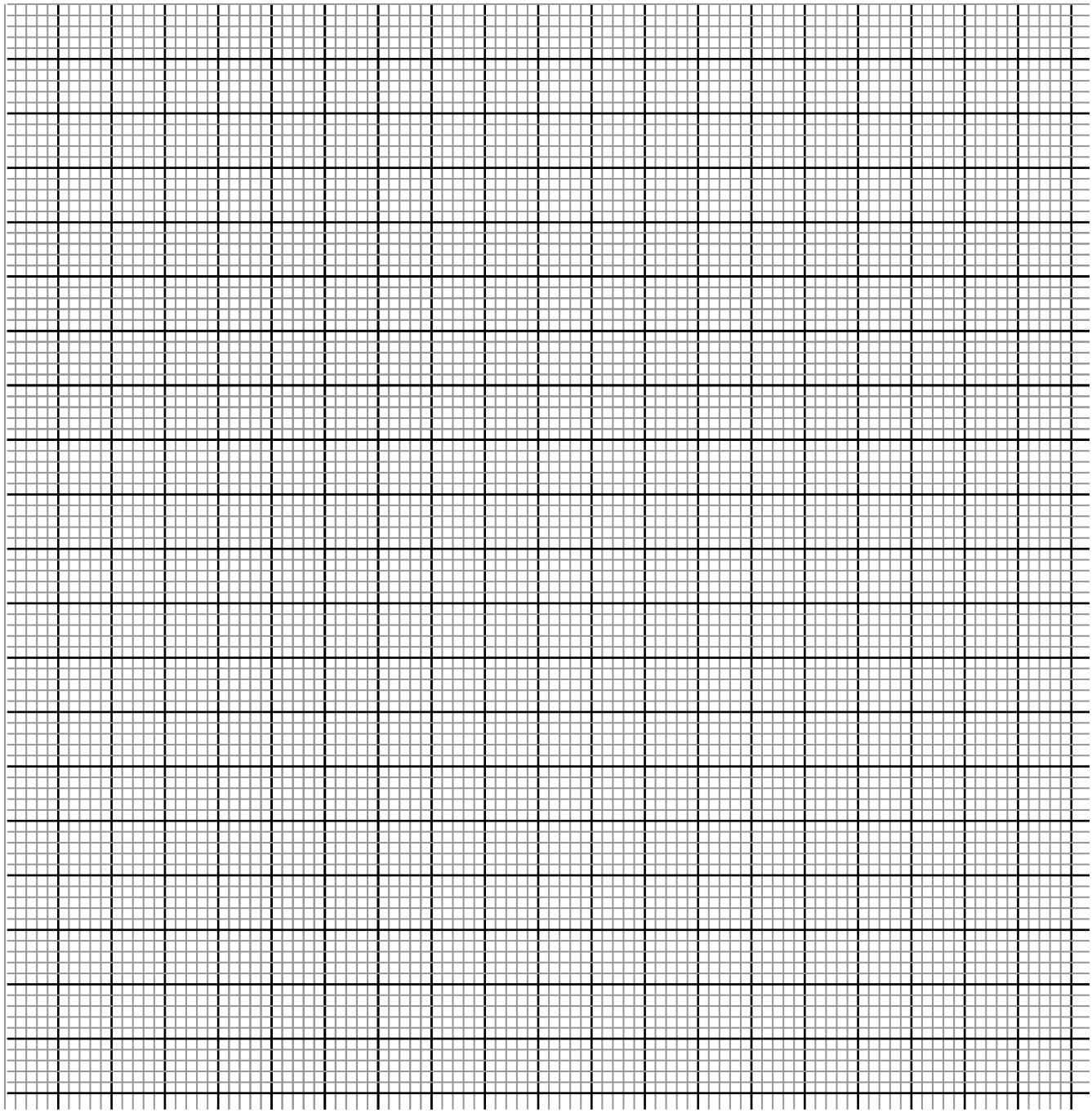
(ii) On the same grid, draw $O''I''K''J''$ **(1 mark)**

(d) Describe a single transformation that maps OIKJ onto $O''I''K''J''$. **(2 marks)**

21. (a) Complete the table given below for the functions $y = -3\cos 2x$ and $y = 2\sin\left(\frac{3}{2}x + 30\right)^0$ for $0^0 \leq x \leq 180^0$ **(2 marks)**

x^0	0	20	40	60	80	100	120	140	160	180
$-3\cos 2x$	-3.00			1.50	2.82	2.82		-0.52	-2.30	
$2\sin\left(\frac{3}{2}x + 30\right)^0$	1.00		2.00	1.73		0.00	-1.00			-1.73

(b) Using the grid provided, draw the graphs of $y = -3\cos 2x$ and $y = 2\sin\left(\frac{3}{2}x + 30\right)^0$ for $0^0 \leq x \leq 180^0$ on the same pair of axes. Take 1cm to represent 20^0 on the $x-$ axis and 2cm to represent 1 unit on the $y-$ axis. **(5 marks)**



(c) From the graphs in (b) above, find;

(i) the period of $y = 2\sin\left(\frac{3}{2}x + 30\right)^0$ **(1 mark)**

(ii) the values of x given that $2\sin\left(\frac{3}{2}x + 30\right)^0 + 3\cos 2x = 0$ **(2 marks)**

22. Awuor was paid an initial salary of Kshs. 180000 per annum with a fixed annual increment. Wasonga was paid and initial salary of Kshs. 150000 per annum with a 10% increment compounded annually.

(a) Given that Awuor's annual salary in the 11^{th} year was Kshs. 288,000, determine:

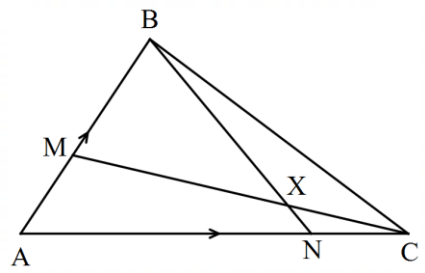
(i) Her annual increment. **(2 marks)**

(ii) The total amount of money Awuor earned during the 11 years. **(2 marks)**

(b) Determine Wasonga's monthly earning, correct to the nearest 10 shillings during the 11^{th} year **(3 marks)**

(c) Calculate the number of years it will take Awuor's total earnings to be Ksh. 1022400**.(3 marks)**

23. In the triangle ABC shown below, $\mathbf{AB} = \boldsymbol{a}$ and $\mathbf{AC} = \boldsymbol{c}$. Point M lies on AB such that AM: MB=2: 3 and point N lies on AC such that AN: NC = 5: 1. Lines BN and MC at X



(a) Express the following in terms of $\boldsymbol{a}$ and $\boldsymbol{c}$;

(i) **BN**; **(1 mark)**

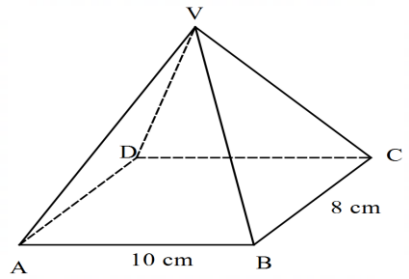
(ii) **CM.** **(1 mark)**

(b) Given further that $\mathbf{BX} = h\mathbf{BN}$ and $\mathbf{CX} = k\mathbf{CM}$ where h and k are constants

(i) Write two different expressions for **AX** in terms of $\boldsymbol{a}$, $\boldsymbol{c}$, h and k. **(4 marks)**

(ii) Hence find the values of h and k. **(4 marks)**

24. The figure below shows a right pyramid VABCD standing on a rectangular base of length 10 cm and width 8 cm. The diagonals of the base intersect at O and M is the midpoint of BC. The vertical height OP of the pyramid is 12 cm and that all the slant edges are equal.



Calculate correct to 2 decimal places:

(a) The length of VM, **(2 marks)**

(b) (i)State the projection of VB on the plane ABCD. **(1 mark)**

(ii) Calculate the angle VB makes with the plane ABCD. **(3 marks)**

(c) The angle between planes VAD and ABCD. **(2 marks)**

(d) The volume of the pyramid. **(2 marks)**

KCSE 2025 NAIROBI CLUSTER MOCK

KCSE EXAM SERIES 2

COMPUTER STUDIES

451/1

PAPER 1 (THEORY)

TIME: 2½ HOURS

NAME……

SCHOOL…… SIGN……

INDEX NO…… ADM NO……

Kenya Certificate of Secondary Education.

Instruction to candidates

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

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

(c)** This paper consists of **two** sections: **A** and **B

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

(e)** Answer question **16** and other **three** questions from section **B

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

(g) Candidates should answer the questions in English.

For Examiner's Use Only

Section	Question	Maximum Score	Score
A	1-15	40	
B	16	15	
	17	15	
	18	15	
	19	15	
	20	15	
		Total S	

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

1. List any THREE examples of Database packages popularly in use today. **(3 marks)**

……

……

……

2. List any TWO functions of the Control Unit **(2 marks)**

……

……

3. Mobile devices such as Smartphones and Tablets use an operating system.

List any THREE types of operating system found in mobile devices. **(3 marks)**

……

……

……

4. A group of students are producing a class newsletter which they will email to parents of students in the class. The students have decided to use a smartphone. Data for the newsletter will be input, stored and output by the smartphone.

Identify any TWO devices that are part of the smartphone that could be used to input the data for the newsletter. **(2marks)**

……

……

……

5. Many books contain a *gutter margin*. Explain gutter margin as used in word processing.**(2mrks)**

……

……

……

……

6. a) Distinguish between General Purpose computers and Special Purpose Computers **(2 marks)**

……

……

……

……

b) Define toggle keys found on a standard keyboard, giving any TWO examples **(2 marks)**

……

……

……

7. Ujuzi High School is about to set up a computer Laboratory. Advise them on three measures to take in order to ensure proper ventilation in the Room. **(3 marks)**

……

……

……

8. a) Define Virtual Memory.

……

……

b) Name any ONE place where virtual memory may be found in a computer. **(2 marks)**

……

……

9. List any THREE differences between *Cathode Ray Tube* Monitors and *Flat Panel* **Monitors** **(3 marks)**

……

……

……

……

……

10. a). One of the factors to consider when purchasing computer hardware is warranty. List any TWO contents of a warranty. (**2 marks)**

……

……

b). Distinguish between portability and compatibility as used in computer hardware. **(2 marks)**

……

……

……

……

11. A computer studies student is creating a movie, in school, for a project. He needs to take the movie home to edit it. The student decided to use solid-state memory card (SSD card) to transport the movie files. The student is unable to save the work on the memory card.

Give any TWO error messages that may appear when attempting to save the work. **(2marks)**

……

……

……

……

12. Mention any TWO advantages of serial cables **over** parallel cables for data transmission.

(2 marks)

……

……

13. List any TWO ways that *text* can be made to fit in a text box in desktop publishing software

(2marks)

……

……

……

……

14. List any TWO application areas of artificial intelligence **(2 marks)**

……

……

……

……

15. a). State any TWO functions of system software **(2marks)**

……

……

b). Differentiate between freeware and shareware with reference to software. **(2marks)**

……

……

……

……

……

SECTION B (60 Marks)

*Answer question **16** and any other **three** questions in this section in the spaces provided*

16. a) State any TWO differences between *syntax error* and *logical error* as used in programming**.**

(4 marks)

……

……

……

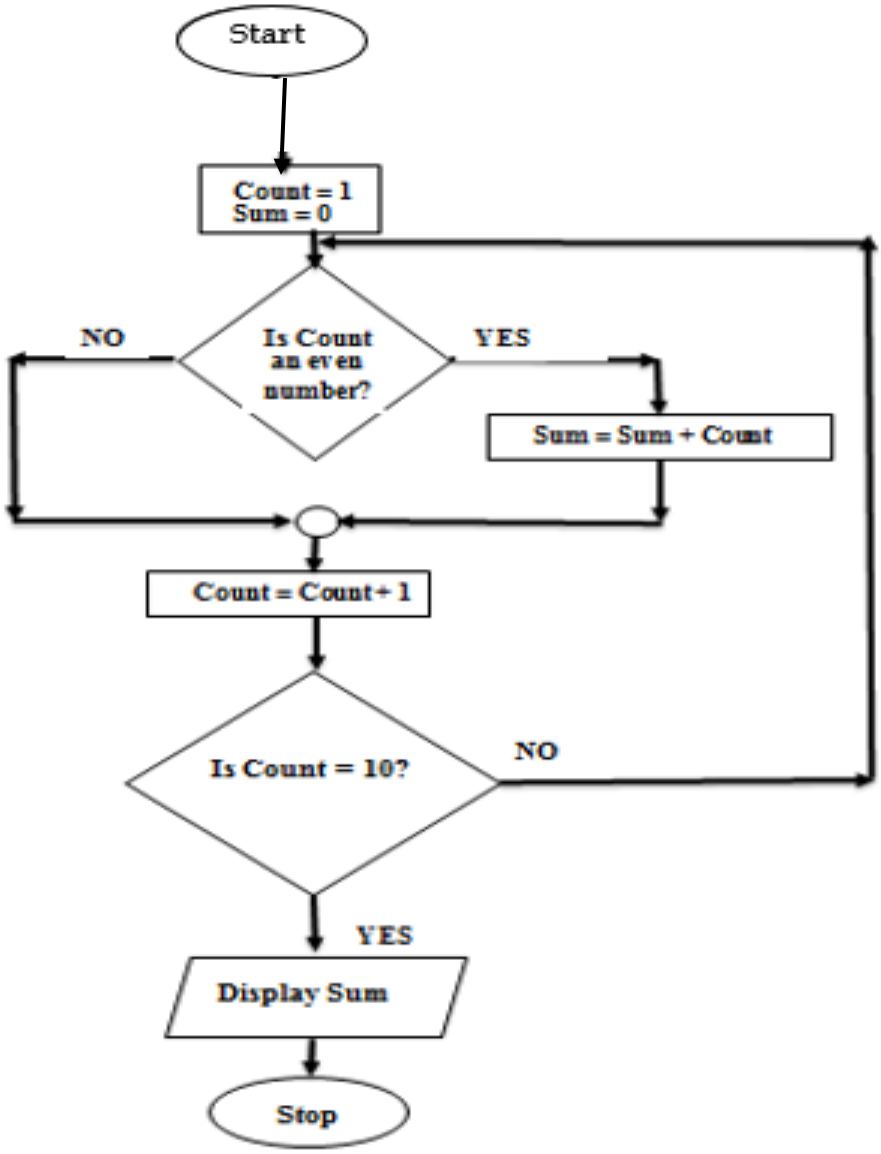
……

……

……

……

b) The Figure below shows flowchart used to find the sum of even numbers in the first 10 natural numbers. Study it and use it to answer questions that follow.



Determine the output from the flowchart. *Show your working*. **(4 marks)**

……

……

……

……

……

……

……

i) Write a pseudo code for the flowchart above. **(7 marks)**

17. a) List any TWO reasons why binary systems are used in computers. **(2 marks)**

b) i) Convert $93CADF_{16}$ to its binary equivalent **(2 marks)**

ii) Use the two's compliment to solve: $-37_{10} + 51_{10}$ **(4 marks)**

iii) Convert 10111111.01111_2 to its Octal equivalent **(2 marks)**

c) Give any TWO characteristics of a good system analyst. **(2 marks)**

d). Describe the THREE components of an expert system **(3 marks)**

18. Lawino opened her flash disk in one of the school's computers using drive F. she had saved her work in a folder named "MINE". This folder has subfolders for PICTURES, PERSONAL and AUDIO. In PERSONAL subfolder, there are files such as MyDocs.xlt and FamilyDocs.pff, while in PICTURES there are subfolders such as OFFICE and CHURCH.

a) i) Draw a directory tree structure for Lawino. **(2 marks)**

ii) In CHURCH subfolder there is a file named OldPicture.jpg. Write a path to this file. **(2 marks)**

ii) She opened the file OldPicture.jpg, then decided to delete it. Explain what would happen. **(2 marks)**

b) i) One classification of operating systems according to user-interface is menu driven. Explain menu driven. **(2 marks)**

ii) Describe, with the help of an example, transcription errors. **(3 marks)**

c) In the academic office of our school, there is a master file and a reference file.

i) Distinguish between a master file and a reference file. **(2 marks)**

ii) For each of the files above (i), name any TWO pieces of information that can be held in each of them in relation to school. **(2 marks).**

19. (a)(i) The formula B2+C2 was entered in cell D2 then copied to cell F2. Show the new formula in cell F2 and give a reason for your answer.. **(2 marks)**

(ii) State the meaning of each of the following terms as used in spreadsheets:

(A) Countif ( ) **(2 marks)**

(B) Max ( ) **(2 marks)**

(b)(i) Explain two types of *documentation* produced when developing a system by a system analyst. **(2 marks)**

(c)Nosim has developed a computerized system for a school and currently in its change over stage, where the new system is introduced in a department then tested to ascertain its

effectiveness and once its performance is satisfactory it is implemented in the entire organization.

(i) Identify the changeover strategy used. **(1 mark)**

(ii) Explain any TWO advantages of the changeover strategy identified in (i)above. **(4 marks)**

20. Arosy bought a smartphone. Smartphones can be connected using wired or wireless methods.

a) i) Give two disadvantages, to Arosy, of using *a wired* method to connect to the smartphone.

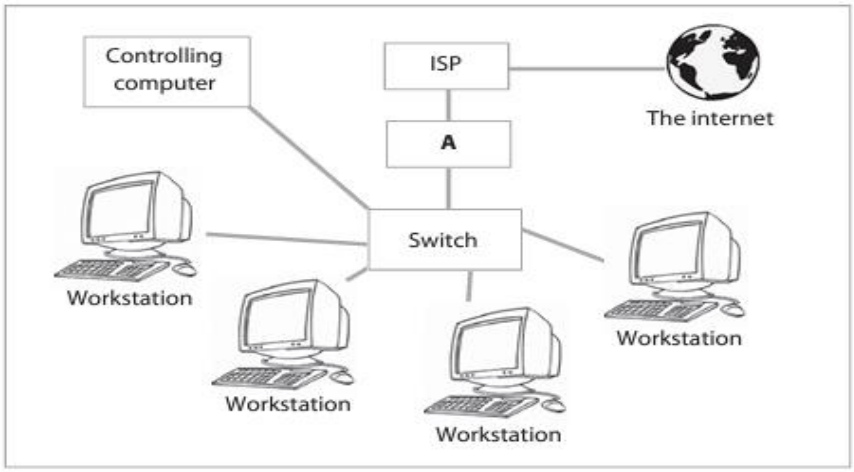
(2marks)

ii) Give two disadvantages to Arosy of using *a wireless* method to connect to the smartphone.

(2marks)

b) The diagram shows how a network is connected to the internet.

i) Identify the hardware device labelled A on the diagram.



Device A **(1 mark)**

ii) Identify any TWO types of connections that can be used to connect the company network to the internet. **(2marks)**

c) i) What is an ISP? **(2 Marks)**

ii) Give four examples of ISPs. (2 Marks)

d) Security solutions prevent read and write access to data, which provides very strong protection against tampering and unauthorized acess.

Explain the following terminology as used in data security **(4 Marks)**

i) Cypher text

ii). Piracy

KCSE 2025 NAIROBI CLUSTER MOCK

KCSE EXAM SERIES 2

COMPUTER STUDIES

451/2

PAPER 2

TIME: 2½ HOURS

NAME……

SCHOOL…… SIGN……

INDEX NO…… ADM NO……

Kenya Certificate of Secondary Education.

Instruction to candidates

1. *Type your name and index number at the top right hand corner of each print out*
2. *Sign and write the date of the examination below the name and the index number on each printout*
3. *Write your name and index number on the compact disks*
4. *Write the name and the version of the software used for each question attempted in the answer sheet*
5. *Passwords should not be used for each question attempted in the answer sheet*
6. *Answer all the questions*
7. *All questions carry equal marks*
8. *All answers must be saved in your compact disks*
9. *Make printout of the answers on the answer sheets provided*
10. *Hand in all the printouts and compact disks*
11. *Candidates should check the question paper to ascertain that all pages are printed as indicated and no questions are missing*

Question 1

Mobility Tax service limited is a company that deals with taxis service within KASSU city. Drivers are paid commission based on number of trips and kilometres covered. The company manager has requested you to assist develop a database to store the details of their drivers.

a) Open a database program and create a database named **Mobility**. **[1mark]**

b) Create two tables named **CarDetails** and **DriverDetails** from the following details. **[12marks]**

Field Name	Data Type and Properties
Trips	Number (size 2)
Reg_No	Text (size12)
Car_Type	Text (size 25)
Emp_No	Text (size 12)
Phone	Number (Format the number to start with 0)
Distance	Number
Charges	Currency (format=Kshs, decimal Places=2)
Name	Text (size 25)
Male	Yes/No

c) Create appropriate relationships among the tables and enforce referential integrity. **[3marks]**

d) Create a form for CarDetails table and add a Subform for the DriverDetails table. save the form as **DataEntry** **[8marks]**

e) Enter the above data using the forms created in (d) above **[10marks]**

f) Create a query to display *EmpNo*, *Name*, Car_*Type* and *Male* for Female drivers whos names contain letter "i". Save the query as Qry_Female. **[3marks]**

g) Create query to calculate commission earned by each driver given that a driver earns 20% of the total amount charged by a vehicle. Save query as Qry_Comm. **[5marks]**

h) Create a report based on Car_Type showing total distance covered. Save report as CarType **[4marks]**

i) Print:

i) CarDetails and DriverDetails tables **[2marks]**

ii) Qry_Comm query **[1mark]**

iii) CarType report **[1mark]**

Question 2

Design a publication to appear as indicated above using the following instructions.



(a) Launch the DTP package and set the page designs as**;** **(2 marks)**

i. Layout landscape

ii. Measurements to centimeters

iii. Margins 2cm on all sides.

(b) Save the publication as **kassucity**. **(1 marks)**

(c) All text font styles are Calibri, Font size 20 <u>unless otherwise stated</u> ***(29 marks)***

(d) Frame border **(4 marks)**

i. Size height 17cm by width 24cm

ii. Fill colour light green, tint 50%

iii. Line/stroke light blue

iv. Weight 3pt

(e) The main heading to have the following styles; **(4 marks)**

i. Text centered

ii. Font Bodoni MT black

iii. Font size 36

iv. Background 2cm by 20 cm

(f) Second heading **(2 marks)**

i. Font style bookman old style

ii. Font size 26

(g) Side heading **(2 marks)**

i. Background 1cm by 15cm

ii. Font style Calibri

(h) Third heading **(1 mark)**

i. Font style Arial black

(i) Star **(1 mark)**

i. rotation 320 degrees

(j) Packages **(3 marks)**

i. rotation 320 degrees

ii. Font style Arial narrow

iii. Stroke weight 1pt

(k) Contact **(1 mark)**

i. Font style Arial black

(l) Print the publication **(1 mark)**

(50 marks)

KCSE 2025 NAIROBI CLUSTER MOCK

KCSE EXAM SERIES 2

HOME SCIENCE

441/1

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 no in the spaces provided.

b) Answer all the questions in section A and B and any two from section C.

c) Answers to all questions must be written in the spaces provided.

FOR EXAMINERS USE ONLY.

Section	Question	Maximum score	Candidates score
A	**1-40**	**40**	
B	**41**	**20**	
C	**42-44**	**40**	
Total score		***100***	

SECTION A (40 MARKS)

Answer all the questions in the spaces provided

1. State two disadvantages of stewing food **(1mk)**

……

……

2. Name two milk products that should be wrapped in grease proof papers and stored on the top shelf of the refrigerator **(1mk)**

……

……

3. Define the term cooking **(1mk)**

……

……

4. Mention two reasons for preserving food **(1mk)**

……

……

……

5. Give two importance of blanching vegetables **(1mk)**

……

……

6. List two categories of convenience foods **(1mk)**

……

……

7. Pinpoint two methods of reheating food **(1mk)**

……

……

8. Mention two styles of service that are commonly practiced **(1mk)**

……

……

9. Mention the two classifications of vitamins **(1mk)**

……

……

10. Give two reasons for food fortification **(1mk)**

……

……

……

11. Give a reason as to why ironing boards have sleeve boards attached to them **(1mk)**

……

……

12. Name two materials used to make hanger**s** **(1mk)**

……

……

13. Mention two qualities of a good toilet/bathing soap **(1mk)**

……

……

14. List down two uses of starch on fabrics **(1mk)**

……

……

15. Maisonettes commonly share walls, give two examples of such maisonette**s** **(1mk)**

……

……

16. Name two examples of fixed dirt **(1mk)**

……

……

17. List two categories of hard furnishings **(1mk)**

……

……

18. Natural lights or sunlight enters the house through **(1mk)**

……

……

19. Mention two importance of social preparation of an expectant mother **(1mk)**

……

……

20. List two points to consider when choosing a weaning food **(1mk)**

……

……

21. State two negative effects of advertisements on consumer **(1mk)**

……

……

22. Name two forms of advertisement **(1mk)**

……

……

23. Describe versatility as a principle of wise buying **(1mk)**

……

……

24. Define simple-non- instalment credit **(1mk)**

……

……

25. Name two family financial goals **(1mk)**

……

……

26. Consumers rights must be safe guarded, name two of such righ**ts** **(1mk)**

……

……

27. When buying goods and services, an invoice or receipt is always issued, what two information is a must in the document above mention **(1mk)**

……

……

28. State the roles of food and drugs act **(1mk)**

……

……

29. Give two reasons for having a sleeve on garment**s** **(1mk)**

……

……

……

30. Highlight two methods used to attach collars to the neckline **(1mk)**

……

……

31. Name two parts of a garment whose method of preparation and attachment is similar **(1mk)**

……

……

32. Slip hemming is suitable for delicate fabrics, mostly used on ladies garments, give two such examples of fabric**s** **(1mk)**

……

……

33. Mention the two layers of a **pleat** **(1mk)**

……

……

34. Give two uses of temporary stitches **(1mk)**

……

……

35. State the function of each of the parts of a sewing machin**e** **(1mk)**

a) Stop motion screw

……

……

b) Balance wheel

……

……

36. Define cellulosic fibers **(1mk)**

……

……

37. Give two examples of regenerated **fibers** **(1mk)**

……

……

38. Mention two types of patches used in repair of garments **(1mk)**

……

……

39. Give a reason why overlaid seam is not suitable on heavy fabrics **(1mk)**

……

……

40. Highlight two pattern markings that are not transferred during garment construction **(1mk)**

……

……

SECTION B

(Answer all the questions in the spaces provided)

41. Describe how to carry out the following home management tasks

a.) Describe how to lauder and starch a white cotton table napkin **(10mks)**

b.) Clean an oily hair brus**h** **(5mks)**

c.) Dust a dining table after sweeping **(5mks)**

SECTION C: 40 MARKS

Answer any two questions in these section

42.a.) State and explain 4 methods of steaming food **(4mks)**

b.) Explain four ways of conserving energy at home **(4mks)**

c.) Explain four ways on how a parent can help a child play and learn properly **(4mks)**

d.) State four functions of Kenya Consumer Association in catering for the needs of the consumers **(4mks)**

e.) State four qualities of a well-made cuff **(4mks)**

43.a.) State and explain four points to consider when planning and packing meals for picn**ic (4mks)**

b.) Explain how to take care of plastic equipment at home to avoid damaging the**m** **(4mks)**

c.) Describe how to meet the emotional needs of a patient recuperating at **home** **(4mks)**

d.) State and explain four importance of budgeting to a student with pocket **money** **(4mks)**

e.) Discuss four points to observe when taking body **measurements** **(4mks)**

44.a.) State four considerations to be observed when preserving food in glass **containers (4mks)**

b.) State four points to consider when choosing flowers for an upcoming co-operate **event (4mks)**

c.) Briefly explain how to hang clothes when the only option available is the use of a hanger in your mother's bedroom **(4mks)**

d.) Discuss the four sources of information for the **consumer** **(4mks)**

e.) Identify four reasons for the management of fullness in garment construction **(4mks)**

For Marking Schemes Contact 0746 222 000 / 0742 999 000

KCSE 2025 NAIROBI CLUSTER MOCK

KCSE EXAM SERIES 2

HOME SCIENCE

441/2

PAPER 2

TIME: 2½ HOURS

SCHOOL…… SIGN……

Kenya Certificate of Secondary Education.

CONFIDENTIAL

HOMESCIENCE 441/2 (PRACTICAL)

CLOTHING CONSTRUCTION

Materials to be provided

1. Plain light weight fabric 55cm long by 90cm

2. Sewing thread to match

3. Paper Pattern KCSE 2015 At Thika Gracious Printers (0723 053 947)

KCSE 2025 NAIROBI CLUSTER MOCK

KCSE EXAM SERIES 2

HOME SCIENCE

441/2

PAPER 2

TIME: 2½ HOURS

NAME……

SCHOOL…… SIGN……

INDEX NO…… ADM NO……

Kenya Certificate of Secondary Education.

441/2

HOMESCIENCE

PAPER 2

CLOTHING CONSTRUCTION

TIME: 2 ½ HRS

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 must use the machine stitches appropriately in the construction of the garment*
4. *Hand stitches used instead of machine stitches will not be marked*
5. *.Hand stitches will only be allowed for hemming and tacking stitches as required.*

KCSE 2025 NAIROBI CLUSTER MOCK

KCSE EXAM SERIES 2

HOME SCIENCE

441/3

PAPER 3

TIME: 1¾ HOURS

NAME……

SCHOOL…… SIGN……

INDEX NO…… ADM NO……

Kenya Certificate of Secondary Education.

Instructions to Candidates

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

(b) Answer **all** questions in section **A, three** from Section **B** and **two** from Section **C.**

(c) Answers to all the questions must be written legibly in the answer booklet provided.

(d) **This paper consists of three printed pages**

(f) Candidates should answer the questions in English

For Examiner's Use Only

Section	Questions	Maximum score	Candidate's scor
A	1-17	25	
B	18 -21	45	
C	22-24	30	
		Total score	

THE TEST

Your grandfather will pay a visit at your home while your parents are away. Using ALL the ingredients listed below, prepare, cook, and present a one-course lunch for both of you. In addition include a nourishing drink.

Ingredients

- Potatoes/Rice/ maize meal flour
- Liver / minced beef
- Tomatoes
- Onions
- Dhania
- Carrots
- Hoho
- Green leafy vegetables
- Fruit in season
- Milk
- Sugar
- Salt

Planning session: 30 minutes

Use separate sheets of paper for each task listed below and use carbon paper to make duplicate copies then proceed as follows:

1. Identify the dishes and write down their recipes.
2. Write down your order of work
3. Make a list of the foodstuff and equipment you will require.

THIS IS THE LAST PAGE PRINTED

For Marking Schemes Contact 0746 222 000 / 0742 999 000

KCSE 2025 NAIROBI CLUSTER MOCK

KCSE EXAM SERIES 2

ISLAMIC RELIGIOUS EDUCATION

314/1

PAPER 1

TIME: 2½ HOURS

NAME……

SCHOOL…… SIGN……

INDEX NO…… ADM NO……

Kenya Certificate of Secondary Education.

INSTRUCTIONS TO CANDIDATES

a) *Candidates must check the paper to ascertain that all pages are printed and no question is missing*

b) *Answer any five questions in the foolscaps provided.*

c) *All answers must be written in English.*

FOR EXAMINER'S USE ONLY

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

Answer any five questions in the foolscaps provided.

1.a) **State** the significance of Ayatul kursy. **(7 marks)**

b) **Explain** reasons why the Quran was not compiled during the time of the prophet. **(8 marks)**

c) **Give five** reasons why the Quran was revealed in Arabic and in Arabia. **(5 marks)**

2. a) Highlight the teachings of Suratul Asr. **(10 marks)**

b) **Give five** differences between tafseer and translation of the Quran. **(10marks)**

3 a) **Discuss** reasons why the prophet discouraged writing of Hadith during his time. **(8 marks)**

b) **Describe** factors that made the study and collection of Hadith successful. **(7marks)**

c) **Identify** the subject matter of Hadith Qudsy. **(5 marks)**

4 a) **Explain** the types of fasting. **(5 marks)**

b) **Mention** the circumstances that make Ghusl compulsory. **(7 marks)**

c) **Identify** people on whom Friday prayer is not compulsory. **(8 marks)**

5 a) Which are the things forbidden while in the state of Ihram. **(6 marks)**

b) **Outline** the functions of the chief Qadhi in Kenya. **(8 marks)**

c) **State** the reasons for asking Tawbah. **(6 marks)**

6a)Outline the different interpretations of Imamah. **(8 marks)**

b) **Highlight** the characteristics of prophets. **(5 marks)**

c) **Discuss** the significance of Tawheed. **(10 marks)**

KCSE 2025 NAIROBI CLUSTER MOCK

KCSE EXAM SERIES 2

ISLAMIC RELIGIOUS EDUCATION

314/2

PAPER 2

TIME: 2½ HOURS

NAME……

SCHOOL…… SIGN……

INDEX NO…… ADM NO……

Kenya Certificate of Secondary Education.

INSTRUCTIONS TO CANDIDATES

a) *Candidates must check the paper to ascertain that all pages are printed and no question is missing*

b) *Answer any five questions in the foolscaps provided.*

c) *All answers must be written in English.*

FOR EXAMINER'S USE ONLY

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

Answer any five questions in the foolscaps provided.

1 a) **Explain** circumstances under which Islam can allow abortion. **(10marks)**

b) **Describe** the ideal dress of a muslim woman. **(10marks)**

2 a) **Discuss** the stand of muslims on slavery. **(8marks)**

b) **How** can a strong muslim family contribute to the development. of a community. **(6marks)**

c) **Highlight** possible reasons whereby a wife can ask for a Fasikh divorce. **(6marks)**

3 a) **What** are the possible remedies for corruption? **(8 marks)**

b) **Give** reasons why hoarding is prohibited in Islam**.** **(6 marks)**

c**)** **State** the conditions for Wasiyyah**.** **(6 marks)**

4 a) **Discuss** the importance of the two covenant of Aqabah. (**10 marks)**

b) **What** are the results of the treaty of Hudaibiyyah. **(10 marks)**

5 a) **Discuss** lessons a muslim leader can learn from Abu Bakr's speech when he was elected a Caliph. **(10 marks)**

b) **Outline** the moral qualities of the prophet (p.b.u.h) which muslims should strive to uphold. **(10 marks)**

6 a) **Discuss** the contributions Ibn Sina made towards philosophy. **(10 marks)**

b) **What** were the views of Ibn Khaldun on writing History**?** **(10 marks)**

THE END

FOR THE FOLLOWING;

- ✓ ONLINE TUITION
- ✓ REVISION NOTES
- ✓ SCHEMES OF WORK
- ✓ SETBOOKS VIDEOS
- ✓ TERMLY EXAMS
- ✓ QUICK REVISION KITS
- ✓ KCSE TOPICALS
- ✓ KCSE PREMOCKS
- ✓ TOP SCHOOLS PREMOCKS
- ✓ JOINT PREMOCKS
- ✓ KCSE MOCKS
- ✓ TOP SCHOOLS MOCKS
- ✓ JOINT MOCKS
- ✓ KCSE POSTMOCKS
- ✓ TOP SCHOOLS PREDICTIONS
- ✓ KCSE PREDICTIONS
- ✓ KCSE REVEALED SETS

CALL/TEXT/WHATSAPP

0746 222 000

0742 999 000

mwalimuconsultancy@gmail.com

This is a Copyright Property of Mwalimu Consultancy

Powered By Mr Isaboke