KCSE 2022 PREDICTION

ALL SUBJECTS

SERIES 1

SUBJECTS PREDICTED;

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

1st Series of Top Analyzed Possible Testable Questions/ Areas Predicted by Experienced Examiners in National Schools within the KNEC Set-up expected in November 2022.

CONFIDENTIAL!

FOR MARKING SCHEMES/ANSWERS

CALL/WHATSAPP 0746 222 000

SUCCESS TO ALL CANDIDATES!

KCSE 2022 PREDICTION

SERIES 1

NAME…………………………………………   INDEX NO………………………

SCHOOL………………………………………   SIGN…………………………………

DATE…………………………………………………

231/1

BIOLOGY

(THEORY)

PAPER 1

TIME: 2 HOURS

Instructions to candidates

1. *Write your **name, index number** and the **name** of your school in the spaces provided above.*
2. ***Sign** and **write** the **date** of examination in the spaces provided above.*
3. *Answer **all** questions in this question paper.*

For Examiner's Use Only

QUESTIONS	MAXIMUM SCORE	CANDIDATE'S SCORE
1-29	80	

Answer All the Questions

1. Identify the characteristics of living organisms shown by the following; **(2marks)**

a) Bursting of the sporangium in *Rhizopous*.

………

………

b) A cheetah chasing after a gazelle.

………

………

2. Define the following terms as used in biology;

i. Entomology. **(1mark)**

………

………

ii. Histology. **(1mark)**

………

………

3. State **three** significance of Osmosis to plant nutrition. **(3marks)**

………

………

………

4. The diagram below represents amoeba. Study it and answer the questions that follow;

J
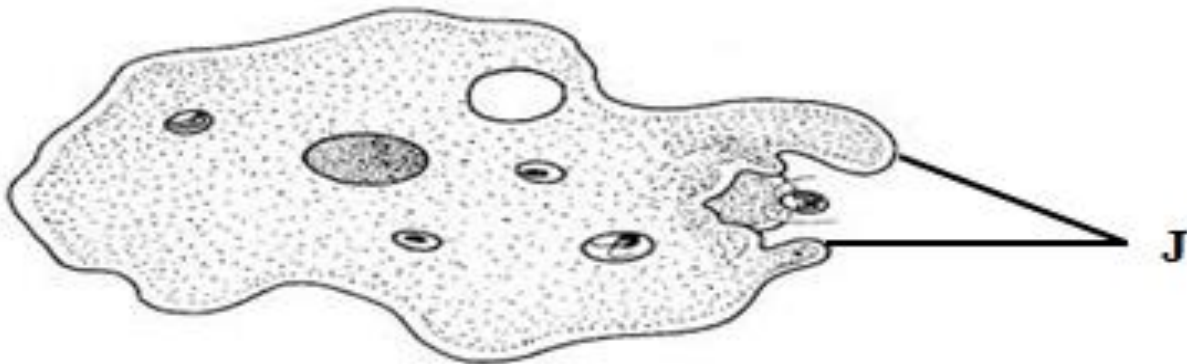
a) Name the respiratory surface found in the above organism. **(1mark)**

....

b) **i**. Identify the structures labeled **J**. **(1mark)**

....

ii. State **two** functions of the structure named in (b) (i) above. **(2marks)**

....

....

....

5. Below is a diagram of a mammalian cell. Study it and answer the questions that follow.
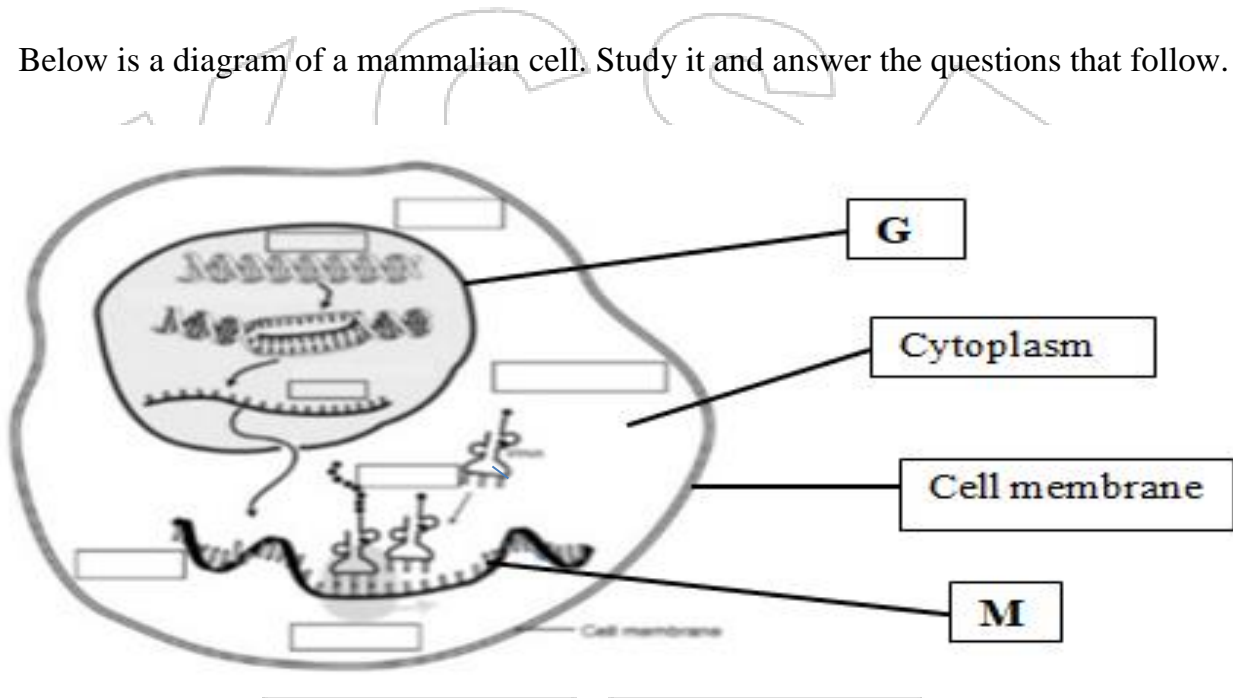
a) Identify the structures labeled; **(2marks)**

G. ………………………………………………..

M. …………………………………………………..

b) State the function of the structure labeled **M**. **(1mark)**

....

....

©2022 The Kenya National Examinations Council

6. Give **two** roles of the colon in human digestive system. **(2marks)**

....

....

7. Distinguish between dentition and dental formula. **(2marks)**

....

....

....

8. Name a carbohydrate that is abundance in the following;

a. Ripe fruits. **(1mark)**

....

b. Blood of vertebrates. **(1mark)**

....

9. Apart from photosynthesis identify one other function of chloroplast in plants. **(1mark)**

....

....

10. Below is a transverse section of a root. Study the diagram and answer the question that follows.
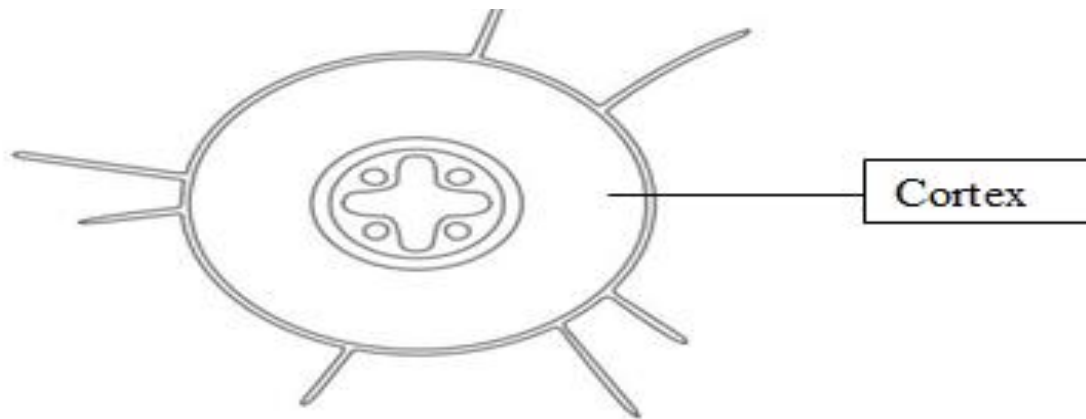
a) Identify the class from which the section was obtained. **(1mark)**

....

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

....

c) State **one** adaptation of endodermis to its function. **(1mark)**

....

....

d) Name **two** tissues found in the cortex. **(2marks)**

....

....

11. Distinguish between Guttation and transpiration. **(2marks)**

....

....

....

12. During a field study, students from Kenya high school found a woody plant as illustrated below.
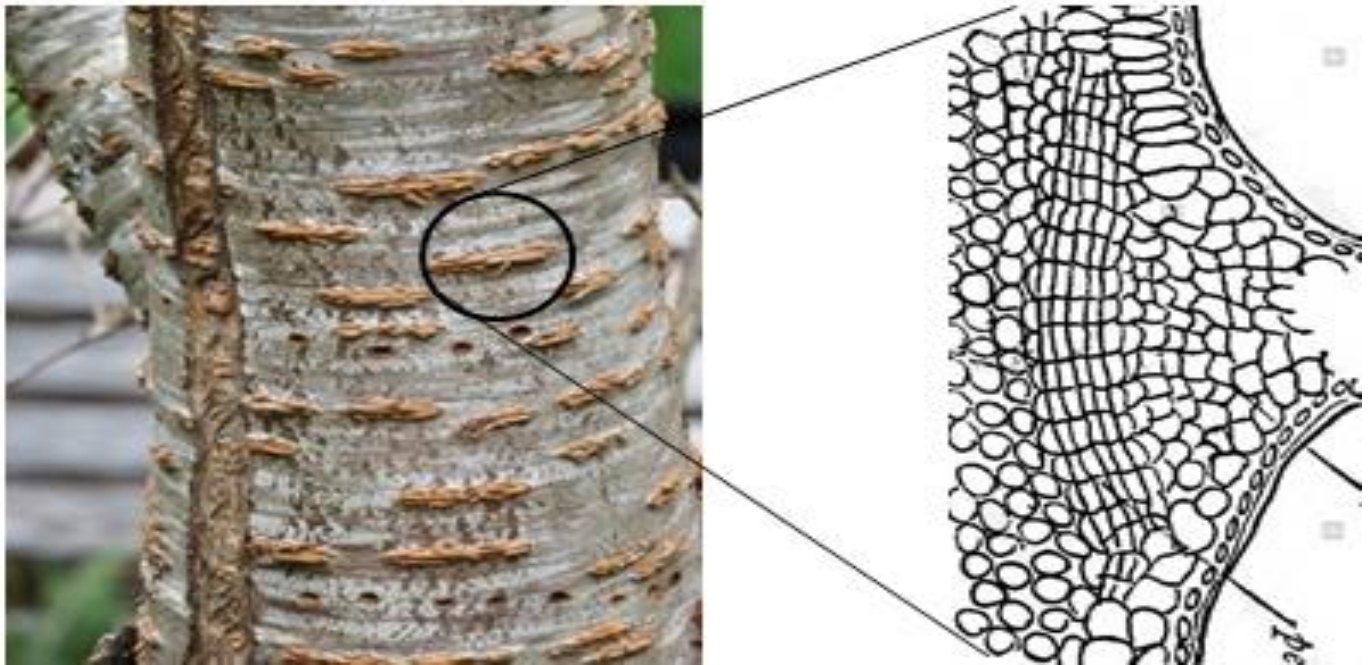
a)   Identify the above structure.   **(1mark)**

....

b)   Give **two** adaptations of the structure named in (a) above.   **(2marks)**

....

....

....

....

c)   Where is the above structure located in halophytes?   **(1mark)**

....

13.   State **two** structural differences between a cell wall and a cell membrane.   **(2marks)**

....

....

....

....

14.   a) Identify the cells that secrete the following along the alimentary canal.
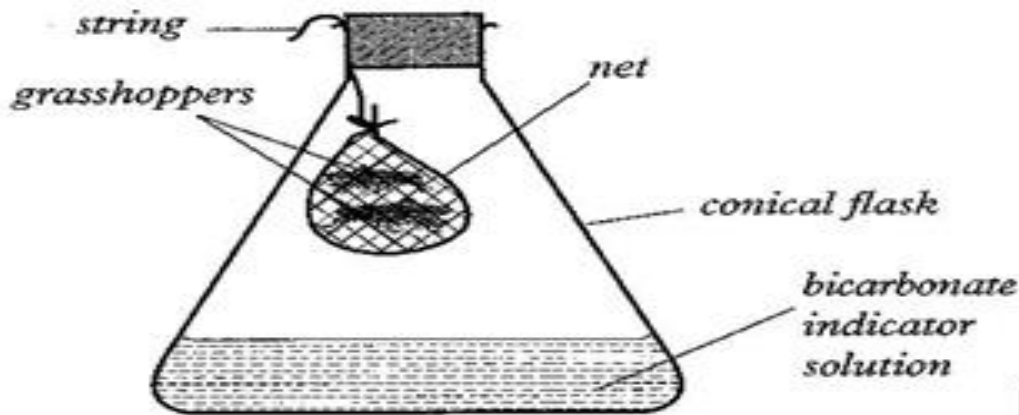
i)   Hydrochloric acid.   **(1mark)**

....

ii)   Rennin.   **(1mark)**

....

b.   State **two** significance of smooth muscles in the digestive system.   **(2marks)**

....

....

....

15. During an investigation of a certain metabolic reaction, students set up the apparatus as shown below.

a. Identify the physiological process being investigated. **(1mark)**

……………………………………………………………………………………………………

b. Account for the observation made in the conical flask after 30 minutes. **(2marks)**

……………………………………………………………………………………………………
……………………………………………………………………………………………………
……………………………………………………………………………………………………

16. a) State **three** ways in which human skin protects the body against bacterial infection.

(3marks)

……………………………………………………………………………………………………
……………………………………………………………………………………………………
……………………………………………………………………………………………………

b, Name the protein found in the Malpighian layer of the skin and state its function.

Name. **………………………………………………………………………………….** **(1mark)**

Function. **…………………………………………………………………...............** **(1mark)**

17. A student mixed a sample of urine from a person with Benedict's solution and heated, the colour changed to orange.

a) What did the student conclude on the health status of the person? **(1mark)**

....

....

b) Which organ in the person may not be functioning properly? **(1mark)**

....

18. An investigation was carried out on a mammalian kidney.
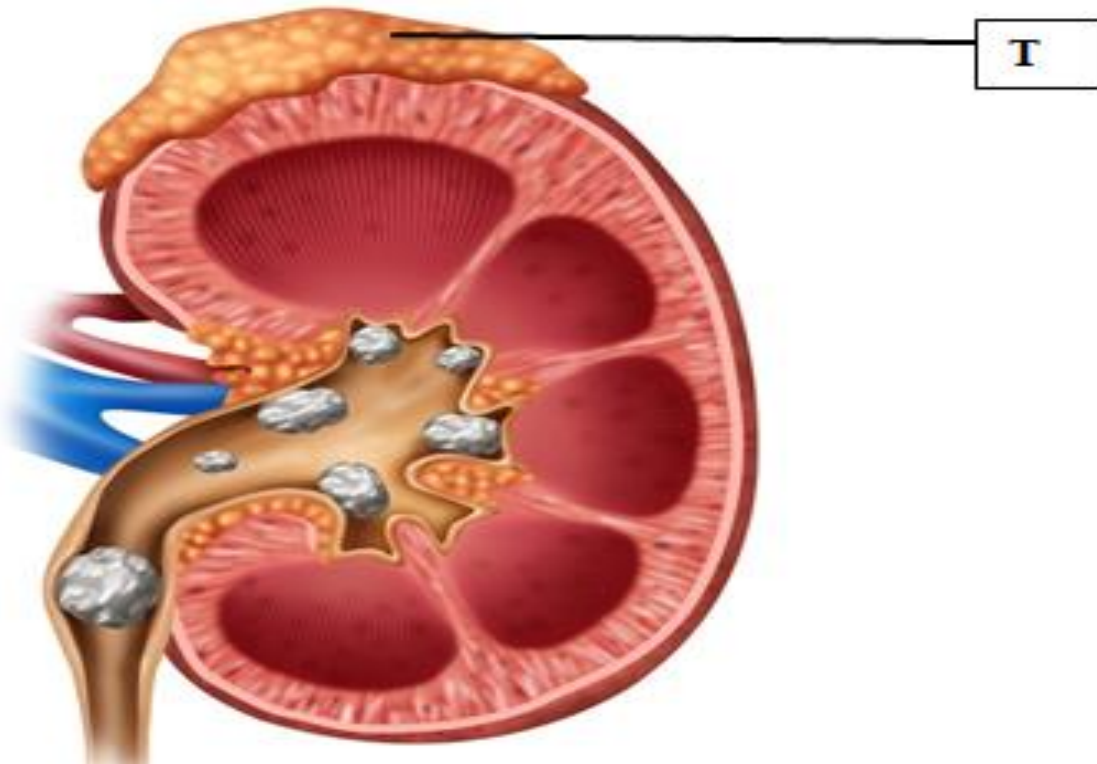
i. Name the structure labeled **T.** **(1mark)**

....

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

....

....

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

....

19. State the importance of saprophytic fungi in an ecosystem. **(1mark)**

....

....

20. List **two** assumptions made when using Capture-recapture as a method of estimating

population. **(2marks)**

....

....

....

21. Give **two** reasons why Pteridophytes are considered more advanced than Bryophytes.

(2marks)

....

....

....

22. Study the diagram below and answer the following questions.
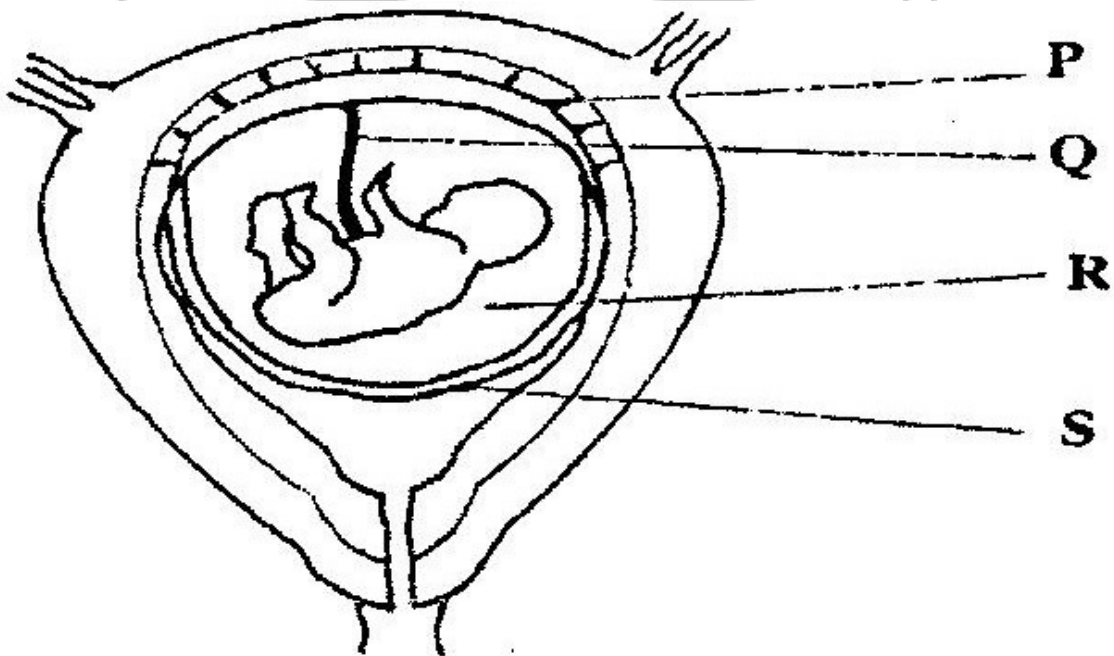
a) State the function of the part labeled **Q**. **(2marks)**

....

....

©2022 The Kenya National Examinations Council

b) State the role of the part labeled **R**. **(1mark)**

....

....

c) Identify a hormone produced by part labeled **P**. **(1mark)**

....

23. Give the function of Prolactin in female reproductive cycle. **(1mark)**

....

....

24. Below is a photograph illustrating a germinating seedling.

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

....

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

....

....

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

....

d) Explain how seedling H responds to light causing it to straighten. **(2marks)**

....

....

....

©2022 The Kenya National Examinations Council

25.   a) Define vestigial structures?   **(1mark)**

……

……

b) State **two** examples of vestigial structures in man.   **(2marks)**

……

……

26.   The figure below shows some cells from parts of mammalian respiratory tract.
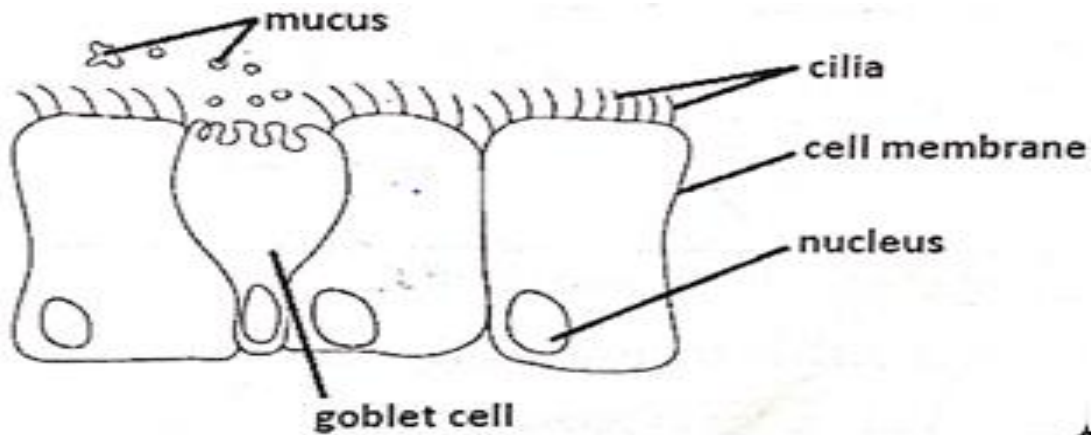
a.   Identify the part of the respiratory tract where the cells were obtained from.   **(1mark)**

……

b.   Explain the role of: **(2marks)**

i.   The mucus

……

……

ii.   The cilia.

……

……

27.   Mycorrhiza is a symbiotic association between two organisms. Name the two organisms that make this association.   **(2marks)**

……

……

©2022 The Kenya National Examinations Council

28. State the significance of diffusion in the following;

a. Pollination. **(1mark)**

....

....

b. Skeletal muscle cell. **(1mark)**

....

....

29. Explain the significance of the following;

a) The cardiac muscle is myogenic. **(1mark)**

....

....

b) The left ventricle of a mammalian heart is more muscular than right ventricle. **(1mark)**

....

....

c) Most of carbon (IV) oxide is not dissolved in the blood plasma. **(1mark)**

....

....

This is the last printed page

KCSE 2022 PREDICTION

SERIES 1

NAME…………………………………………… INDEX NO………………………

SCHOOL………………………………………… SIGN…………………………………

DATE……………………………………………

231/2

BIOLOGY

PAPER 2
THEORY
TIME: 2 HOURS

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 two sections **A** and **B**.*

*- 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	QUESTION	MAX SCORE	SCORE
A	1	8	
	2	8	
	3	8	
	4	8	
	5	8	
B	6	20	
	7	20	
	8	20	
	TOTAL	**80**	

©2022 The Kenya National Examinations Council

SECTION A

1) A group of students set up an experiment to investigate a certain physiological process. The set up was as shown in the diagram below.
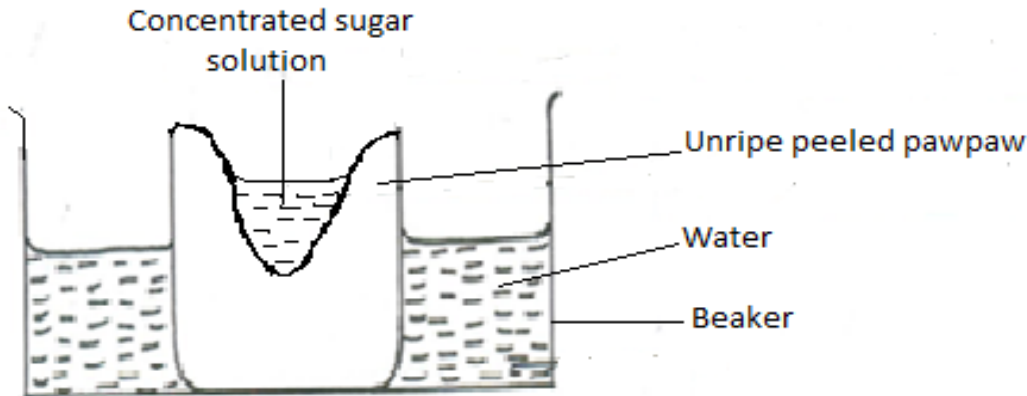
After some time, the students observed that the level of sugar solution had risen.

(a) What physiological process was being investigated? **(1mk)**

....

(b) Account for the rise in the level of sugar solution in this experiment. **(4mks)**

....

....

....

....

(c) (i) State the results the students would obtain if they repeated the experiment using a piece of boiled pawpaw.   ` **(1mk)**

....

....

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

....

....

....

2)   Use the diagram below to answer the questions that follow.
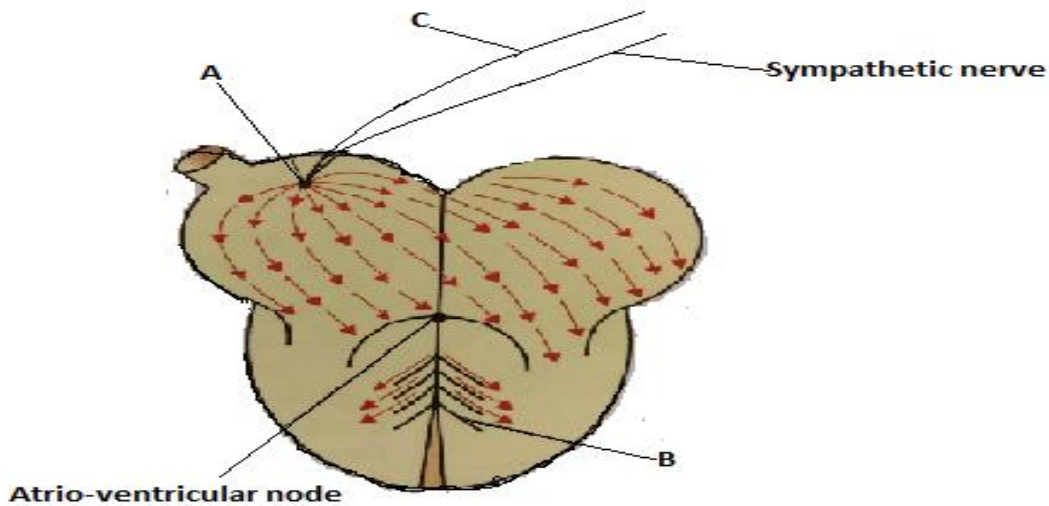
(a)   (i) Name the parts labelled **A**, **B** and **C**.   **(3mks)**

....

....

....

(b)   State the function of the part labelled **C**.   **(1mk)**

....

....

(c)   Explain the difference between pulmonary circulation and systemic circulation.   **(2mk)**

....

....

....

....

(d) What is the advantage of having a double circulatory system over a single circulatory system?

2mks)

....

....

....

3) In an investigation, a variety of pea plants grown from seeds with smooth coats were crossed with plants grown from seeds with wrinkled coats. All the seeds obtained in the first filial (F1) generation had smooth seed coats.

(a) Using letter **R** to represent the gene for smooth seed coat, work out the genotypes of the F1 generation. Show your working. **(3mks)**

....

....

....

....

....

....

....

....

(b) If F1 generation was selfed, determine the phenotypic ratio of the second filial (F2) generation. Show your working. **(4mks)**

....

....

....

....

....

....

....

....

(c) If the total number of seeds in the F2 generation was 14640, calculate the number of seeds with wrinkled coats. Show your working. **(1mk)**

....

....

4)   The apparatus below was set up by a student to find out the changes in gases during germination of bean seeds. Study it and answer the questions that follow.
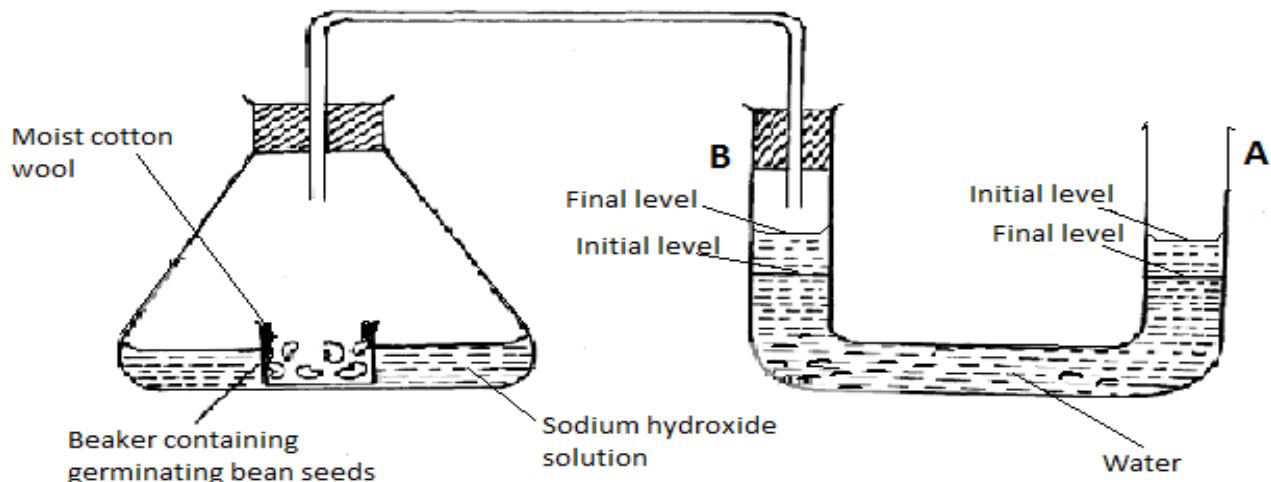
(d)   After 48 hours the level of water in U-tube **A** had dropped and rose in **B** as indicated above. Explain this observation.   **(3mks)**

....
....
....
....

(e)   The equation below shows the process that takes place in mammalian muscles.

$$2C_{51}H_{98}O_6 + 145O_2 \longrightarrow 102CO_2 + 98H_2O + Energy$$

Calculate the respiratory quotient from the equation above.   **(2mks)**

....
....
....

Identify the substrate being respired from the equation above.   **(1mk)**

....

Explain why it is difficult to calculate the respiratory quotient in plants.   **(2mks)**

....
....
....

©2022 The Kenya National Examinations Council

2) The diagram below illustrates the components of a simple reflex that takes place when a person's finger is accidentally pricked by a sharp pin.
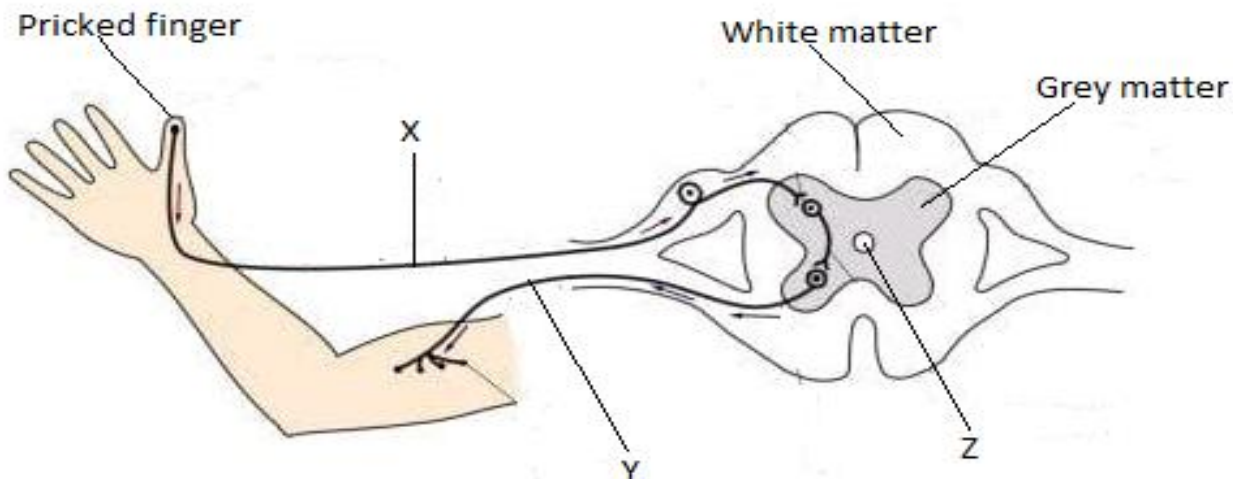
(a) Name the neurones labelled **X** and **Y**. **(2mks)**

....

....

....

(b) State **one** function of the fluid found in the part labelled **Z**. **(1mk)**

....

....

(c) Explain how the above simple reflex action takes place. **(5mks)**

....

....

....

....

....

....

....

©*2022 The Kenya National Examinations Council*

SECTON B (40 MKS)
Answer question 6 (compulsory) and either question 7 or 8

6) In a population growth, two species of flour beetles, *Tribulum confusum* and *Tribulum casteanum* were grown in a box with unlimited supply of flour (food). The box was kept at 24^0C and 30% relative humidity. The beetles were counted at certain intervals and the results tabulated as shown below.

No. of days after introduction		0	10	50	60	80	100	120	140	180	200
No. of beetles present in the box	*T. confusum*	20	20	300	800	1330	1440	1620	1600	1620	1600
	T. casteanum	20	20	300	430	500	400	150	60	20	10

(a) Using the same axis, draw graphs of number of beetles in the box against time. **(8mks)**
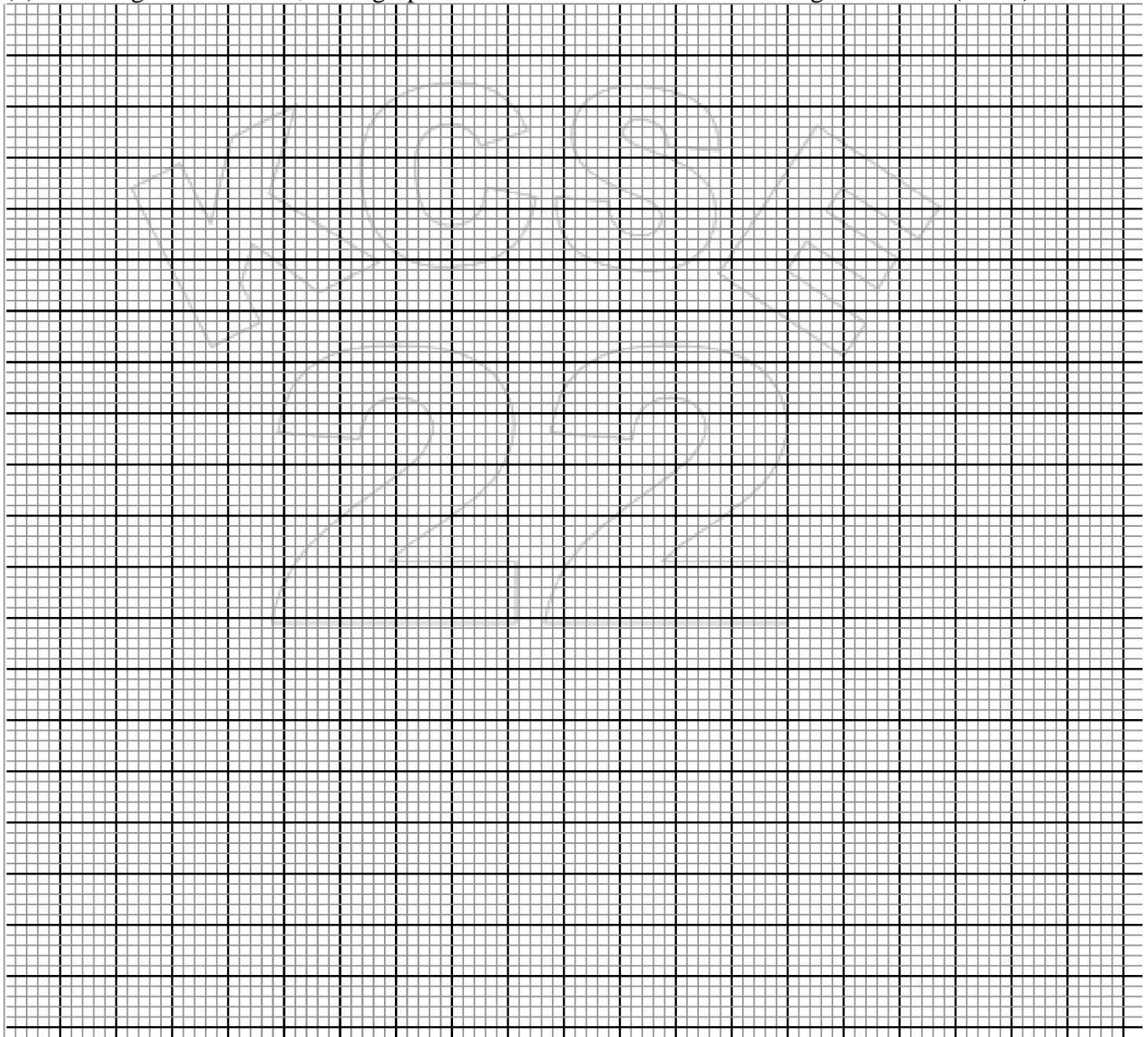
(b) How many beetles were present on the 76th day? **(2mks)**

T.confusum..

T.casteanum..

(c) Account for the shape of *T. confusum* curve between day 1 and 180. **(5mks)**

....

....

....

....

....

....

....

(d) **(i)** What happens to *T. casteanum* between day 80 and 160? **(1mk)**

....

....

(ii) What biological phenomenon is represented by observation in (d) (i) above? **(1mk)**

....

(e) State any **three** factors that determine the distribution of animals in their habitat. **(3mks)**

....

....

....

7) (a) Explain how the human ileum is adapted to its function. **(10mks)**

(b) Explain the role of the liver in regulation of blood sugar. **(10mks)**

8) (a) Explain the economic importance of fungi. **(9mks)**

(b) Describe the adaptations of flowers to insect pollination. **(11mks)**

©2022 The Kenya National Examinations Council

KCSE 2022 PREDICTION

SERIES 1

SCHOOL……………………………………… SIGN…………………………

BIOLOGY PRACTICAL

CONFIDENTIAL INSTRUCTIONS TO SCHOOLS

The information contained in this **KCSE Biology Prediction paper** is to enable the head of the school and the teacher in charge of Biology to make adequate preparations for the **231/3 Biology** Practical examination.

No one else should have access to this information either directly or indirectly.

REQUIREMENTS

Each KCSE candidate will require;

❖ Specimen **R-** a piece of ripe pineapple fruit

❖ 2mls Benedict's solution placed in a test tube with a dropper

❖ 2mls of 10% Sodium hydroxide solution placed in a test tube with a dropper

❖ 2mls of 1% Copper sulphate solution placed in a test tube with a dropper

❖ Source of heat

❖ 4 test tubes in a rack

❖ 2 Droppers

❖ Scalpel/Razor blade

❖ Pestle and mortar

❖ Filter paper

❖ 4mls DCPIP solution placed in a small beaker with a dropper

❖ 4mls of 0.1% solution of Ascorbic acid supplied in a test tube

❖ White tile

This is the last printed page

©2022 The Kenya National Examinations Council

KCSE 2022 PREDICTION

SERIES 1

NAME………………………………………… INDEX NO………………………

SCHOOL……………………………………… SIGN………………………………

DATE……………………………………………

Kenya Certificate of Secondary Education

231/3

BIOLOGY

(Practical)

Paper 3

Time: 1 ¾ hours

INSTRUCTIONS TO CANDIDATES

❖ *Write your name, Admission number and your other details in the spaces provided above.*

❖ *Spend the first 15 minutes of the time allocated to read through the question paper before commencing your work*

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

❖ *Additional pages must **not** be inserted*

FOR EXAMINER'S USE ONLY

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

©2022 The Kenya National Examinations Council

1. You are provided with the following reagents and materials.

Specimen **R**

Benedict's solution

Sodium hydroxide solution

Copper sulphate solution

Source of heat

3 test tubes in a rack

Droppers

Scalpel/Razor blade

Pestle and mortar

Filter paper

Study the specimen **R** provided.

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

....

(b) With reasons, identify the method of dispersal for the specimen.

Method of dispersal **(1 mark)**

....

Reasons **(2 marks)**

....

....

....

(c) By use of the scalpel provided, peel off the outer cover of the specimen **R** to reveal the inner juicy part. Extract a small portion of the juicy part, place in a mortar and mash it using a pestle.

Use the filter paper provided to filter the extract from the specimen R.

Divide the extract from specimen **R** into two portions each $2cm^3$ and use them as follows;

PORTION ONE

Use the reagents provided to test for the food substances present in portion **1**. Use the table below as a guide. **(6 marks)**

Food substance	Procedure	Observation	Conclusion

PORTION TWO

(d)(i) To 1cm^3 of DCPIP in a test tube, add 0.1% solution of Ascorbic acid drop by drop until the colour of DCPIP disappears. Shake the test tube after addition of each drop. Record the number of droplets used. **(1 mark)**

………………………………………………………………………………………………………

………………………………………………………………………………………………………

ii) To another 1cm^3 of DCPIP in a test tube add the **portion two** drop by drop, shaking the test tube after addition of each drop until the colour of DCPIP disappears. Record the number of drops used **(1 mark)**

………………………………………………………………………………………………………

iii) From the results obtained in (d) (i) and (ii) above, calculate the percentage of Ascorbic acid in the juice obtained from specimen **R**. Show your working **(2 marks)**

………………………………………………………………………………………………………

………………………………………………………………………………………………………

………………………………………………………………………………………………………

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

(a) (i) By use of a flow chart, show the possible energy flow in the ecosystem above.   **(1 mark)**

………………………………………………………………………………………………………

………………………………………………………………………………………………………

   (ii) State **two** ways in which energy is lost from one trophic level to the next one. **(2 marks)**

………………………………………………………………………………………………………

………………………………………………………………………………………………………

………………………………………………………………………………………………………

(b) With **observable reasons**, identify the classes of specimen **X** and **Z**

Specimen **X**

Class ………………………………………………………………………………   **(1 mark)**

Reasons   **(2 marks)**

………………………………………………………………………………………………………

………………………………………………………………………………………………………

………………………………………………………………………………………………………

Specimen **Z**

Class   **(1 mark)**

…………………………………………………………………………………………………

Reason   **(1 mark)**

…………………………………………………………………………………………....

(c) Describe **two** adaptations of organism labeled **Y** to its habitat.   **(2 marks)**

……

……

……

……

(d) Study the photograph below and answer the questions that follow.   **(1 mark)**
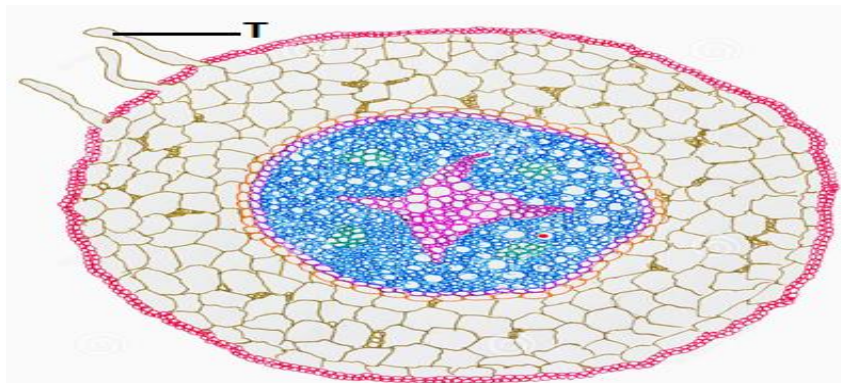
(i) Which part of the plant is represented by the cross-section shown above

……

(ii) Give **two** observable reasons for your answer in (d)(i) above. **(2 marks)**

....

....

(iii) Give **one** adaptation of the part labeled **T** to its function. **(1 mark)**

....

3. Study the photographs below and answer the questions that follow.
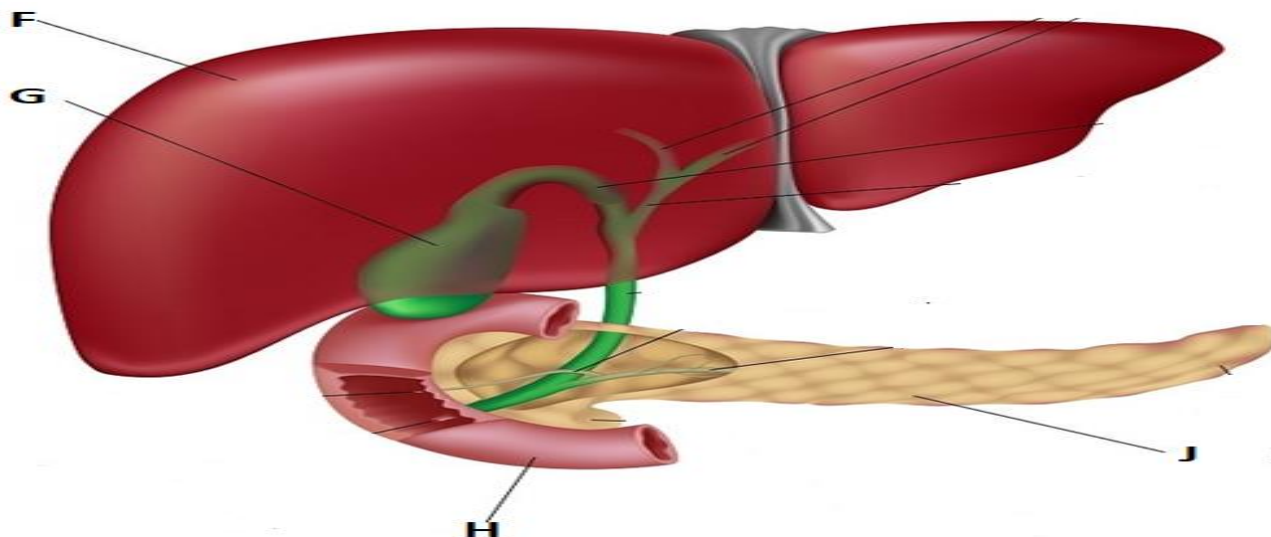
(a) Identify the following parts **(2 marks)**

F ....

G ....

(b) **(i)** Identify the secretions stored in part labeled **G** **(1 mark)**

....

(ii) Give **two** functions of the secretions you have identified in (b)(i) above**.** **(2 marks)**

....

....

(c) **(i)** Give **two** major roles of the part labeled **J** . **(2 marks)**

....

....

(ii) State the hormone secreted by the part labeled **H** . **(1 mark)**

....

....

(d) Study the photograph below and answer the questions that follow.

(e)   **(i)** Identify the following parts.   **(2 marks)**

K   ....

L   ....

(ii) Give **two** adaptations of the part labeled **M**   **(2 marks)**

....

....

....

This is the last printed page

KCSE 2022 PREDICTION

SERIES 1

NAME………………………………………… INDEX NO………………………

SCHOOL…………………………………… SIGN………………………………

DATE……………………………………………

Kenya Certificate of Secondary Education
233/1

CHEMISTRY

Paper 1
2 hours

INSTRUCTIONS TO CANDIDATES

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

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

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

(d) KNEC Mathematical tables and electronic calculators may be used for calculations

*(e) All working **MUST** be clearly shown where necessary*

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

(g) Candidates should answer the questions in English

FOR EXAMINER'S ONLY

QUESTION	MAXIMUM SCORE	CANDIDATES SCORE
1-28	80	

©2022 The Kenya National Examinations Council

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

1. In the industrial preparation of oxygen, state:

(a) How dust particles are removed from air. **(1 mark)**

………………………………………………………………………………………………………

………………………………………………………………………………………………………

(b) Why carbon (IV) oxide is removed before the mixture is cooled to – 25^0C **(1 mark)**

………………………………………………………………………………………………………

………………………………………………………………………………………………………

2. A form four student accidentally mixed Sodium Carbonate and Calcium Carbonate.

Describe how he would obtain a dry sample of Sodium Carbonate from the mixture. **(3 marks)**

………………………………………………………………………………………………………

………………………………………………………………………………………………………

………………………………………………………………………………………………………

………………………………………………………………………………………………………

3. The set up below was used to prepare dry hydrogen gas. Study it and answer the questions that follow.
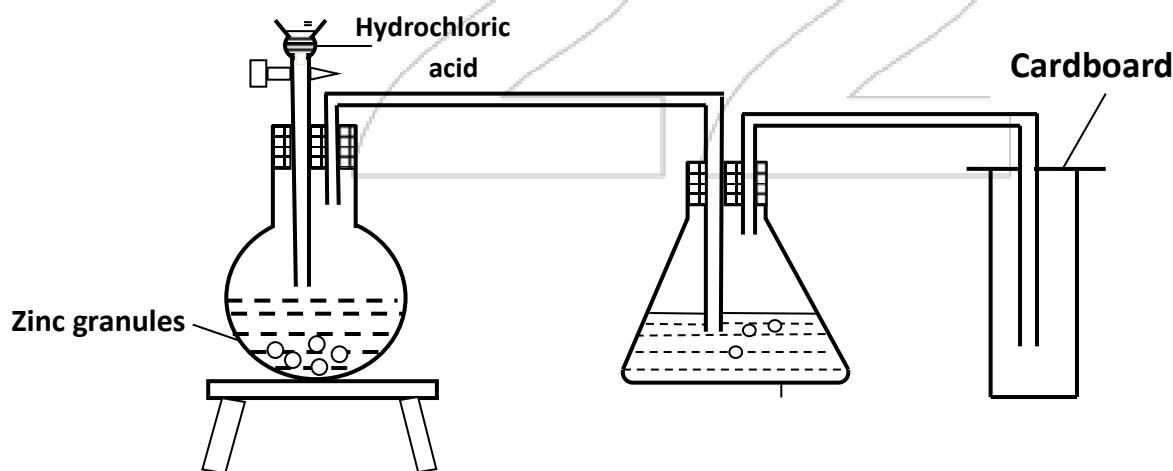
(i) Identify a mistake in the set up **(1 mark)**

………………………………………………………………………………………………………

………………………………………………………………………………………………………

©2022 The Kenya National Examinations Council

(ii) Write an equation for the reaction for the reaction that produces hydrogen gas   **(1 mk)**

……

(iii) State the chemical test for hydrogen   **(1 mark)**

……

4. When air is bubbled through pure water (pH 7), the pH drops to 6.0.Explain   **(2mks)**

……
……
……

5.Explain why iron III chloride is fairly soluble in methylbenzene while Magnesium chloride is insoluble.   **(2 mks)**

……
……
……

6.Describe how a solid sample of Lead(II) Chloride can be prepared using the following Reagents:Dilute Nitric Acid, Dilute Hydrochloric Acid and Lead Carbonate**.**   **(3marks)**

……
……
……

7.50cm^3 of Carbon (IV) Oxide diffuses through a porous plate in 15 seconds. Calculate the time taken by 75cm^3 of Nitrogen (IV) Oxide to diffuse through the same plate under similar conditions. (C = 12, 0 = 16, N = 14)   **(2marks)**

……
……
……

©2022 The Kenya National Examinations Council

8.(a). Carbon (IV) oxide is bubbled through Calcium hydroxide until there is no further change.

Explain using equations the changes observed. **(2 marks)**

....

....

....

(b) Explain why diamond is used in cutting of glass and drilling. **(1 mark)**

....

....

9.Study the table for certain properties of substances A, B, C and D.

	Melting point ^0c	Solubility in water	Electrical conduct
A	-119^0c	Soluble	Solution does not conduct
B	1020^0c	Soluble	Solution conducts
C	1740^0c	Insoluble	Doesn't not conduct
D	1600^0c	Insoluble	Conducts at room temperature

Which of the substances A, B, C and D: **(4 mks)**

(i) Is a metal ....

(ii) Has a simple molecular structure..

(iii) Has a giant ionic structure...

(iv) Has a giant covalent structure...

10.A compound G reacts with 2 moles of bromine to form another compound whose structural formula is.

```
        H    Br  Br   H

        |    |   |     |

   H- C -   C - C - C – H

        |    |   |     |

        H    Br  Br   H
```
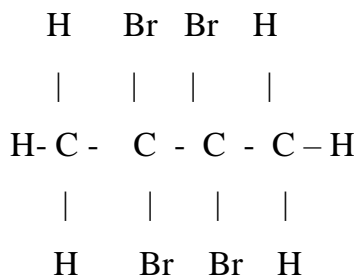
i) What is the formula and name of compound **G** **(2 marks)**

....

....

ii) State the observations made when acidified potassium chromate (VI) is added to compound G

(1 mark)

....

....

11. Study the set-up below and answer the questions that follow
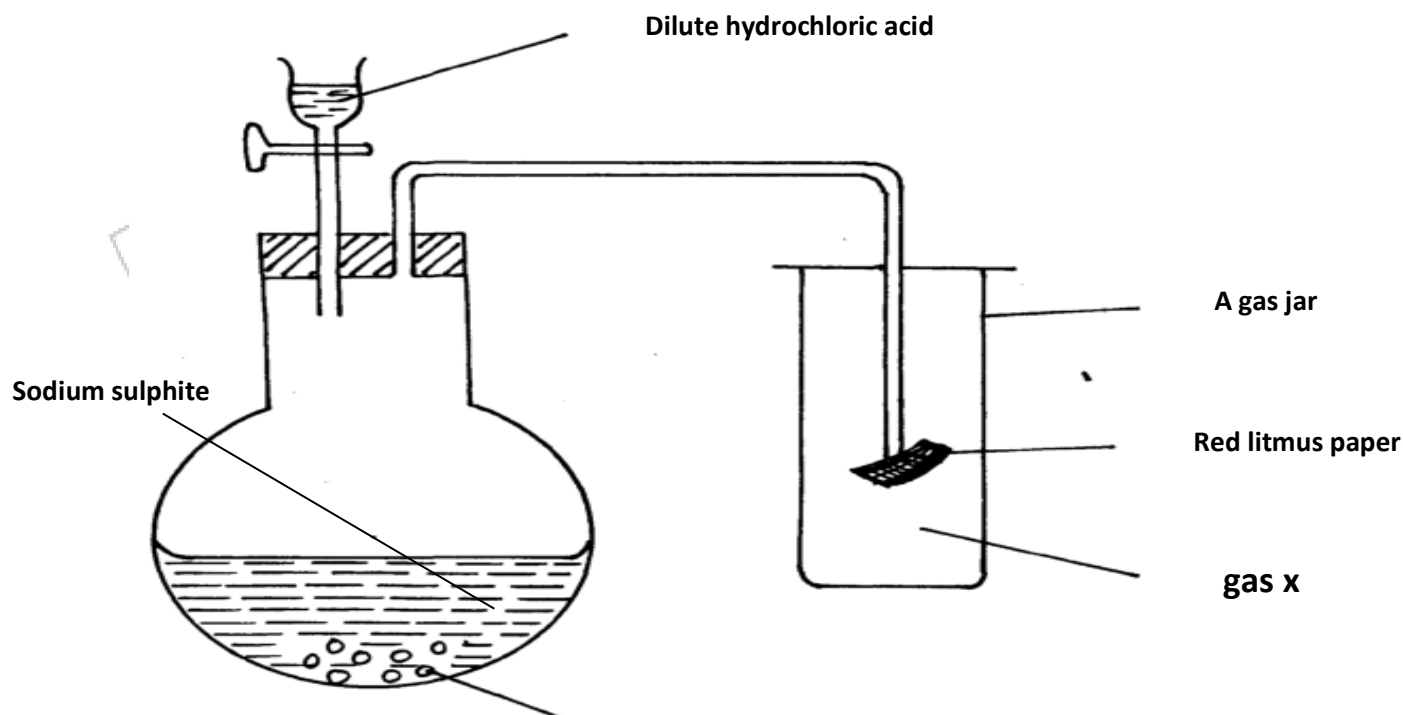
(a) Identify gas **(1 mark)**

....

(b) Write an equation for the reaction that produces gas **x**. **(1 mark)**

....

....

(c) What is the effect of the gas **x** above on the red-litums paper **(1 mark)**

....

....

©2022 The Kenya National Examinations Council

(d) State and explain two observations made when hydrogen sulphide is bubbled through a solution containing iron (III) chloride. **(2mks)**

....

....

....

....

12. Aluminium (III) chloride sublimes. Explain why this is possible. **(2mks)**

....

....

....

....

13. The table below shows the solubility of a substance at various temperatures. Study it and answer the questions that follow.

Temperature (^0C)	Solubility in g/100g of water
0	36
40	30
80	25
110	20

(a) What is the meaning of solubility? **(1 mark)**

....

....

(b) What is the physical state of the substance? **(1 mark)**

....

(c) State and explain what would happen if a sample of a saturated solution of the substance at 40^0C was heated to 110^0C. **(1mark)**

....

....

©2022 The Kenya National Examinations Council

14. Study the chart below and answer the questions that follow.
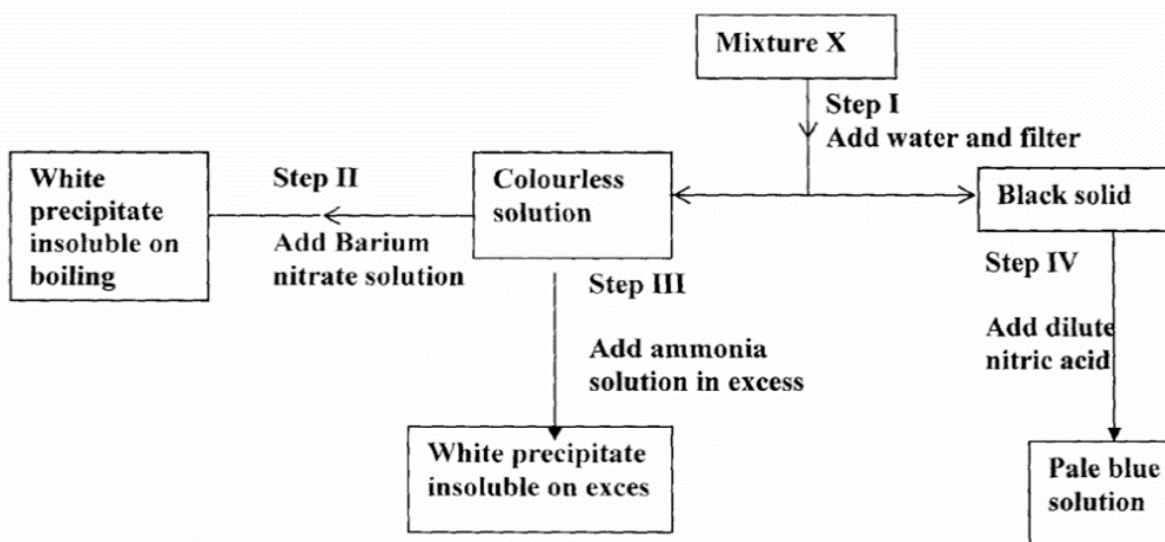
(a)   Name:

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

....

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

....

(b) Write an equation to show how the white precipitate in step III is formed.   **(1mark)**

....

....

15. Study the diagram below and answer the questions
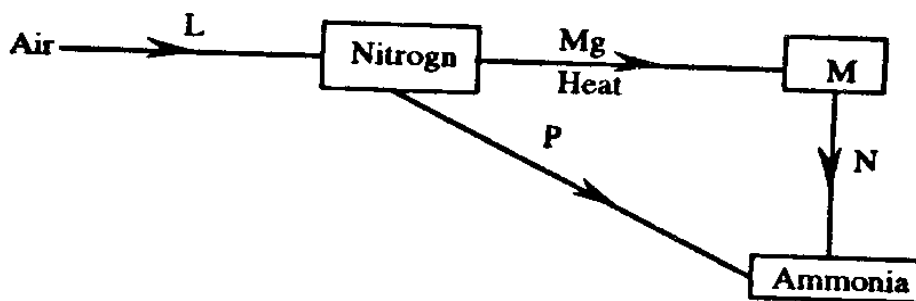
(i) What is the process involved in step L   **(1mark)**

....

(ii) Explain how process N and P can be affected   **(2marks)**

....

....

....

16. The scheme below was used to prepare a cleansing agent. Study it and answer the questions that follow.
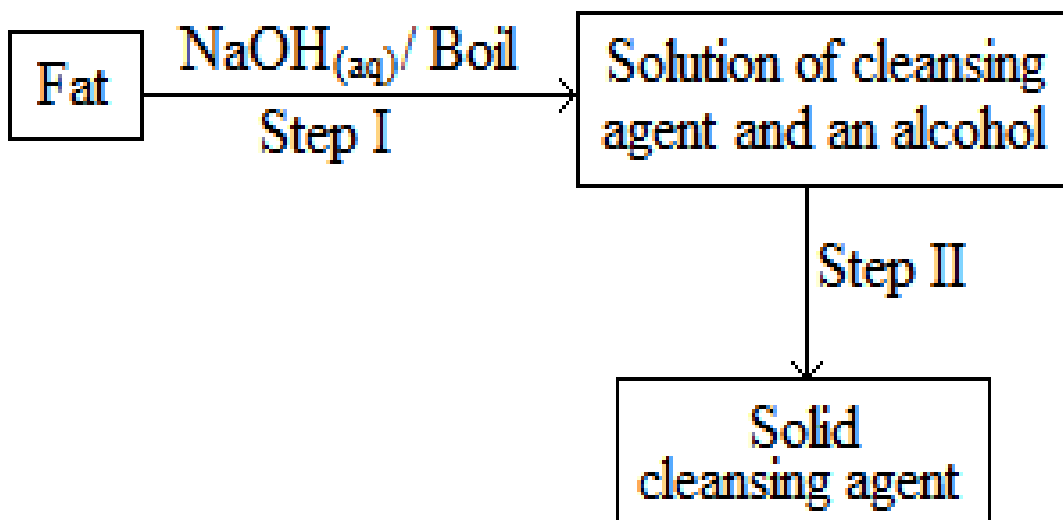
(h)   Given to the type of cleansing agent prepared by the method above?   **(1 mark)**

....

(ii) Name one chemical substance added in step II   **(1 mark)**

....

(iii) What is the purpose of adding the chemical substance named in c (ii) above?   **(1 mark)**

....

17. Nitrates of metals A, B, C were heated and the products of the reactions recorded in the table below.

Nitrate of metal	Products
A	Metal nitrate and oxygen
B	Free metal, nitrogen (IV) Oxide and oxygen gas
C	Metal oxide, nitrogen (IV) oxide and oxygen gas

©2022 The Kenya National Examinations Council

a) Name two possible identities of metal A. **(1mk)**

....

....

b) Name the two possible identity of metal B **(1mk)**

....

....

c) Calcium nitrate is one of the nitrate which forms the products in C. Using chemical equation show how the products are formed. **(1mk)**

....

18. State and explain what happens to the masses of the following substances when they are separately heated in open crucibles ; **(3mks)**

(i) copper metal

....

....

(ii) Sulphurpowder

....

....

19. The table below gives the first ionization energies of the alkali metals.

Element	1st ionization energy kJ mol^{-1}
A	494
B	418
C	519

a) Define the term ionization energy. **(1mk)**

....

....

b) Which of the three metals is the least reactive? Give a reason. **(2mks)**

....

....

....

20. Study the set-up below and answer questions that follow.
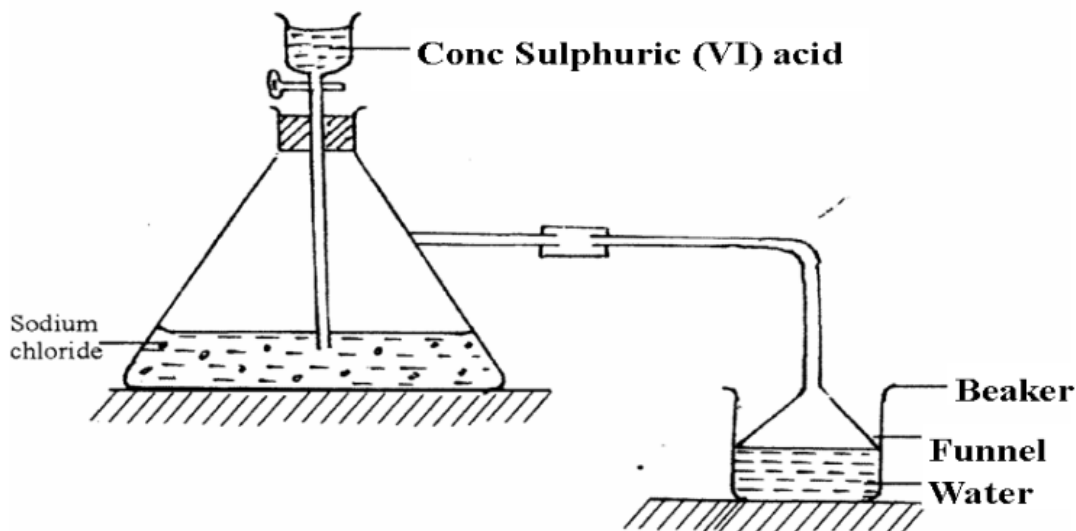
i) Name the gas that is produced when concentrated sulphuric (VI) acid reacts with the

Sodium chloride **(1mark)**

....

....

ii) Why is it necessary to use a funnel in the beaker? **(1mark)**

....

....

iii) How does the gas affect the P^H of the water in the beaker? **(1mark)**

....

....

....

©2022 The Kenya National Examinations Council

21. The flow chart/diagram below outlines a method of preparing a fertilizer
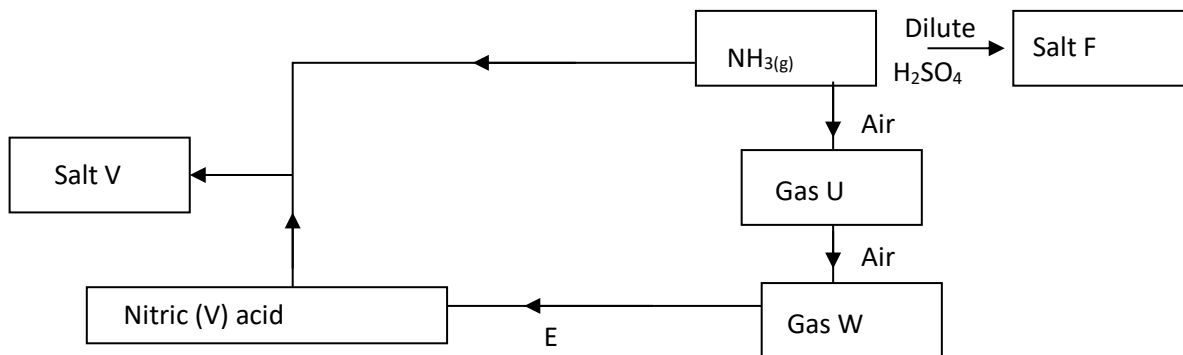
i)   Identify U and W

U ……………………………………………………………….. **($^1/_2$mark)**

W ……………………………………………………………… **($^1/_2$mark)**

ii)   Give the names of salt F and V

F ………………………………………………………………. **($^1/_2$mark)**

V ………………………………………………………………. **($^1/_2$mark)**

iii)   Write a balanced equation for the formation of salt F   **(1 mark)**

……

……

22.(a) Draw a dot (•) and a cross (**x**) diagram to show bonding in Cl_2O.   **(1 mark)**

……

……

……

Explain why the compound Cl_2O has a very low melting and boiling point.   **(1 mark)**

……

……

23. Ethene reacts with oxygen according to the equation.

$$C_2H_{4(g)} + 3O_{2(g)} \longrightarrow 2\ CO_{2(g)} + 2H_2O_{(g)}$$

15.0 cm^3 of ethene were mixed with 50cm^3 of oxygen and mixture was sparked to complete the reaction. If all the volumes were measured at a pressure of one atmosphere and 25^{0}C. **Calculate** the volume of resulting gaseous mixture.   **(3 marks)**

©2022 The Kenya National Examinations Council

…………………………………………………………………………………………………

…………………………………………………………………………………………………

…………………………………………………………………………………………………

…………………………………………………………………………………………………

…………………………………………………………………………………………………

24. The graph below shows the behavior of a fixed mass of a gas at constant temperature.

Pressure

(atmospheres)
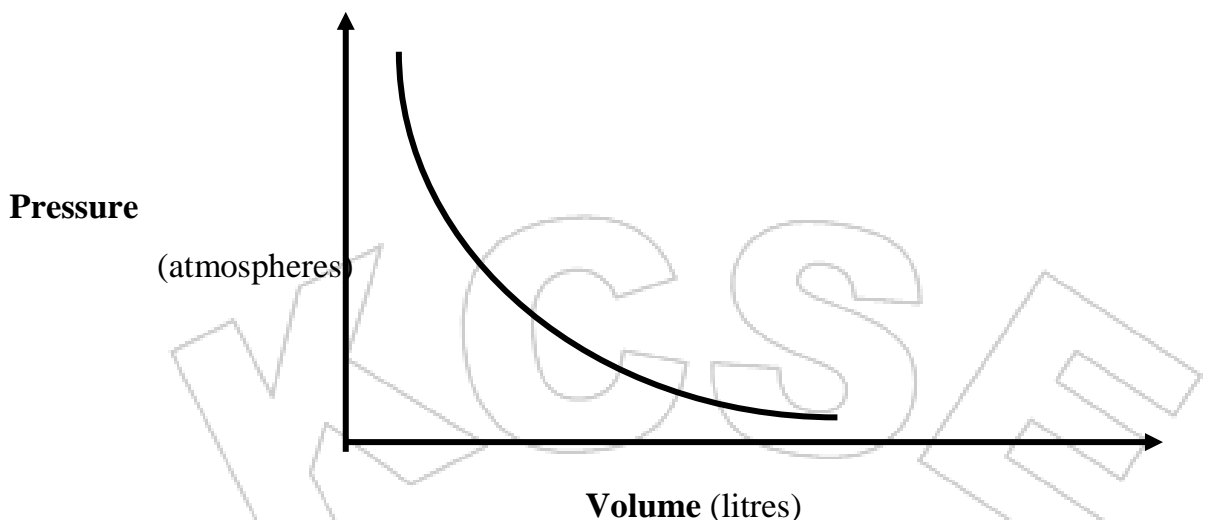
Volume (litres)

(a) What is the relationship between the volume and the pressure of the gas? **(1 mark)**

…………………………………………………………………………………………………

…………………………………………………………………………………………………

(b) 3 litres of oxygen gas at 1atm atmosphere pressure were compressed to 2atm at constant temperature. Calculate the volume occupied by the oxygen gas. **(2marks)**

…………………………………………………………………………………………………

…………………………………………………………………………………………………

…………………………………………………………………………………………………

…………………………………………………………………………………………………

25. Temporary water hardness can be removed by boiling

(a) What is hard water. **(1 mark)**

…………………………………………………………………………………………………

…………………………………………………………………………………………………

(b) Write a chemical equation to show how temporary hardness is removed by boiling.   **(1 mark)**

....

....

(c) State **one** advantage of hard water.   **(1 mark)**

....

....

26.A student set-up the experiment below to collect gas K. The glass wool was heated before heating the zinc powder.
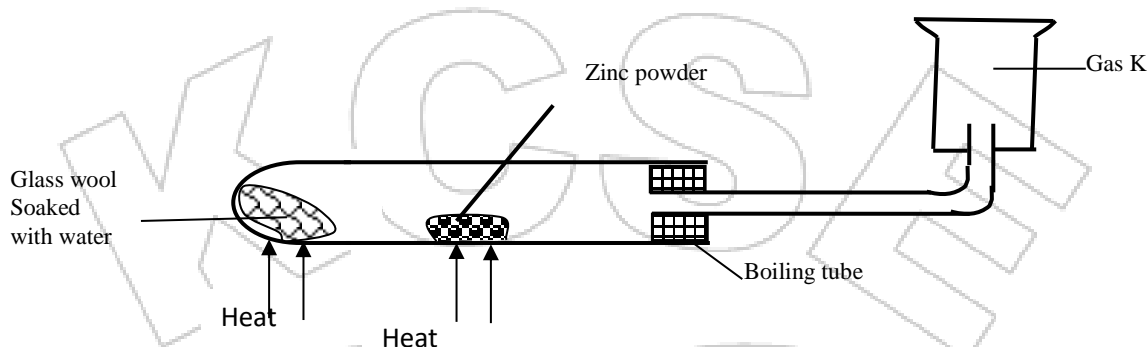
(a)   Why was it necessary to heat the moist glass wool before heating the zinc powder? **(1 mark)**

....

....

(b) What observation was made in the boiling tube.   **(1 mark)**

....

....

27. During the extraction of lead from its ores one of the main ore used is Galena
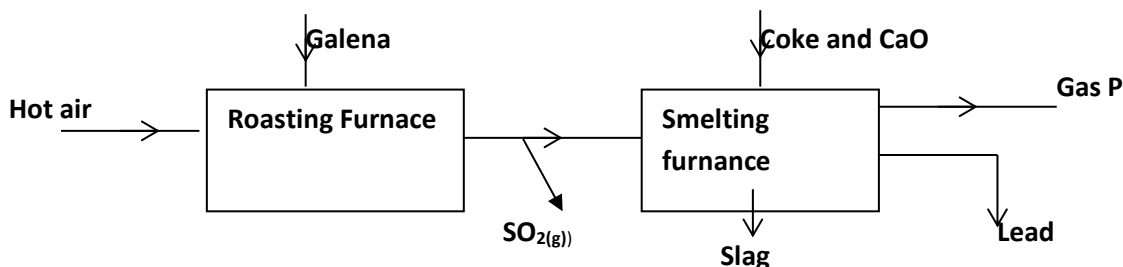
(i) Write an equation for the reaction in roasting furnace. **(1 mark)**

....

....

(ii) Name gas **P** **(1 mark)**

....

(iii) State **one** use of lead metal. **(1 mark)**

....

....

28. The empirical formula of a compound is CH_2 and it has a molecular mass of 42.

(a) What is the molecular formula of this compound? **(1 mark)**

....

....

(b)   Write the general formula of the homologous series to which the compound belongs.

(1mk)

....

....

(c)   Draw the structural formula of the third member of this series and give its IUPAC name.

(1mark)

....

....

....

KCSE 2022 PREDICTION

SERIES 1

NAME…………………………………………… INDEX NO………………………

SCHOOL………………………………………… SIGN……………………………

DATE……………………………………………

Kenya Certificate of Secondary Education
233/2

CHEMISTRY

Paper 2
TIME: 2 hours

INSTRUCTIONS TO CANDIDATES:

- *Write your **name** and **index** on the spaces provided above*
- *Answer **all** the questions in the spaces provided.*
- *All working **must** be clearly shown where necessary.*
- *Mathematical tables, Electronic calculators may be used.*

For Examiners Use Only

QUESTION	MAXIMUM SCORE	CANDIDATE'S SCORE
1	13	
2	13	
3	12	
4	09	
5	13	
6	10	
7	10	
Total	**80**	

©2022 The Kenya National Examinations Council

QUESTIONS

1.(a) The grid below show part of the periodic table.(The letter do not represent the actual Symbols. Use it to answer the questions that follow.

T									Q
				S		R	K		
A	J		Y		U		L		
W							M	B	
	C						N		
P									

(i) Select the most reactive non-metal. **(1mk)**

……………………………………………………………………………………………………

(ii) Select an elements that forms a divalent cation. **(1mk)**

……………………………………………………………………………………………………
……………………………………………………………………………………………………

(iii) Element **Z** has atomic number 14.Show its position in the grid. **(1mk)**

(iv) How do the atomic radii of **U** and **J** compare? **(2mks)**

……………………………………………………………………………………………………
……………………………………………………………………………………………………
……………………………………………………………………………………………………

(v) How do electrical conductivity of **A** and **Y** compare? **(2mks)**

……………………………………………………………………………………………………
……………………………………………………………………………………………………
……………………………………………………………………………………………………

(vi) How does the boiling point of elements **K, L** and **M** vary? Explain **(2mks)**

……………………………………………………………………………………………………
……………………………………………………………………………………………………
……………………………………………………………………………………………………

(b) The table below gives information on four elements by letters V, X, E and G. Study it and answer the questions that follow. The letters do not represent the actual symbols of the elements.

Element	Electron arrangement	Atomic radius	Ionic radius
V	2:8:2	0.136	0.065
X	2:8:7	0.099	0.181
E	2:8:8:1	0.203	0.133
G	2:8:8:2	0.174	0.099

(a) Which two elements have similar properties? Explain.   **(2mks)**

………

………

………

(b) Which element is a non-metal? Explain.   **(1mk)**

………

………

(c) Which one of the elements is the strongest reducing agent.   **(1mk)**

………

2. (a) Petrol is a mixture of several alkane molecules ranging from pentane (C_5H_{12}) to decane ($C_{10}H_{22}$).Name the process by which petrol is obtained from crude oil   **(1mk)**

………

(b) A decane molecule derived from petrol is cracked into hydrocarbon with equal number of carbon atoms in each molecule.

(i) What is cracking?   **(1mk)**

………

………

………

(ii) State **two** conditions necessary for the above process. **(2mks)**

....

....

....

(iii) Write an equation for the cracking of decane molecule. **(1mk)**

....

....

(iv) Draw and name **two** isomers of molecule with lower molecular mass obtained from cracking of decane as shown in b(iii) above. **(2mks)**

....

....

....

....

(v) How would you distinguish the products formed by cracking as shown in b(iii) in the laboratory. **(2mks)**

....

....

....

(c) Name the class to which the following cleansing agents belong.

(i)   R-COONa$^+$ **(1mk)**

(ii)   R⏥ -O-SO$_3$Na **(1mk)**

(d) Which cleaning agent above is not environmental friendly? Explain. **(2mks)**

....

....

....

©2022 The Kenya National Examinations Council

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

```
   ┌──────────────┐              ┌──────────────────┐
   │   Sodium     │              │ Metal A + Chlorine│
   └──────┬───────┘              └────────┬─────────┘
      │Water                         │Heat
   ┌──────▼───────────────┐      ┌────────▼─────────┐
   │Solution C + Hydrogen gas│    │   Compound B     │
   └──────┬───────────────┘      └────────┬─────────┘
          │                               │Water
      Solution                     ┌───────▼────────┐   Na₂CO₃    ┌────────────────┐
         C                         │ Colorless acidic│─────────────▶│White precipetate│
          │                        │   solution D    │  Solution   └────────────────┘
          │                        └───────┬────────┘
          │        Mixed                   │
          │                        Few drops of
          │                        solution C
   ┌──────────────┐  Dilute  ┌────────▼────────┐  Excess    ┌──────────────────┐
   │Colorless solution│◀──HCl──│White Precipetate│──NaOH(aq)─▶│Colorless solution│
   └──────────────┘          └─────────────────┘            │        F         │
                                                            └──────────────────┘
```
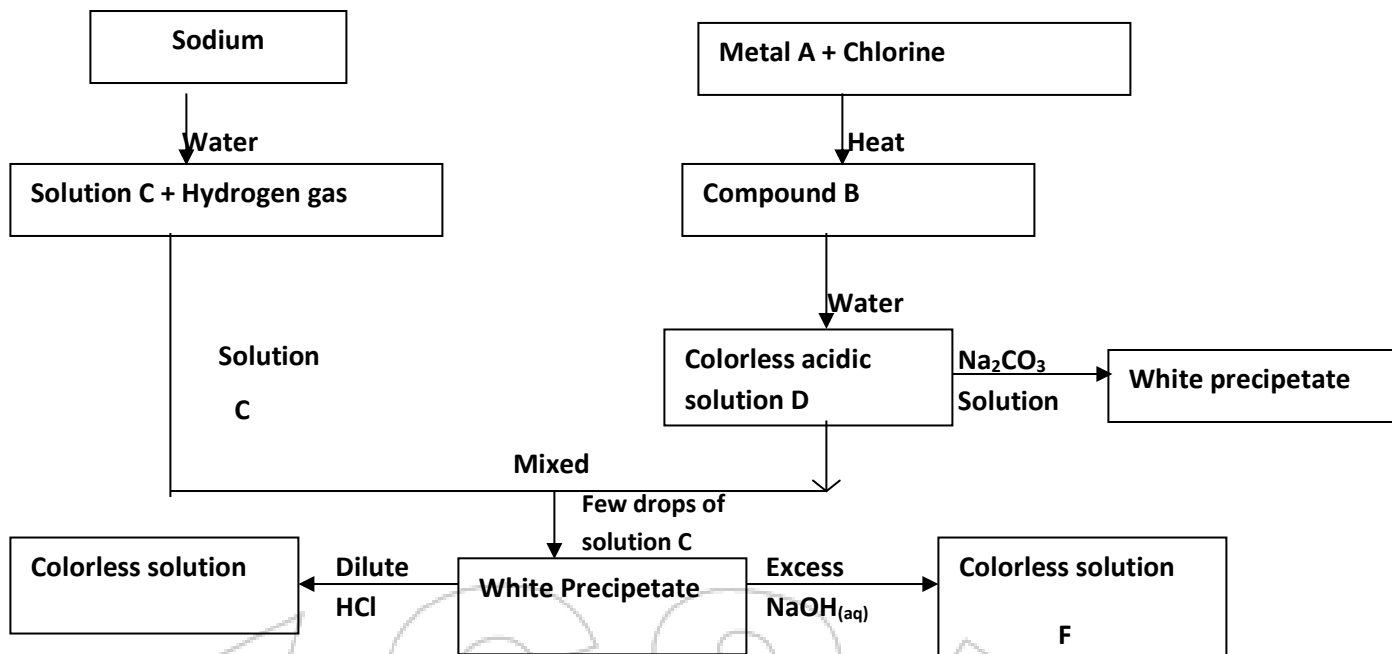
(a) Give the name and formula of the following.

    (i) White precipitate **E**

        Name…………………………………………………………… (½ mk)

        Formula……………………………………………………… (½ mk)

    (ii) Colourless solution F

        Name ………………………………………………… (1mk)

        Formula………………………………………………… (1mk)

(b) What property is exhibited by white precipitate E when it reacts with Sodium hydroxide and HCl acid. **(1mk)**

……

……

(c) Write an ionic equation for the reaction between white precipitate E and excess sodium

    hydroxide solution. **(1mk)**

……

……

(d) The information below gives the solubilities (In g/100g of water) of substances X and Y at various temperatures

Temperature		0	20	40	60	80	100
Solubility g/100g of water	X	10	15	26	40	63	100
	Y	30	34	37	40	44	48

(i) Plot a graph of solubility against temperature for the two salts X and y on the same axis. **(4mks)**
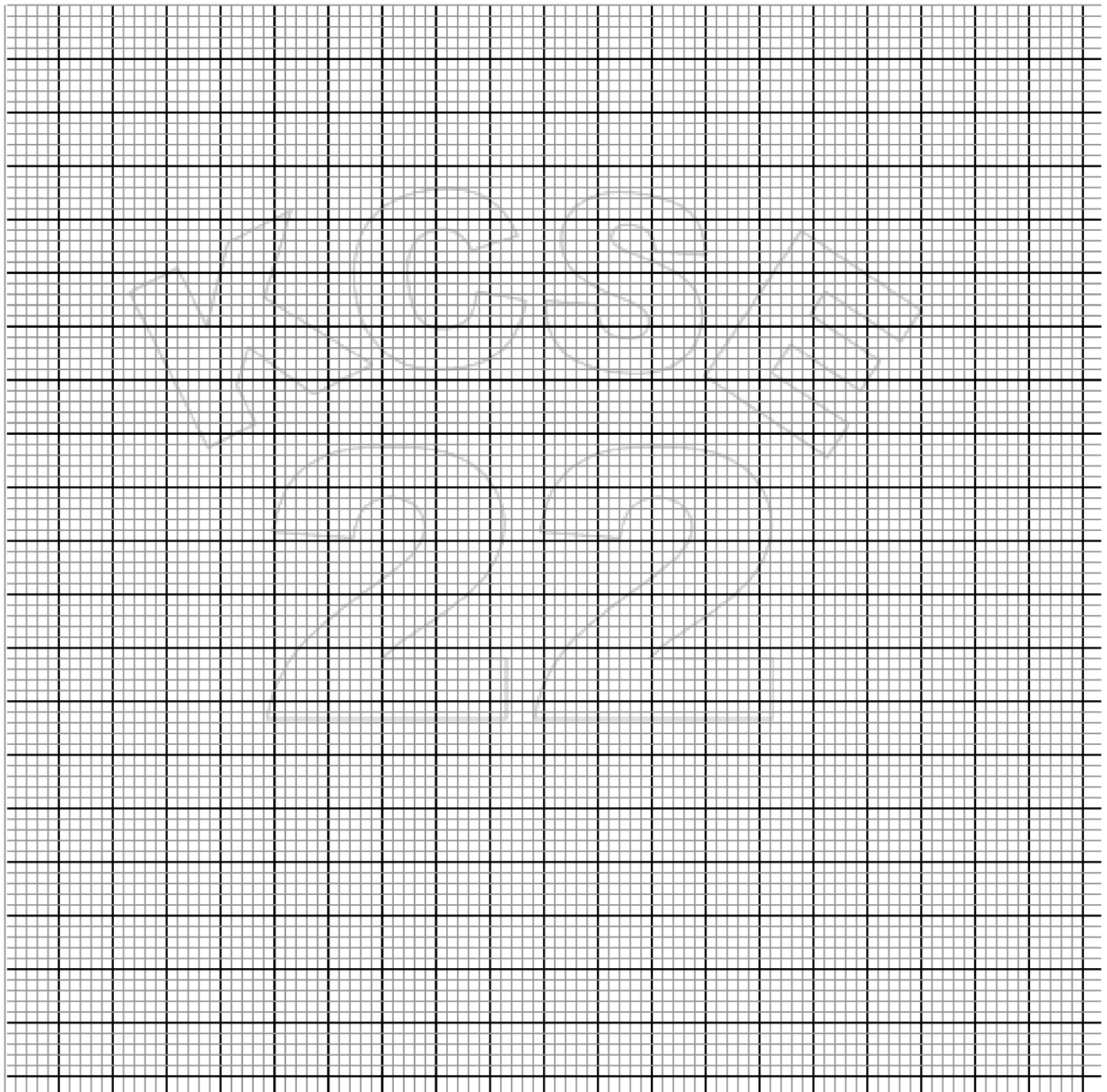
(i) From the graph state:

I The solubility of X at 50ºC **(1mk**

II The temperature at which solubility of Y is 36g/100g of water. **(1mk)**

III Calculate the mass of crystals of substance X which will deposit when a solution containing 50g of X in 100g of water initially at 80ºC is cooled to a temperature of 30ºC **(1mk)**

4. The diagram below shows a set – up that was used to prepare oxygen gas and passing it over a burning candle. The experiment was allowed to run for some time.

Liquid X

To sunction pump

Conical flask K

Conical flask M

Water

Soduim Peroxide
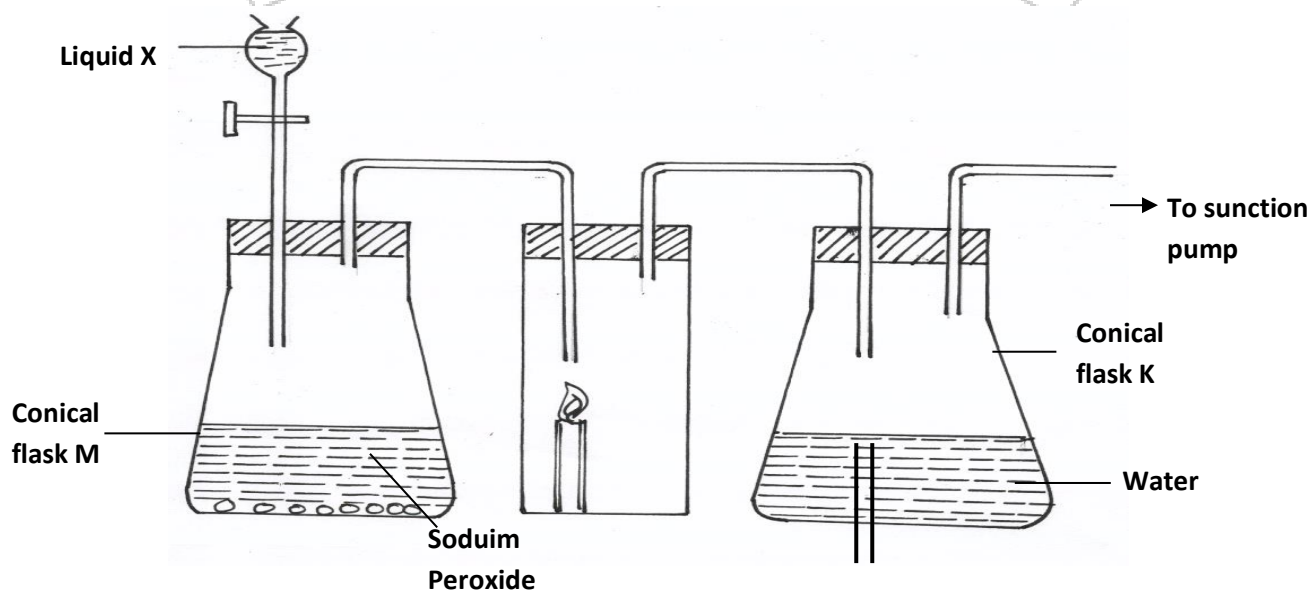
(i) Name liquid **X** **(1mk)**

....

(ii) Suggest the PH of the solution in conical flask **K**. **(1mk)**

....

....

(iii) Write an equation for the reaction taking place in the conical flask M. **(1mk)**

....

....

(b) During the extraction of sodium metal from sodium chloride in the Down's cell, calcium chloride is added

(i) Explain why it is necessary to add Calcium chloride **(1mk)**

....

....

(ii) Explain why sodium metal is not used in making the overhead electric cables yet it is a conductor of electricity **(1mk)**

....

....

....

(c) (i) Describe a simple chemical test that can be used to distinguish carbon (IV) oxide and Carbon(II) oxide gases. **(1mk)**

....

....

....

(ii) Give **one** use of carbon (II) Oxide **(1mk)**

....

....

(d) A form two student inverted a gas jar full of carbon (IV) oxide over water and sodium

hydrogen solution separately as shown below
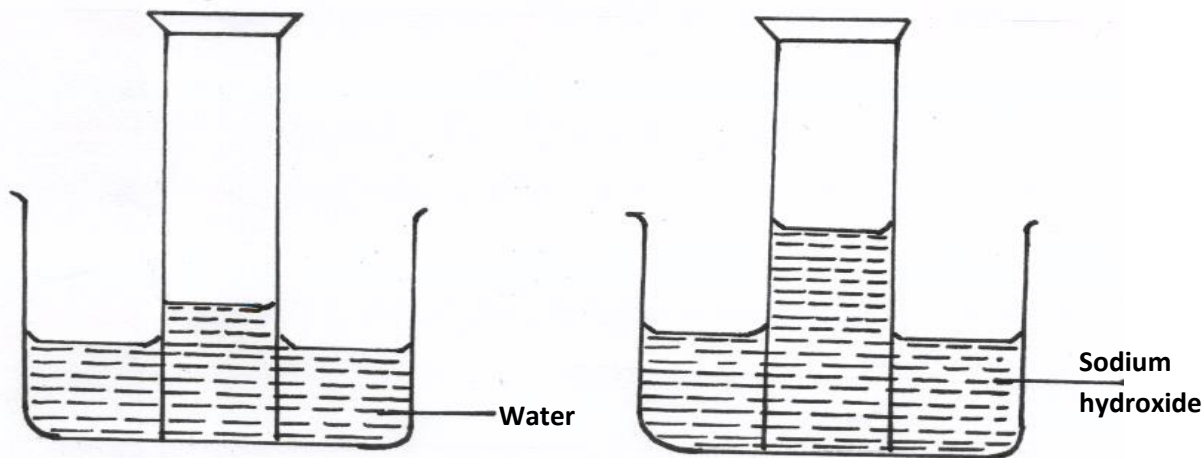
Explain the observations made. **(2mks)**

....
....
....

5.(a) Study the diagram below and use it to answer the questions that follow.
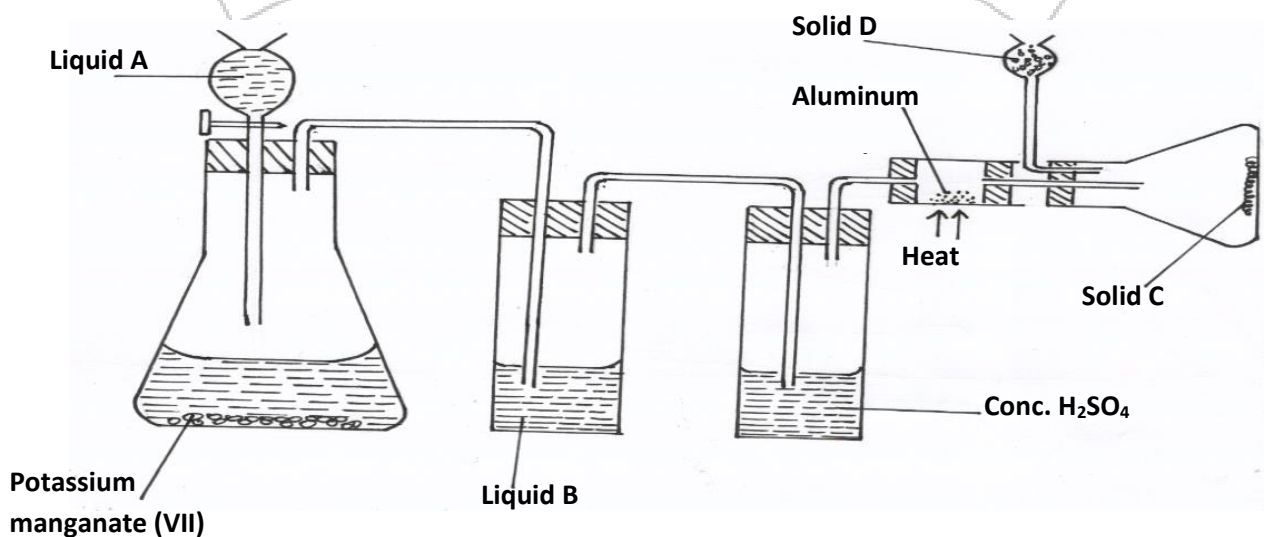
(i) Name liquids **A** and **B**

A.. **(1mk)**

B.. **(1mk)**

(ii) Suggest a suitable reagent that can be used as solid **D** **(1mk)**

....
....

(iii) State the role of Solid **D** **(1mk)**

....

....

(iv) Write a balanced chemical equation for the reaction in the conical flask **(1mk)**

....

....

(v) Explain why solid C collects further away from the heated aluminium metals. **(1mk)**

....

....

(v) In the combustion tube above, 0.675g of aluminium metal reacted completely with 1800cm^3 of chlorine gas at room temperature. Determine the molecular formula of Solid C, given that its relative formula mass is 267 (Al= 27.0, Cl= 35.5 molar gas volume at r.t.p = 24.0 litres) **(3mks)**

....

....

....

....

....

....

(b) The reaction between hot concentrated sodium hydroxide and chlorine gas produces Sodium Chlorate (V) as one of the products

(i) Write the equation for the reaction. **(1mk)**

....

....

(ii) Give **one** use of sodium chlorate.(V) **(1mk)**

....

....

(c) Explain the difference between bleaching by chlorine and bleaching by sulphuric

(IV)oxide gases. **(2mks)**

....

....

....

6. **A.** Study the diagram below that is used to prepare a gas Q.
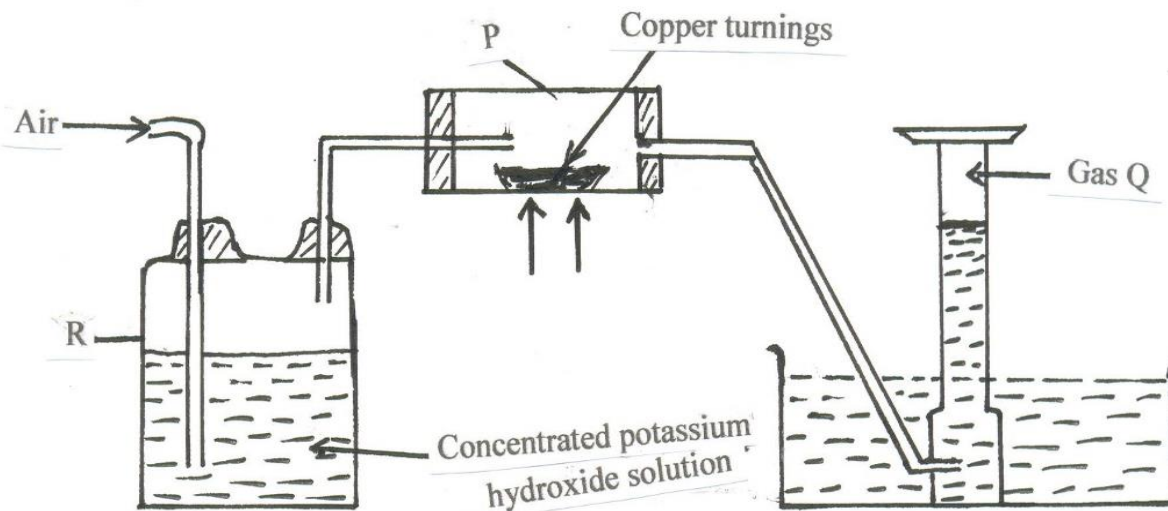
(i) (a) What component of air is eliminated in wash bottle labelled R? **(1 mark)**

....

(c) Write the reaction equation for the reaction that eliminates the component of air in a(i) above.

(1 mark)

....

....

(ii) What component of air is removed in hard glass tube labelled P? **(1 mark)**

....

(iii) Identify gas Q. **(1 mark)**

....

B.In an experiment 1.54g of nitrogen reacted with 3.53g of oxygen to form a compound.

N = 14, O = 16

(i) Calculate the moles of nitrogen and oxygen that reacted.   **(2 marks)**

....

....

....

(ii) Determine the simplest formula of the compound formed between nitrogen and oxygen.**(2 mks)**

....

....

....

(iii) Commend on the melting and boiling points of the compound in B(ii) above, explain. **(2 marks)**

....

....

....

7.   In the preparation of Copper carbonate, copper was burnt in air and the product collected.Dilute sulphuric acid was added and the mixture filtered and cooled. Sodium carbonate was added to the filtrate and the content filtered. The residue was washed and dried to give a white powder.

a) Give the chemical name of the product formed when magnesium burns in air   **(1mk)**

....

b) Write a chemical equation for the formation of product.   **(1mk)**

....

....

c) (i) Name filtrate collected after sodium carbonate was added   **(1mk)**

....

(ii) Name the white powder.   **(1mk)**

....

d) Write chemical equation for the reaction between product in (a) and acid.   **(1mk)**

....

....

e) Write an ionic equation to show the formation of the white powder   **(1mk)**

....

....

f) Write an equation to show what happened when white powder is strongly heated.   **(1mk)**

....

....

g) Using a diagram, describe how a salt can be obtained from the filtrate in c(i) above   **(3mks)**

....

....

....

KCSE 2022 PREDICTION

SERIES 1

SCHOOL……………………………………………… SIGN………………………………

DATE………………………………………………

CHEMISTRY PRACTICAL

CONFIDENTIAL

The information contained in this **KCSE Chemistry Prediction paper** is to enable the head of the school and the teacher in charge of Chemistry to make adequate preparations for the **233/3 Chemistry** Practical examination.

<u>**No one else**</u> should have access to this information either directly or indirectly.

INSTRUCTIONS

<u>In addition to the laboratory fittings each candidate requires the following:</u>

(a)

1. Burette
2. Pipette
3. Pipette filler
4. Filter funnel
5. White tile
6. Clamp and stand
7. **2** conical flask
8. **100 cm^3** glass Beaker (empty)
9. Stop watch
10. **100cm3** measuring cylinder
11. **10cm^3** measuring cylinder
12. **250 cm^3** volumetric flask
13. Metallic spatula
14. **6** clean test tubes

©2022 The Kenya National Examinations Council

15. Test tube holder
16. **500ml** distilled water
17. White piece of paper or filter paper
18. **1** filter paper
19. **1** labelling paper
20. Phenolphthalein indicator
21. About **90cm^3** solution **K**
22. About **100cm^3** solution **L**
23. About **70cm^3** solution **N**
24. About **90cm^3** solution **P**
25. About **0.5gNaHCO$_3$**
26. About **1.0g** solid **Q**
27. About **0.5g** solid **R**

(b) **Each student should have access to the following solutions:**
1. Mean of heating
2. 2M NaOH
3. 2M HNO$_3$
4. Pb(NO$_3$)
5. Acidified KMNO$_4$
6. Potassium iodide solution

NB: The above solutions should be supplied with a dropper each.

(c) **SOLUTIONS PREPARATION AND SOLID MEASUREMENTS**
1. SOLUTION **K** IS **1M H$_2$SO$_4$**
2. SOLUTION **L** IS **0.36 M NaOH** CONTAINING **14.4g** OF **NAOH** IN **1 LITRE** OF THE SOLUTION
3. SOLUTION N IS **2M HCl**
4. SOLUTION P IS **0.16 M Na$_2$S$_2$O$_3$**(*SODIUM THIOSULPHATE*)
5. SOLID Q IS A MIXTURE OF SODIUM SULPHITE(**Na$_2$SO$_3$**) AND LEAD (II) CARBONATE (**PbCO$_3$**) MIXED IN THE **RATIO 1:1** (*should be thoroughly mixed*)
6. SOLID **R** IS MALEIC ACID

KCSE 2022 PREDICTION

SERIES 1

NAME…………………………………………… INDEX NO………………………

SCHOOL………………………………………… SIGN………………………………

DATE……………………………………………

233/3

CHEMISTRY

PAPER 3
TIME: 2 ¼ HOURS
PRACTICAL

INSTRUCTIONS TO THE CANDIDATES:-

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

FOR EXAMINERS USE ONLY

QUESTION	MAXIMUM SCORE	CANDIDATES SCORE
1	15	
2	11	
3	14	
TOTAL	40	

©2022 The Kenya National Examinations Council

QUESTION 1

- You are provided with solution **K** and **L**
- **S**olution **K** is 1M H_2SO_4
- Solution **L** contains 8.7g of the hydroxide of metal **M** {with formulae MOH] in 600cm^3 of the solution
- You are required to carry out the experiment to determine;
 i.   Concentration of solution L
 ii. R.A.M of metal **M**

PROCEDURE

1. Measure 75cm3 of solution K and put into a clean 250cm3 volumetric flask and add distilled water up to the mark
 -label this solution **W**
2. Fill a clean burette with solution W
3. Pipette 25cm3 of solution L into a clean conical flask and add 2 drops of phenolphthalein indicator
4. Titrate the solution **W** in the burette against solution **L** in the conical flask and record the results in the table below
5. Repeat {3} and {4} above as you fill the table below.

TABLE 1

	I	II	III
Final burette reading {cm^3}			
Initial burette reading {cm^3}			
Volume of solution W used {cm^3}			

[4mks]

{a}Calculate the;

{i}Average volume of solution W used **[1mk]**

………………………………………………………………………………………………

………………………………………………………………………………………………

………………………………………………………………………………………………

{ii} Concentration of solution W **[1mk]**

………………………………………………………………………………………………

………………………………………………………………………………………………

………………………………………………………………………………………………

©2022 The Kenya National Examinations Council

{iii} Number of moles of solution W that reacted with each 25cm3 portion of solution L

{2mks}

....
....
....
....

{b} Calculate the;

{i} Number of moles of the metal hydroxide {MOH} in solution L that reacted with each portion of solution W **[2mks]**

....
....
....
....

{ii} Concentration of solution L **[1mk]**

....
....
....

{iii} Number of moles of the metal hydroxide [MOH] in 600cm3 of solution L **[2mks]**

....
....
....
....

{iv} R.A.M of metal M $[O=16, H=1]$ **[2mks]**

....
....
....
....
....

©2022 The Kenya National Examinations Council

QUESTION 2

You are provided with solution **N** and **P**

▪ Solution N is **2M HCl**
▪ Solution P is 0.16M sodium thiosulphate
▪ You are required to carry out the experiment below to determine how concentration affects the rate of reaction between HCl and sodium thiosulphate solutions

PROCEDURE

1. Fill a clean burette with solution P.

Measure 25cm³ of the solution P from the burette into a clean 100cm³ glass beaker and place on a white piece of paper with a cross[x] marked on it

2. Add 10cm³ of solution N into it and immediately start a stop watch and note the time taken for the cross beneath the mixture to become invisible

3. Clean the 100cm³ beaker and measure into it 20cm³ of solution P form the burette, and add 5cm³ of distilled water into the solution solution

4. Repeat step [2] above and note the time taken for the cross to become invisible

5. Repeat the experiment using volumes indicated on the table below and as you record the results

TABLE 2

Expt	1	2	3	4	5
Volume of solution p(cm³)	25	20	15	10	5
Volume of water added to solution p{cm3}	0	5	10	15	20
Volume of solution N	10	10	10	10	10
Time taken for the cross to become invisible [in seconds]					
$\frac{1}{t}$ S⁻¹					

(4mks)

[a]   plot a graph of $\frac{1}{t}$ against volume of solution P on the grid provided   **[3mk]**
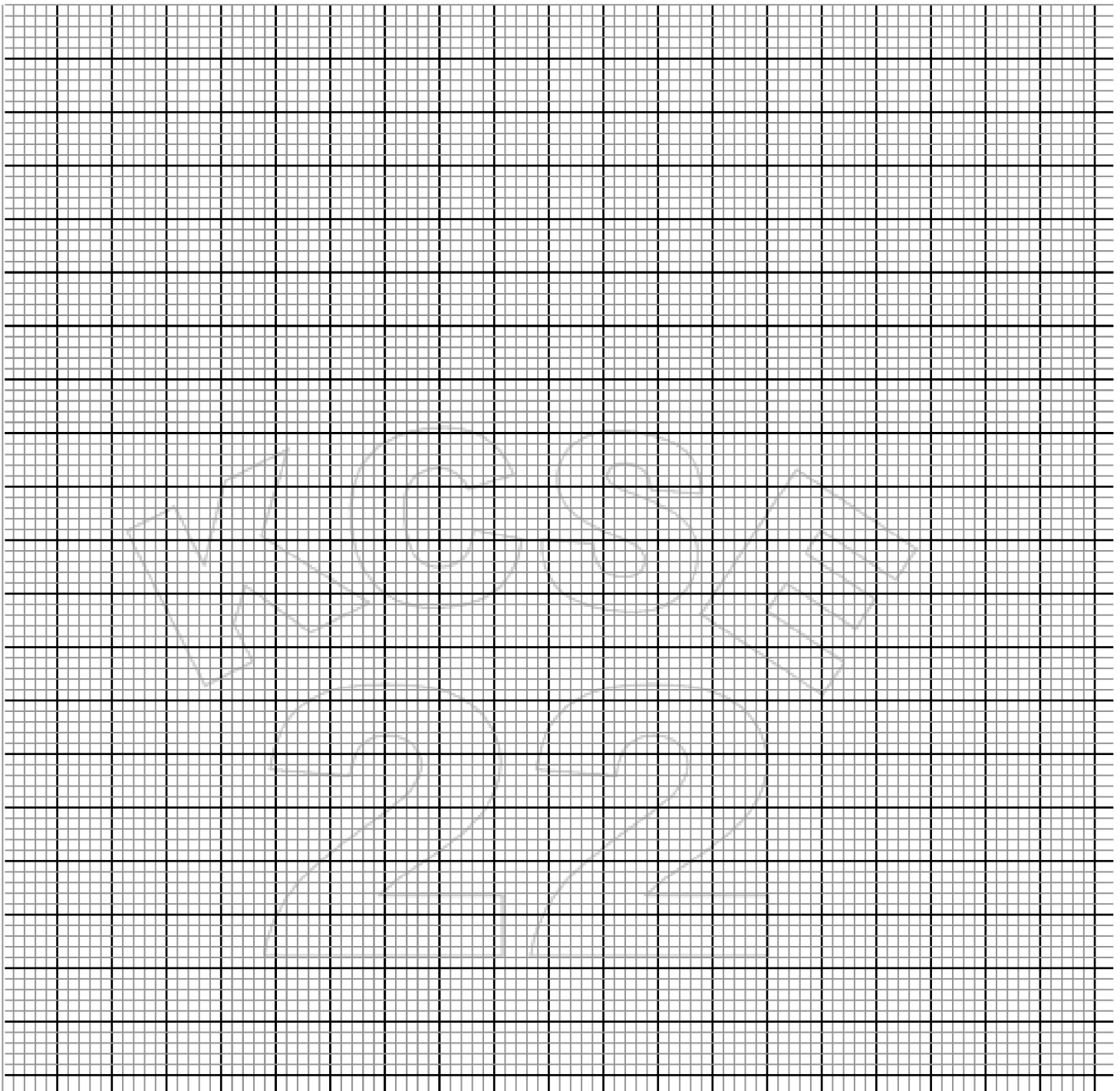
{b}   From the graph

{i}   Determine the time taken for the cross to become invisible when 12.5cm³ of solution P is

used   **[2mks]**

....

....

………………………………………………………………………………………………

………………………………………………………………………………………………

{ii} Explain the effect of concentration on the rate of reaction between HCl and sodium

thiosulphate solution **[2mks]**

…………………………………………………………………………………………………

…………………………………………………………………………………………………

…………………………………………………………………………………………………

…………………………………………………………………………………………………

QUESTION 3

- You are provided with solids Q and R
- You are required to carry out the tests below as you record your observations and inferences

(i) **SOLID Q**

-Add about $5cm^3$ of distilled water to solid Q, shake the mixture thoroughly for a while and then filter it

NOTE: Retain both the filtrate and the residue for the tests below

	TEST	OBSERVATIONS	INFERENCES
(a){i}	Divide the filtrate into 4 portion -To the first portion, add 4 drops of NaOH	$\left(\frac{1}{2}mar\right.$	$(1mar$
{ii}	Scoop the 2nd portion on a metallic spatula and ignite on a non-luminous flame	$\left(\frac{1}{2}mar\right.$	$\left(\frac{1}{2}mar\right.$

{iii}	To the 3rd portion, add 2 drop of Pb{NO$_3$}$_{[aq]}$	$\left(\frac{1}{2}mar\right)$	(**1mar**
{iv}	To the 4th portion ,add acidified KmnO$_4$	$\left(\frac{1}{2}mar\right)$	$\left(\frac{1}{2}mar\right)$
b{i}	Put the residue in a test tube and add about 2cm^3 of HNO$_3$	$\left(\frac{1}{2}mar\right)$	(**1mar**
{ii}	To the mixture in b{i} above, add 2 drops of KI solution	$\left(\frac{1}{2}mar\right)$	$\left(\frac{1}{2}mar\right)$

{ii}SOLID R

	TEST	OBSERVATIONS	INFERENCES
(a)	Scoop a portion of solid R on Metallic spatula and burn on Non-luminous flame	(1mar	(1mar
(b){i]	Put the remaining portion of solid R into a clean test tube and add about 3cm³of distilled water, shake and divide into 2 portions	(1mar	$\left(\frac{1}{2}mar\right.$
{ii}	To the 1st portion, add 2 drops of acidified KMnO₄ and warm	$\left(\frac{1}{2}mar\right.$	(1mar
{iii}	To the 2nd portion add NaCO	$\left(\frac{1}{2}mar\right.$	(1mar

KCSE 2022 PREDICTION

SERIES 1

NAME………………………………………………   INDEX NO………………………

SCHOOL……………………………………………   SIGN………………………………

DATE…………………………………………………

232/1

PHYSICS

THEORY
PAPER 1
TIME: 2 HOURS

INSTRUCTIONS TO THE CANDIDATES:

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

b)   *Answer **all** the questions both in section **A** and **B** in the spaces provided below each question*

c)   *All workings **must** be clearly shown; marks may be awarded for correct steps even if the answers are wrong.*

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

FOR EXAMINERS' USE ONLY

SECTION	QUESTION	MAX SCORE	CANDIDATE'S SCOR
SECTION A	1-13	25	
SECTION B	14	11	
	15	15	
	16	08	
	17	07	
	18	14	
	TOTAL	80	

©2022 The Kenya National Examinations Council

SECTION A (25 MARKS)

Answer All Questions In This Section In The Spaces Provided

1. Figure 1 shows an object held between two straight edges. Determine the radius of the object using the meter rule shown in figure 1 below. **(2 marks)**

Figure 1

....

....

....
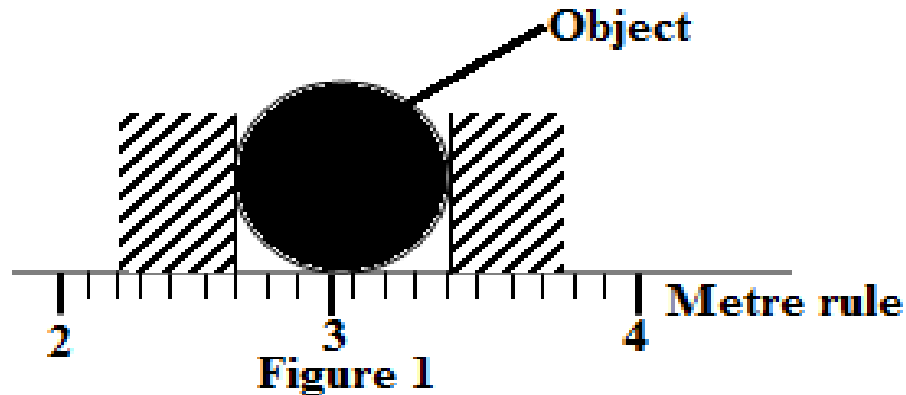
2. Apart from the size of an object state the other factor to be considered when choosing an instrument for measuring length of a given object **(1 mark)**

....

3. The figure shows the level of mercury in a barometer. Study the diagram and answer the questions that follow
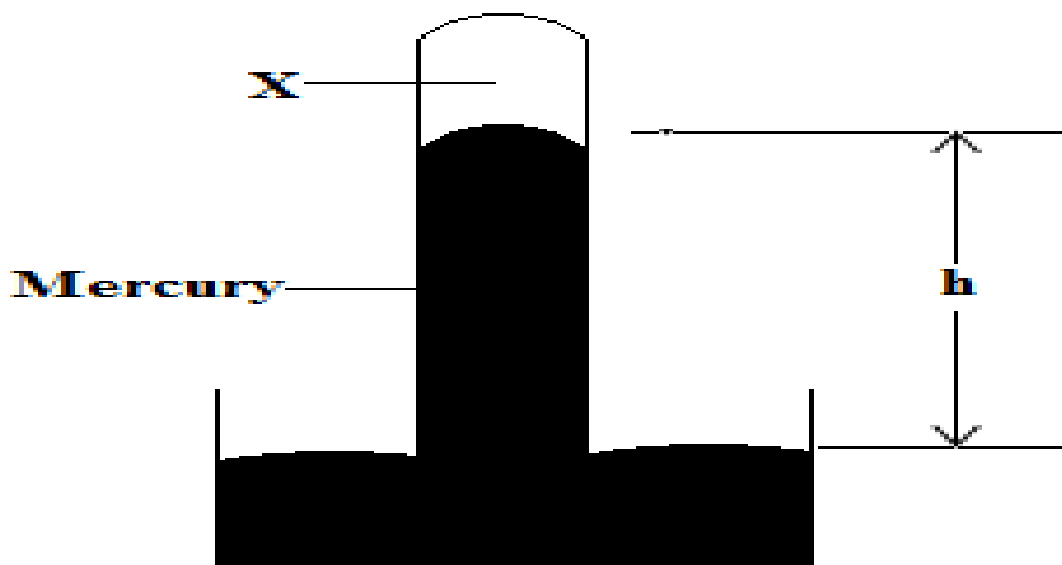
State and explain the effect on the height h when the atmospheric pressure increases **(2 marks)**

………………………………………………………………………………………………………

………………………………………………………………………………………………………

………………………………………………………………………………………………………

4. Give a reason why it easier to use a hammer with a long handle to remove a nail from wood than to use another one with a short handle to remove the same nail **(1 mark)**

………………………………………………………………………………………………………

………………………………………………………………………………………………………

5. When a steel ball is allowed to fall freely in a viscous fluid, it is observed to attain terminal velocity after some time. State the reason why the ball attains terminal velocity **(1 mark)**

………………………………………………………………………………………………………

………………………………………………………………………………………………………

………………………………………………………………………………………………………

6. The tape in the figure (not to scale) was obtained from an experiment using a timer of frequency 50Hz

Direction of motion of the body
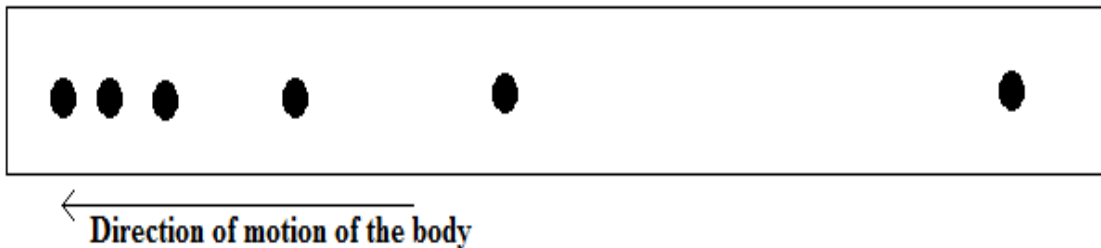
State whether the body is decelerating or not the acceleration of the body whose motion is represented in the tape. **(1mark)**

………………………………………………………………………………………………………

………………………………………………………………………………………………………

………………………………………………………………………………………………………

7. The figure shows two identical measuring cylinder containing different liquids X and Y placed on a weightless simple balance. The system is equilibrium.
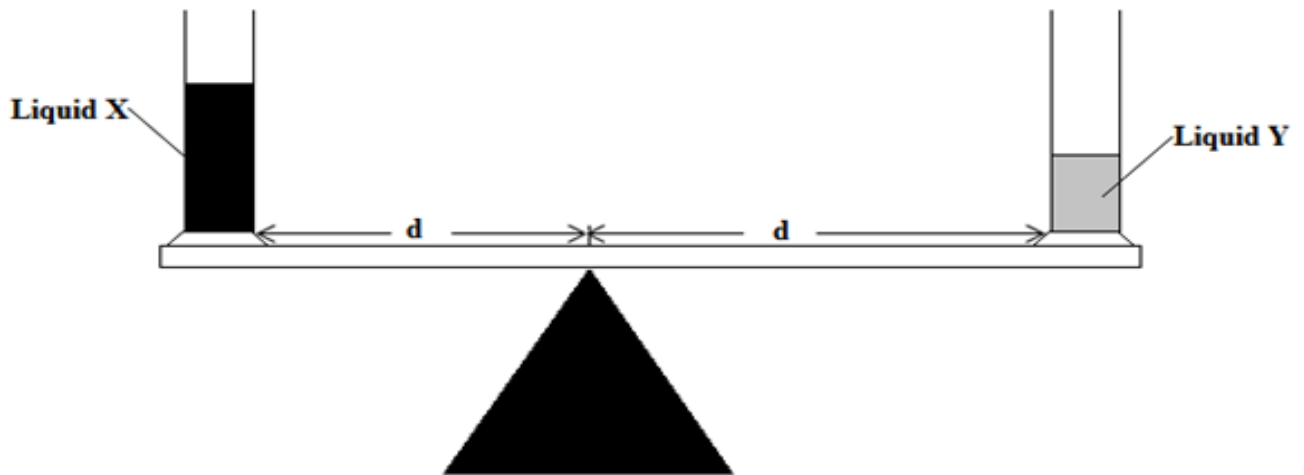
Compare the density of liquid X and that of Y **(2 marks)**

....

....

....

8. The figures below show an arrangement of two pulleys used to lift same load of 100N
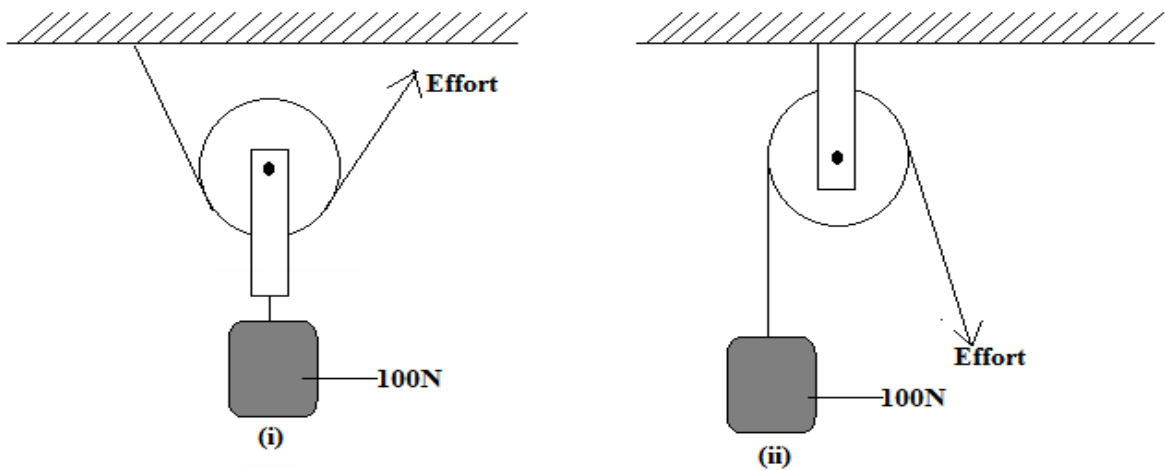
State with a reason the system that is more efficient **(2 marks)**

....

....

....

©2022 The Kenya National Examinations Council

9. The figure shows a water tank that is used to heat water and supply through taps.
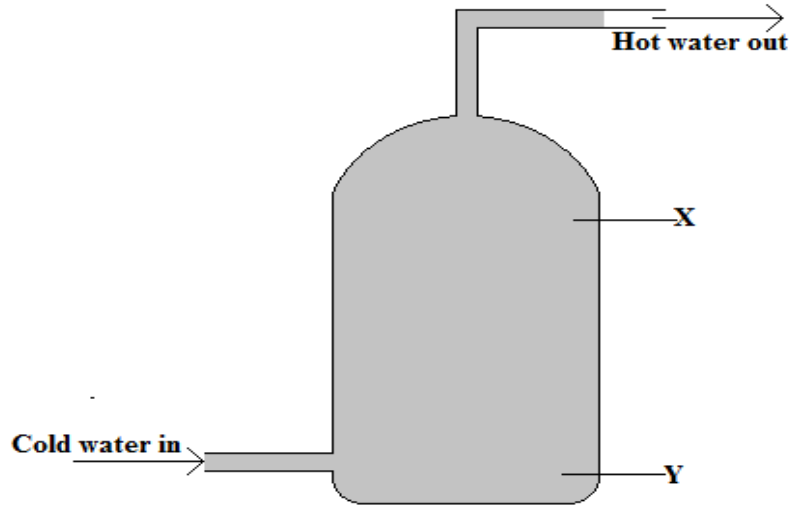
State with a reason whether the appropriate position for a heater is X or Y **(2 marks)**

....

....

....

10. The figure shows a uniform metre of mass 200g balance by a spring balance placed 70cm form one. The pivot is placed 30cm away from the same end. Study the diagram and answer the questions that follow
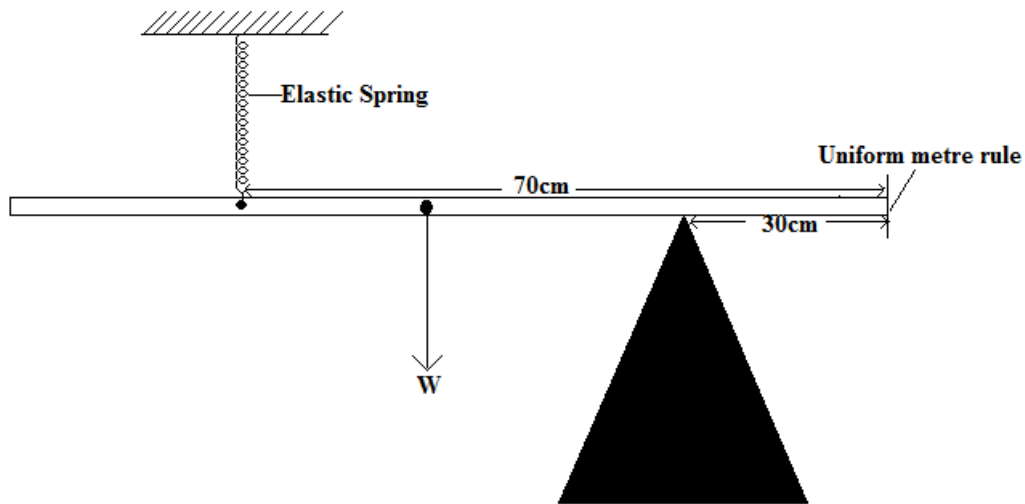
Determine tension T on the spring **(2 marks)**

....

....

....

11. State the cause of random motion of smoke particles as observed in Brownian motion experiment using a smoke cell. **(1 mark)**

....

....

12. The figure shows the level of mercury and water in identical glass beakers
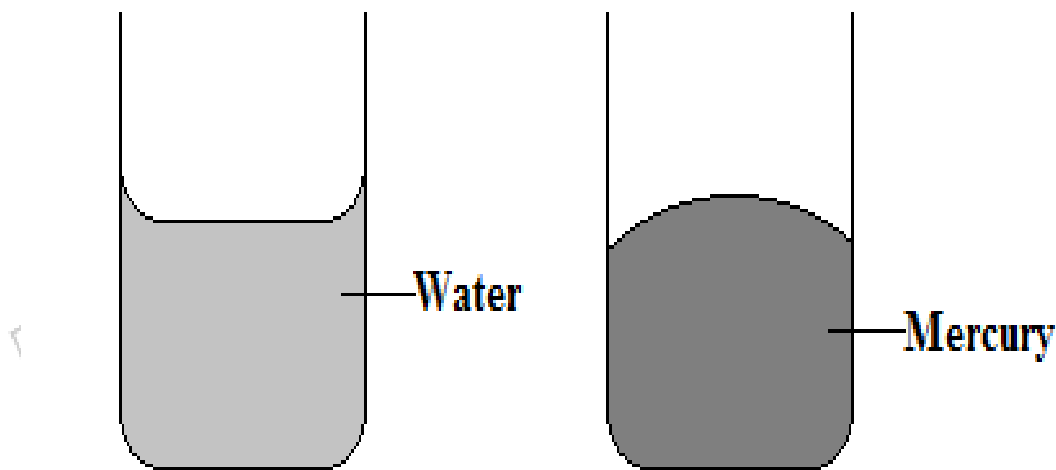
Explain the difference in the shapes of the meniscus **(2 marks)**

....

....

....

13. A wooden block of mass 2kgs is placed on a horizontal surface. A horizontal force of 12N is exerted on it   makes it to accelerate at 5ms^{-2}. Determine the frictional force acting between the surfaces. **(2 marks**

....

....

....

SECTION B (55 MARKS)

Answer All Questions In This Section In The Spaces Provided

14.

a) State the two conditions necessary for a system of forces acting on a body to be in equilibrium **(2 marks)**

………

………

………

b) The figure shows a loaded wheelbarrow held in equilibrium by a gardener. The wheel of the wheelbarrow is in contact with the ground at point C
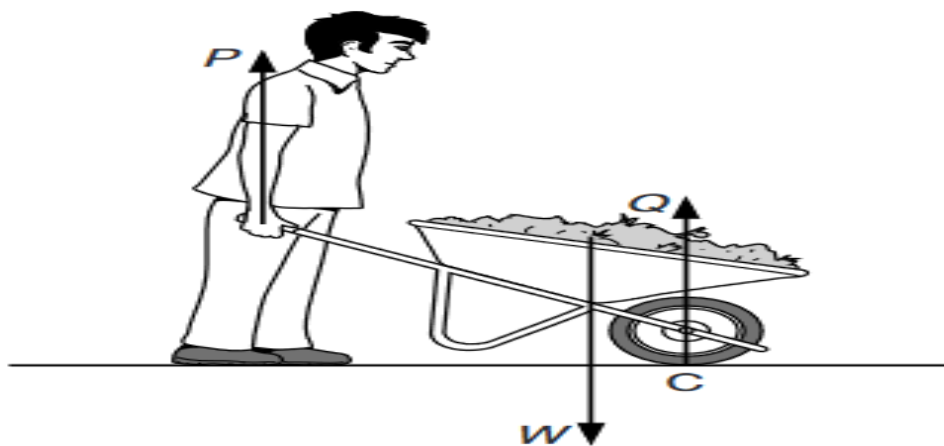
There are three vertical forces acting on the wheelbarrow P is the upward force applied by the gardener. Q is the upward force of the ground on the wheel at point C.W is the weight of the wheelbarrow and its contents. Explain why the force P is less than the force W

i. By considering the forces P, Q and W, **(2 marks)**

………

………

………

ii. By considering the moments of the forces P and W about point C. **(2 marks)**

………

………

………

c) The figure shows a tanker lorry full of liquid. Study the diagram and answer the questions that follow
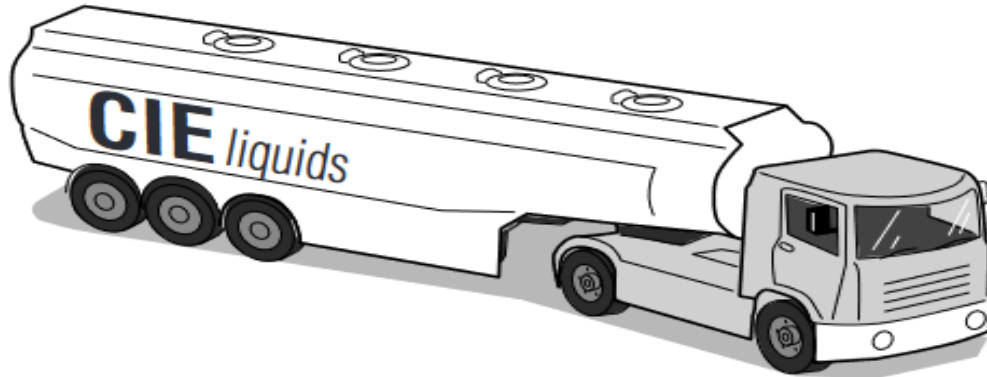
i. The tanker delivers the liquid and drives away empty. Compare the acceleration of the empty tanker with the acceleration of the full tanker for the same resultant force **(2 marks)**

....

....

....

....

ii. Given that empty tanker has a weight of 50 000 N. The forward force is 6000 N and the total resistive force is 2000N. Determine the acceleration of the tanker **(3 marks)**

....

....

....

....

15.

a) A warm bottle of soda placed in ice at 0°C cools faster than when the same soda is placed in water at the same temperature. Explain this observation **(2 marks)**

....

....

....

b) The figure shows an incomplete circuit set up that can be sued in an experiment to determine the specific heat capacity of a solid block by electric method. Study the diagram and answer the questions that follow
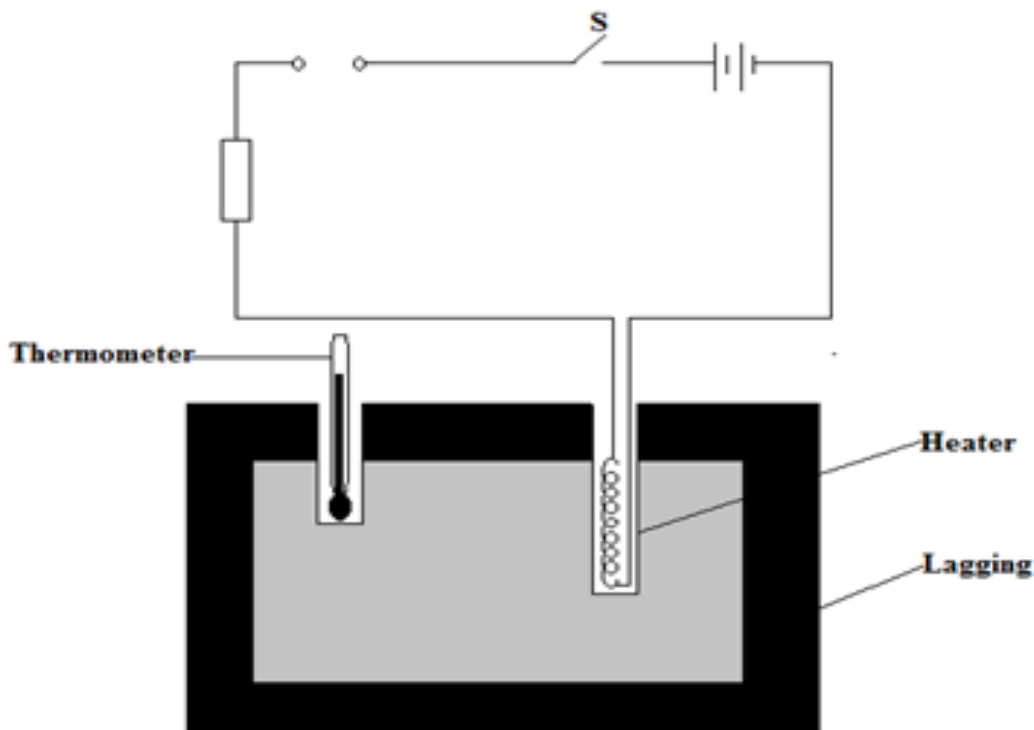
i. State the purpose of the rheostat in the experiment **(1 mark)**

....

....

ii. Complete the diagram by inserting the missing components for the experiment to work **(2 marks)**

iii. Other than temperature, state three measurements that should be taken **(3 marks)**

....

....

....

....

c) The figure shows a set-up of apparatus used in an experiment to determine the specific latent heat of fusion of ice. Study the diagram and answer the questions that follow
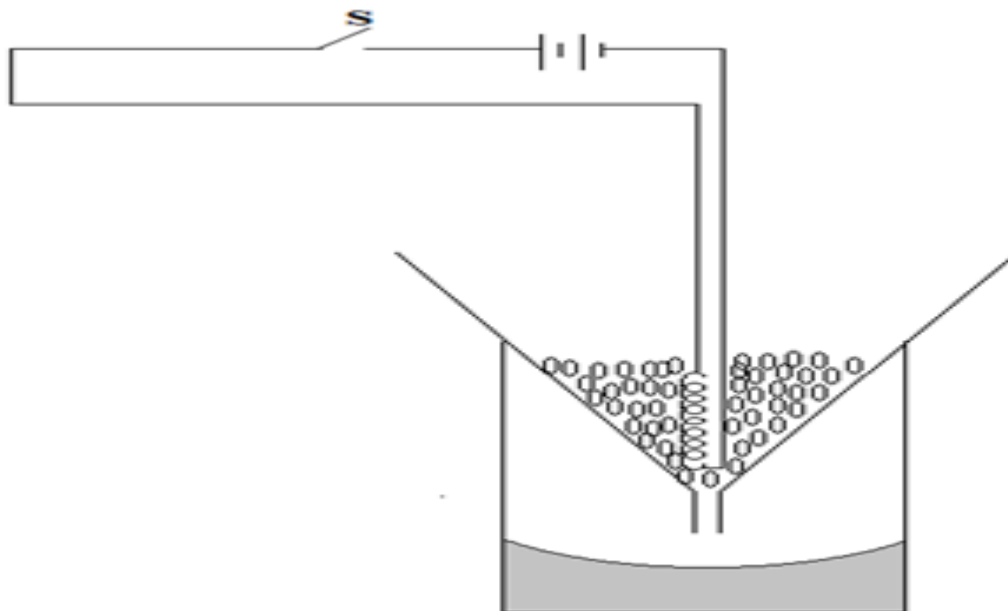
The following readings were noted after the heater was switched on for 10 minutes

➢ **Mass of the beaker=260g**

➢ **Mass of the beaker +melted ice =280g**

Determine

i. The energy supplied by the 120W heater in the 10 minutes **(3 marks)**

……

……

……

……

……

ii. The specific latent heat of fusion of the ice **(3 marks)**

……

……

……

iii. The experiment value for the specific latent heat of fusion of ice obtained is less than the theoretical value. Give one reason for this observation **(1 mark)**

....

....

16. The figure shows a conveyor belt transporting a package to a raised platform. The belt is driven by a motor.
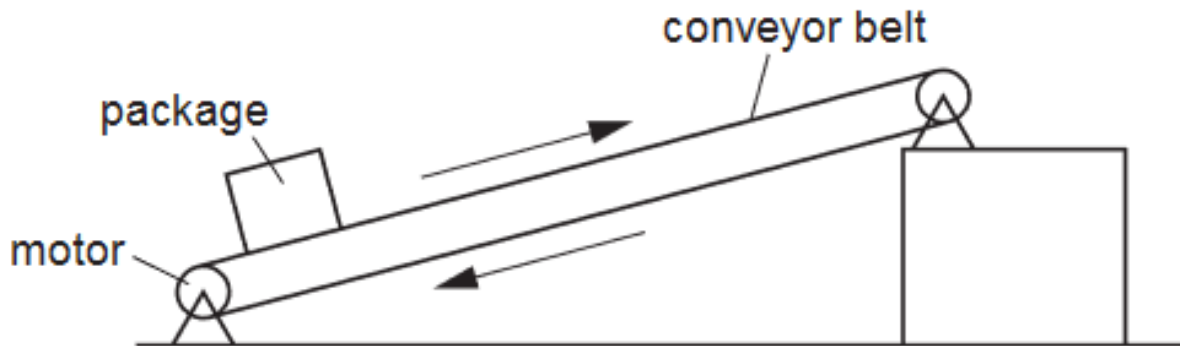
The mass of the package is 36 kg.

Determine

a) The increase in the gravitational potential energy (G.P.E.) of the package when it is raised through a vertical height of 2.4 m. **(2 marks)**

....

....

....

b) The power needed to raise the package through the vertical height of 2.4 m in 4 s **(2 marks)**

....

....

....

c) The electrical power supplied to the motor is much greater than the answer to (b).

Explain how the principle of conservation of energy applies to this system. **(2 marks)**

....

....

d) Assume that the power available to raise packages is constant. A package of mass greater than 36 kg is raised through the same height. Suggest and explain the effect of this increase in mass on the operation of the conveyer belt. **(2 marks)**

....

....

©2022 The Kenya National Examinations Council

....

....

17. An athlete of mass 64 kg is bouncing up and down on a trampoline.
At one moment, the athlete is stationary on the stretched surface of the trampoline as shown in the figure below.
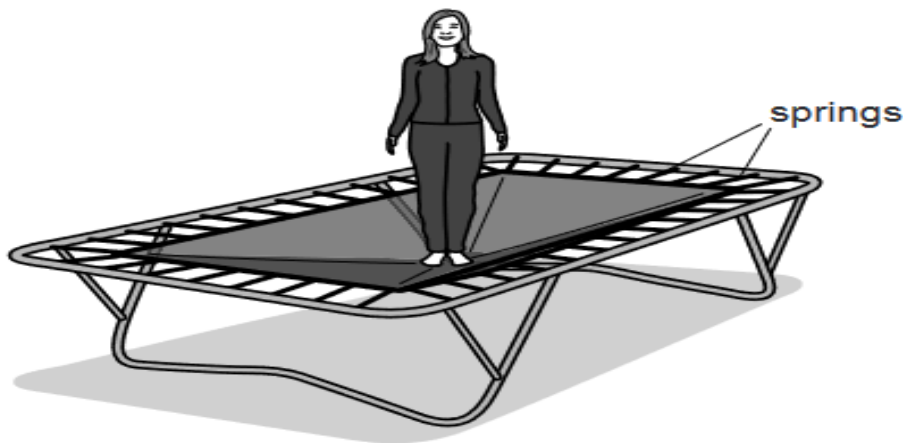
a) State the form of energy stored due to the stretching of the surface of the trampoline.**(1 mark)**

....

b) The stretched surface of the trampoline begins to contract. The athlete is pushed vertically upwards and she accelerates. At time t, when her upwards velocity is 6.0 m / s, she loses contact with the surface. Determine
Her kinetic energy at time t.   **(2 marks)**

....

....

....

The height at which the kinetic energy will be zero   **(2 marks)**

....

....

In practice, she travels upwards through a slightly smaller distance than the distance

calculated in (ii).Suggest why this is so.   **(1 mark)**

....

....

c) The trampoline springs are tested. An extension-load graph is plotted for one spring. Fig. 3.2 is the graph.
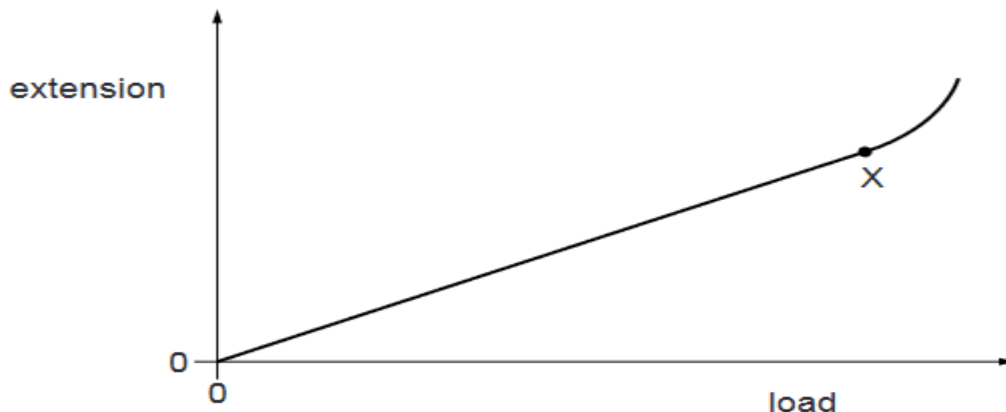
i. On the same axes sketch a graph of another spring whose spring constant is higher than the trampoline springs **(1 mark)**

18.

a) The diagram below shows a set-up used to investigate a particular gas law. Study the diagram and answer the questions that follow
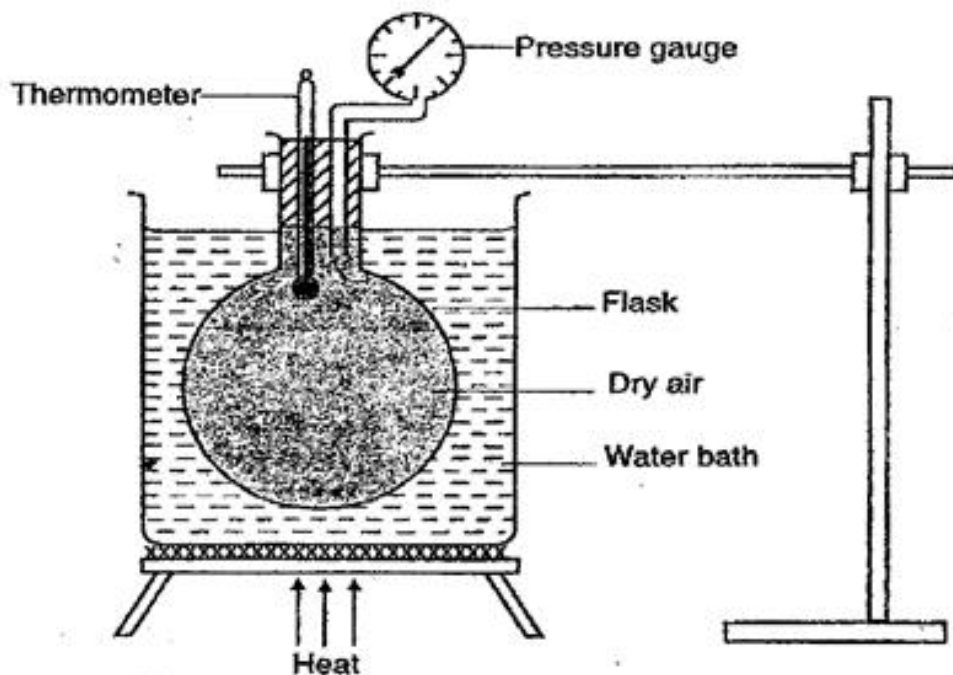
(a) State with a reason which gas law is being experimented by the set-up **(2 marks)**

....

....

....

©2022 The Kenya National Examinations Council

(b)   Name the two factors that are held constant in the experimented   **(2 marks)**

....

....

(c)   Give the reason why heating is done through a water bath   **(1 mark)**

....

....

b)   Figure (a) shows 52cm of air trapped by a mercury column of 10cm while figure (b) shows the column of air when the glass tube is inverted
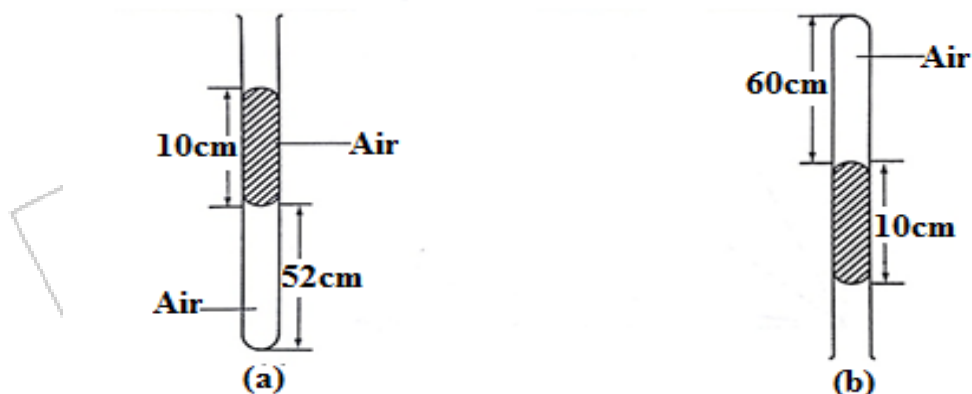
Determine the atmospheric pressure in mmHg   **(3 marks)**

....

....

....

c)   The graph below shows the relationship between the pressure and temperature of a gas of volume V_1
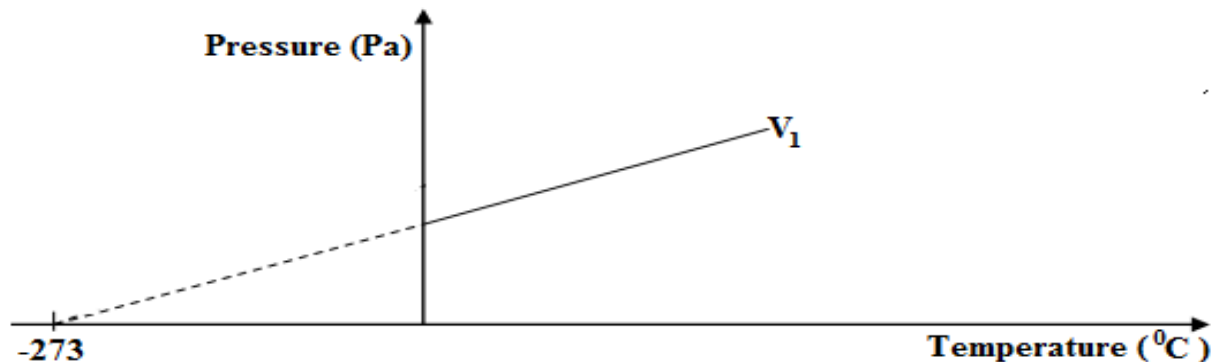
On the same axis sketch another graph for a gas of a larger volume.   **(1 mark)**

b)

(a) The figure below shows a ball spinning in anticlockwise direction through still air

Direction of spinning

Direction of motion

The horizontal distance covered by the ball is observed to be longer than when the ball is not spinned. Explain how the spinning increases the range of the ball **(3marks)**

....

....

....

(b) The figure below shows gas flowing along a pipe of non-uniform cross-sectional area. Two pipes A and B are dipped into liquids as shown below.

Gas

A   B
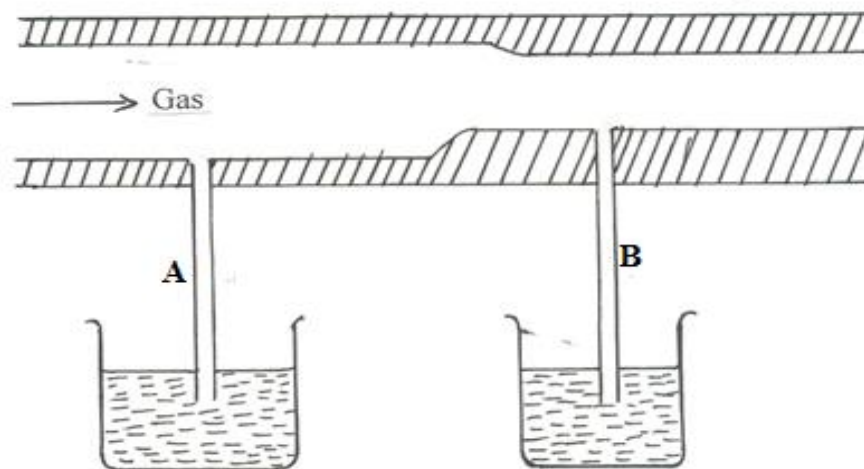
Indicate the levels of the liquids in A and B giving a reason for your answer **(2marks)**

....

....

....

KCSE 2022 PREDICTION

SERIES 1

NAME………………………………………… INDEX NO………………………

SCHOOL……………………………………… SIGN………………………………

DATE……………………………………………

232/2

PHYSICS

PAPER 2
(THEORY)
TIME: 2 HRS

INSTRUCTIONS

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

b) *This paper consists of **two** sections, Section A and **B.** Answer **ALL** the questions in both section in the spaces provided in this paper.*

c) ***ALL** working must be clearly shown.*

d) *Mathematical tables and electronic calculators **may be** used.*

FOR EXAMINER'S USE:

SECTION	QUESTION	MAXIMUM SCORE	STUDENTS SCORE
A	1-15	25	
B	16	10	
	17	15	
	18	15	
	19	15	
	TOTAL	80	

©2022 The Kenya National Examinations Council

SECTION A: 25 MARKS

1. State what is meant by polarization in a simple cell. **(1 mark)**

....

....

2. Determine the total capacitance of the arrangement below. **(1 mark)**

$3\mu F$ $\qquad\qquad$ $2\mu F$
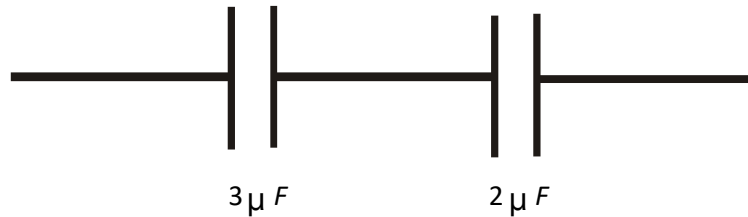
3. Indicate the poles of the electromagnet shown in the figure below. **(1 mark)**
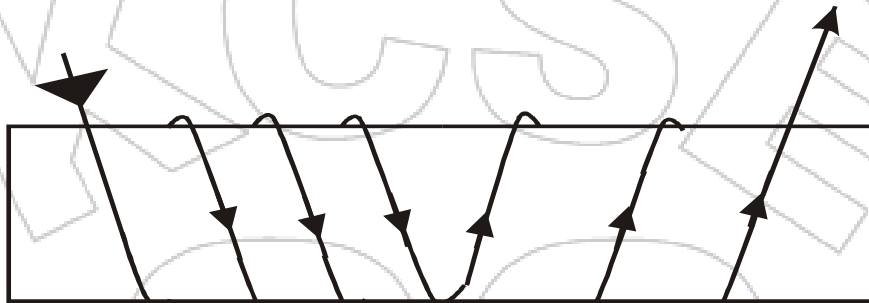
4. The following diagram shows the path of light after striking two mirrors at an angle.

20^0 $\qquad$ 20^0
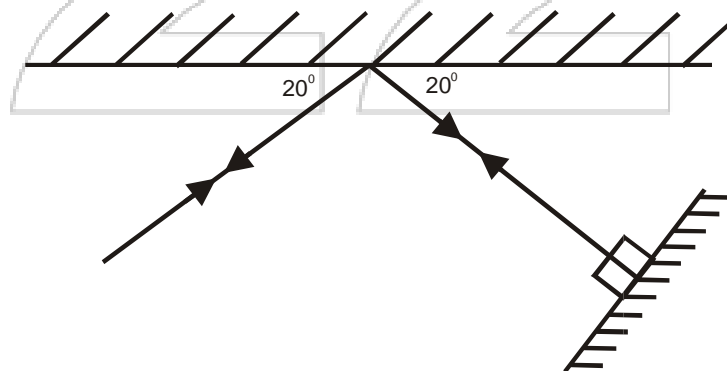
Determine the angle between the two mirrors.

5. A cell of e.m.f E volts and internal resistance r ohms is connected to an external resistor R.A current I amperes flows through the circuit. Write an expression relating E,r,R and I. **(1 mark)**

....

....

6. A radio station broadcasts at a frequency of 96.4MHz.What is the wavelength of its radio waves. **(C=3.0x10^{8}ms^{-1}).**   **(1 mark)**

7. A vertical pin is fixed at the centre of a rectangular container with thin transparent walls as shown below.
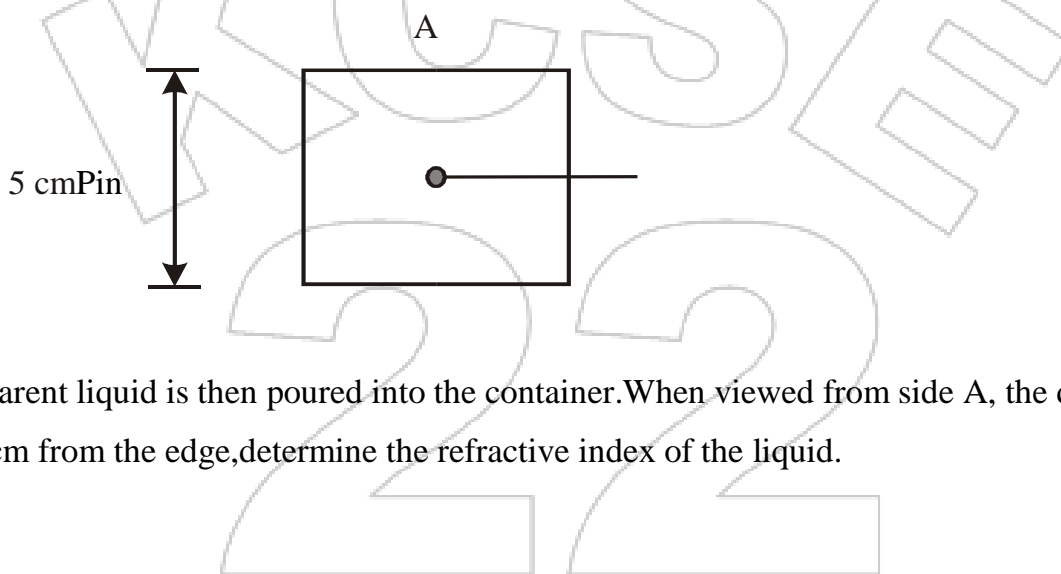
A transparent liquid is then poured into the container.When viewed from side A, the distance of the pin is1.9cm from the edge,determine the refractive index of the liquid.   **2 mk**

8. When a candle flame is brought near the cap of a charged electroscope, the electroscope discharges.

Explain this observation.   **(2 marks)**

....

....

....

9. State the function of a fuse in a circuit. **(1 mark)**

……………………………………………………………………………………………………

……………………………………………………………………………………………………

10. Sketch a ray diagram to show the image formed when a convex lens is used as a simple microscope. **(2 marks)**

11. What is meant by threshold frequency as used in photoelectricity. **(1 mark)**

……………………………………………………………………………………………………

……………………………………………………………………………………………………

12. Give the difference between real and virtual image. **(2 marks)**

……………………………………………………………………………………………………

……………………………………………………………………………………………………

……………………………………………………………………………………………………

13. A charge of 360 coulombs flows through a lamp every minute. Calculate the number of electrons involved (electron charge is 1.6×10^{-19}C). **(3 marks)**

……………………………………………………………………………………………………

……………………………………………………………………………………………………

……………………………………………………………………………………………………

……………………………………………………………………………………………………

14. X-Rays are produced by a tube operating at 1.0×10^4V. Calculate their wavelength (Take $h=6.6 \times 10^{-34}$JS, $e=1.6 \times 10^{-19}$ C, $c=3.0 \times 10^8$ms^{-1}.). **(3 marks)**

15. The following is part of a radioactive decay series.

$$^{234}_{83}Bi \xrightarrow{\beta} \ ^{a}_{84}X \xrightarrow{230} \ _{b}Y$$
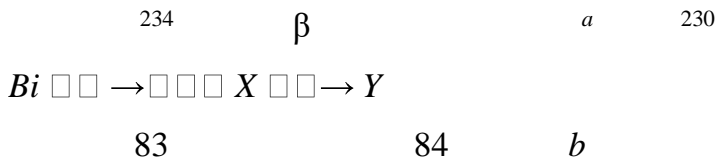
Determine the values of a and b. **(2 marks)**

SECTION B (55 marks)

16. a) Define the term principal focus as applied in thin lenses. **(2 marks)**

………………………………………………………………………………………………………
………………………………………………………………………………………………………
………………………………………………………………………………………………………

b) A lens forms a clear image on a screen. When the distance between the screen and the object is 80cm, the image is 3 times the size of the object.

i) Explain the type of lens used. **(2 marks)**

ii) Determine the distance of the image from the lens. **(3 marks)**

©2022 The Kenya National Examinations Council

iii) Determine the focal length of the lens. **(2 marks)**

c) i) Define the term 'refractive index' of a material. **(1 mark)**

ii) A microscope is used to focus a mark on a surface .When a rectangular glass block 30mm thick is placed on the mark,

17. a) Define work function as used in photoelectric effect. **(1 mark)**

b) Give one application of photoelectric effect **(1mark)**

b) In an experiment to observe photoelectric emission from a clean caesium surface, the following readings were obtained.

Stopping potential (V)	0.6	1.0	1.4	1.8	2.2
Frequency (x10^{4}Hz)	6.0	7.0	8.0	9.0	10.0

i) Plot a graph of stopping potential V$_S$ (y-axis) against frequency **(5 marks)**
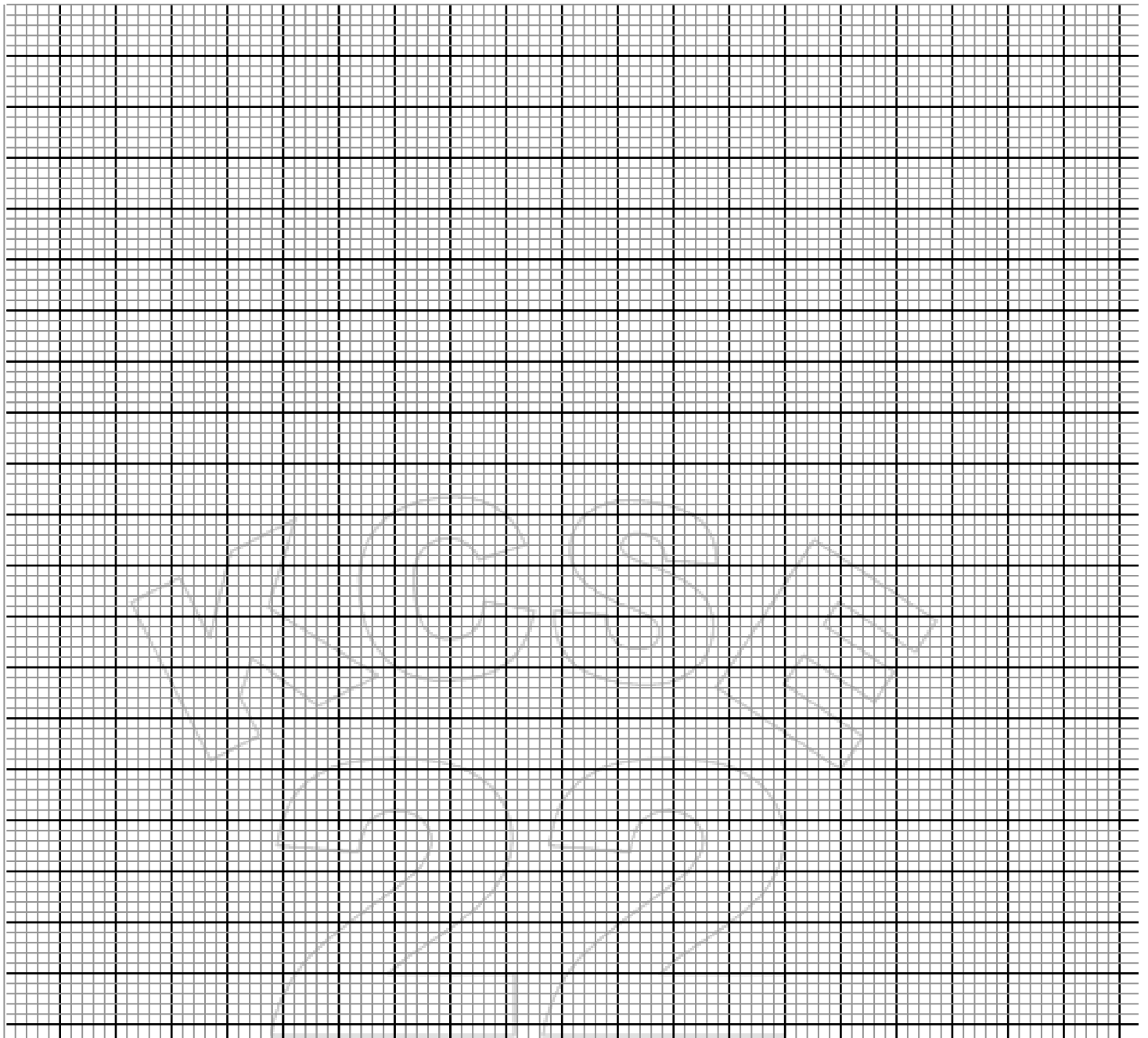
ii)   From the graph, determine the threshold frequency of the surface**.**   **(1 marks)**

iii) Use the graph to determine plank's constant.(Charge of electron=1.6×10^{-19}C).**(3 mark)**

iv) Calculate the work function of the metal**.** **(3 marks)**

v) Calculate the threshold wavelength of the radiation.($c=3.0 \times 10^8$). **(2 marks)**

18. a)An x-ray tube produces x-rays whose wavelengths vary from 6.0×10^{-13} to 6.0×10^{-13}m. Determine.

i)The range of the frequency of the x-rays. **(3 marks)**

ii)The highest energy of the x-rays.($c=3.0 \times 10^8$ and $h= 6.6 \times 10^{-34}$ JS)**.** **(3 marks)**

b) The primary coil of a transformer has 1200 turns and the secondary coil has 60 turns. The transformer is connected to a 240V a.c source.
Determine:

i) The output voltage. **(2 marks)**

ii) The output current when the primary coil has a current of 0.5A. (Assume there are no energy losses.) **(3 marks)**

c) A student connected a circuit as shown below, hoping to produce a rectified output.
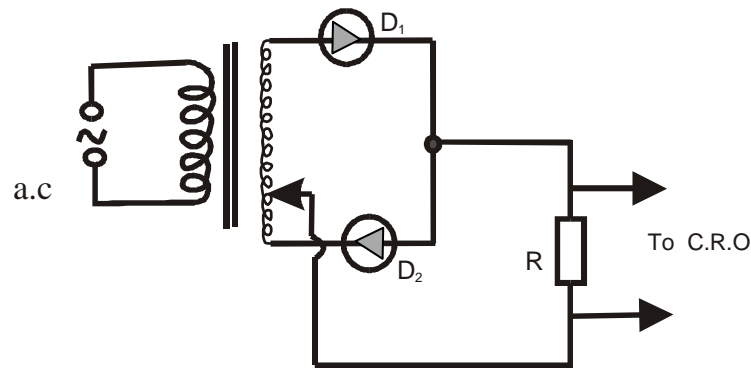
i) Sketch the graph of the output as seen on the C.R.O screen. **(2 marks)**

ii) Explain how this output is produced. **(2 marks)**

19. a) Define the term radioactivity. **(1 mark)**

b) Radiations from a radioactive isotope were subjected to a strong magnetic field .The results are represented in the figure below.
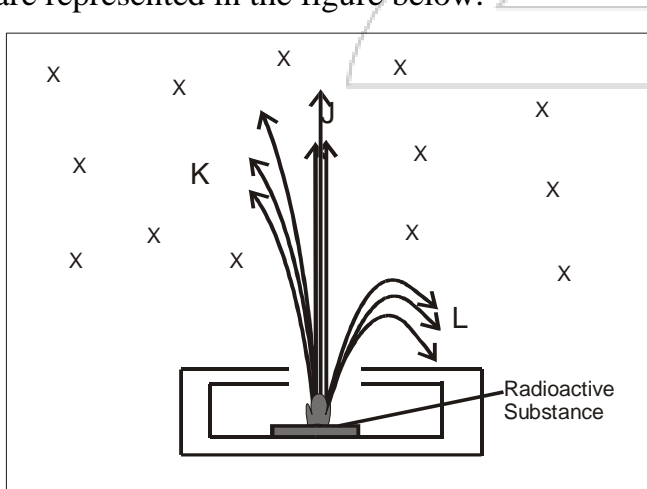
Identify the radiations J and K giving a reason for your choice. **(4 marks)**

a)J………………………………… **(1 marks)**

Reason

b)K…………………………………………………………….. **(1 mark)**

(1 mark)

Reason

(1 mark)

KCSE 2022 PREDICTION

SERIES 1

SCHOOL……………………………………… SIGN……………………………

Confidential

The information contained in this **KCSE Physics Prediction paper** is to enable the head of the school and the teacher in charge of Physics to make adequate preparations for the **232/3 Physics** Practical examination.

No one else should have access to this information either directly or indirectly.

INSTRUCTIONS TO SCHOOLS:
QUESTION 1
Each candidate will require the following.

- A milliammeter.
- A voltmeter (0 – 3V) or (0 – 5V).
- A wire mounted on a mm scale (Nichrome wire SWG 32)
- A switch.
- A long wire with a crocodile clip at one end (crocodile clip to be used as a slider or jockey).
- A micrometer screw gauge (may be shared).
- 5 connecting wires, two with crocodile clips at the end.
- One new dry cell size D.
- Cell holder.

QUESTION 2
EACH STUDENT REQUIRES
✓ Micrometer screw gauge (shared between 4 students)
✓ Vernier callipers
✓ Masses
♦ 10g
♦ 2 – 20g
♦ 50g
♦ 100g
✓ Helical spring (K = 0.08N/cm)
✓ Metre rule or half metre rule
✓ Complete retort stand

©2022 The Kenya National Examinations Council

KCSE 2022 PREDICTION

SERIES 1

NAME………………………………………… INDEX NO………………………

SCHOOL……………………………………… SIGN…………………………….

DATE…………………………………………

Kenya Certificate of Secondary Education (K.C.S.E)
232/3

PHYSICS

PAPER 3
(PRACTICAL)
TIME: 2 ½ HRS

INSTRUCTIONS TO CANDIDATES

a) Answer all the questions in the spaces provided in this question paper.

b) You are supposed to spend the first **15 minutes** of the **2 ½ hrs** allowed for this paper reading the whole paper carefully before commencing your work.

c) Marks will be given for clear record of the observations actually made, their suitability, accuracy and the use made of them.

d) Candidates are advised to record their observations as soon as they are made.

e) Non-programmable silent electronic calculators and KNEC mathematical tables may be used.

FOR EXAMINERS USE ONLY

QUESTION	MAX. SCORE	CANDIDATES SCORE
1	20	
2	20	
TOTAL	40	

©2022 The Kenya National Examinations Council

QUESTION 1 (20 MARKS)

You are provided with the following

> -Two dry cell
> -One bulb
> -Voltmeter (0 – 3V)
> -Ammeter (0 – 1A)
> -Amounted nicrome wire mounted on a millimeter scale
> -Switch
> -Seven connecting wire at least two with crocodile clips
> -Micrometer screw gauge

Proceed as follows:

a)   i). Set up the circuit as shown in the figure 1 below.
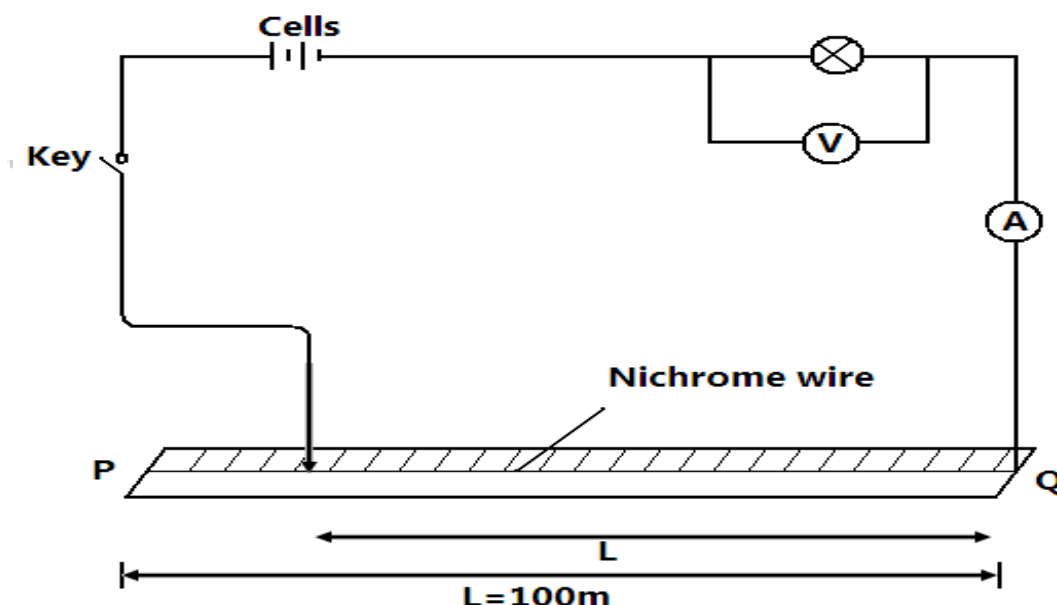
ii) With the crocodile clip at p, take the voltmeter reading and ammeter reading. Record v and 1 repeat the readings for L=80, 60, 40, 20 and 0cm respectively and complete the table below.

(5mks)

Length, L(cm)	100	80	60	40	20	0
Voltage, V(V)						
Current, I (A)						

iii). What changes do you observe on the bulb as L decreases from p?   **(1mrk)**

....

....

©2022 The Kenya National Examinations Council

iv). Plot a graph of ammeter reading (y=axis) against voltmeter readings.   **(5mrks)**
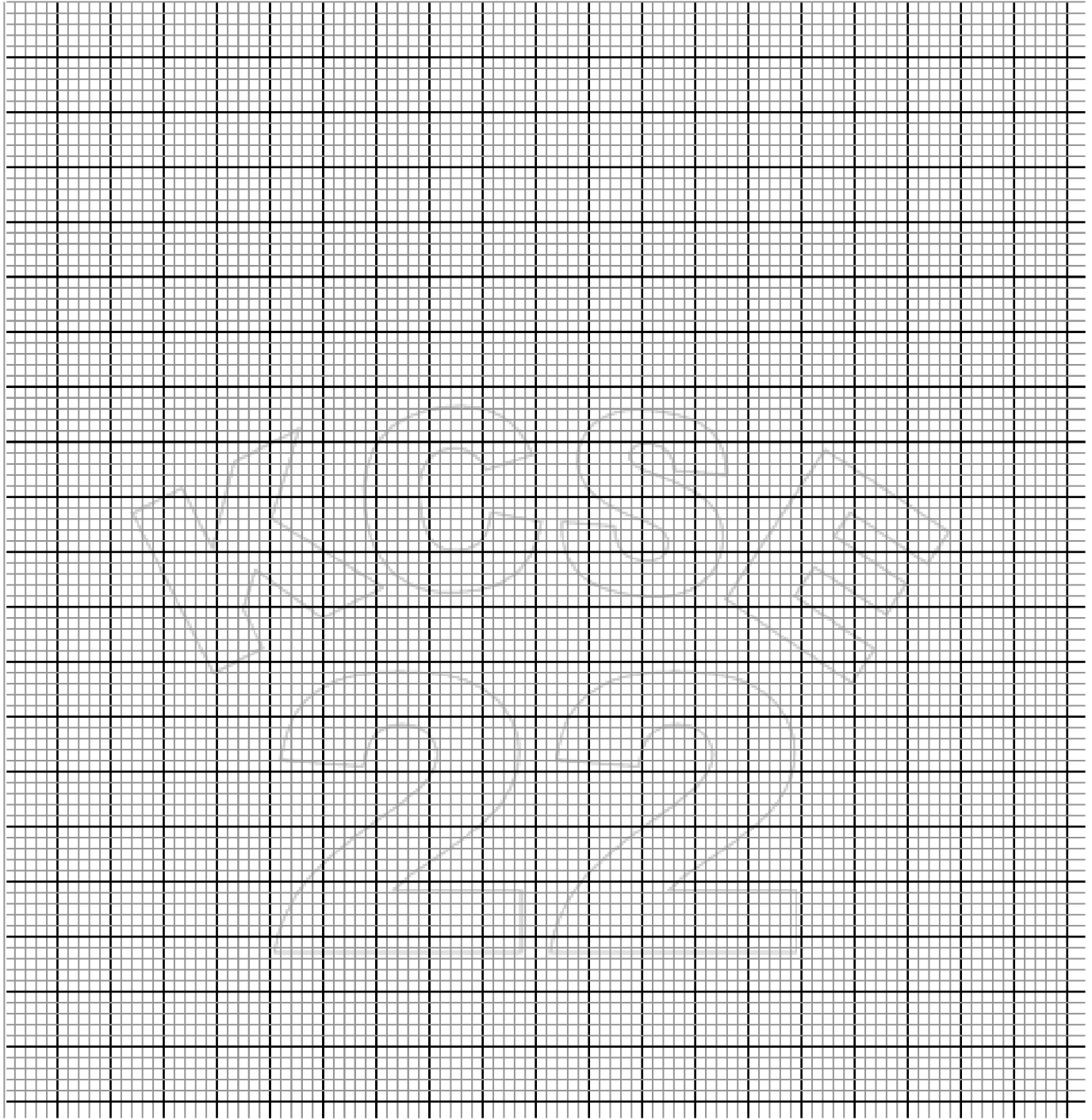
v). Determine the slope of the graph at V=1 volt.   **(2mrks)**

vi). What physical quantity is represented by the slope of the graph at any given point? **(1mrk)**

b. (i) Given the apparatus in a (i) above, draw a diagram of the circuit you would use to determine the current through the resistant wire and the potential difference across. **(1mrk)**

ii). Set up the circuit you have drawn. Record the ammeter reading I and the wire reading V when L=100cm **(2mks)**

V=………………… **I**=………………………………………...

iii). Using a micrometer screw gauge, measure the diameter of the wire.
(1mrk)

d=……………………………………**m**

iv). Calculate the quantity:

p= 0.785 $\frac{(V)}{I}\frac{d^2}{L}$ and give its units, where L is one meter. **(2mrks)**

QUESTION 2

You are provided with the following:-

- Vernier callipers
- Micrometer screw gauge
- Masses; 10g, 20g, 50g and 100g
- A helical spring
- Metre rule or half metre rule

Proceed as follows

(a) Determine the number of complete turns of the helical spring.

N = _____ **(1 Mark)**

(b) Measure the external diameter of the spring using the vernier callipers

D = _____ m **(1 Mark)**

(c) Use the micrometer screw gauge to determine the diameter of the wire of the spring.

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

(d) Determine the value of m **(2 Marks)**

$N = \frac{0.4D}{dm}$

....

....

....

(e) Suspend the helical spring vertically alongside the clamped half metre rule as shown in figure 1 below. Determine the length L_0, of the spring before loading it.

$L_0 =$ _____ cm
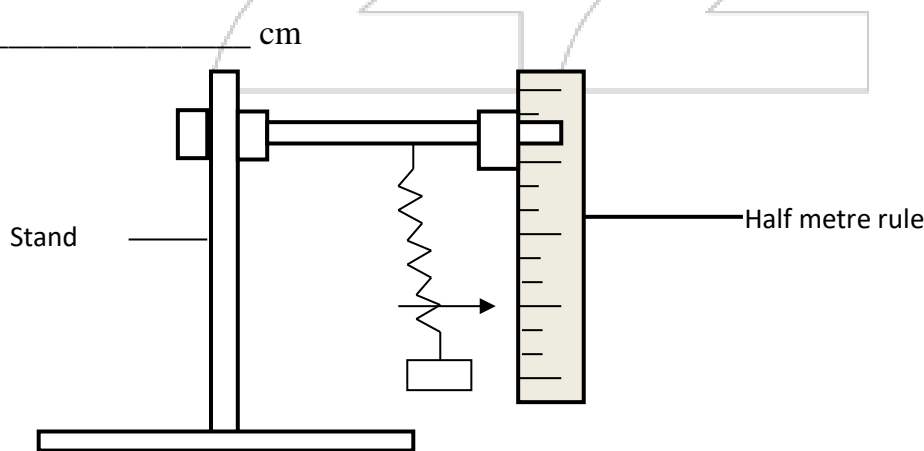
Figure 2

(f) Load the spring with a mass of 20g and determine the new reading on the metre rule. (L) Record this in the table below.

©2022 The Kenya National Examinations Council

(g) Calculate the extension $e = L - L_0$ due to the mass of 20g and record the value in the table given below. Repeat step f for other masses and complete the table.

Mass (g)	0	10	20	30	40	50	60	70	80	90	100
Weight (N)											
Reading (L) (cm)											
Extension e (cm)											
$\frac{1}{e}$ (cm^{-1})											

(6 Marks)

(h) Plot a graph of weight (N) against $\frac{1}{e}$ (cm^{-1}) **(4 Marks)**
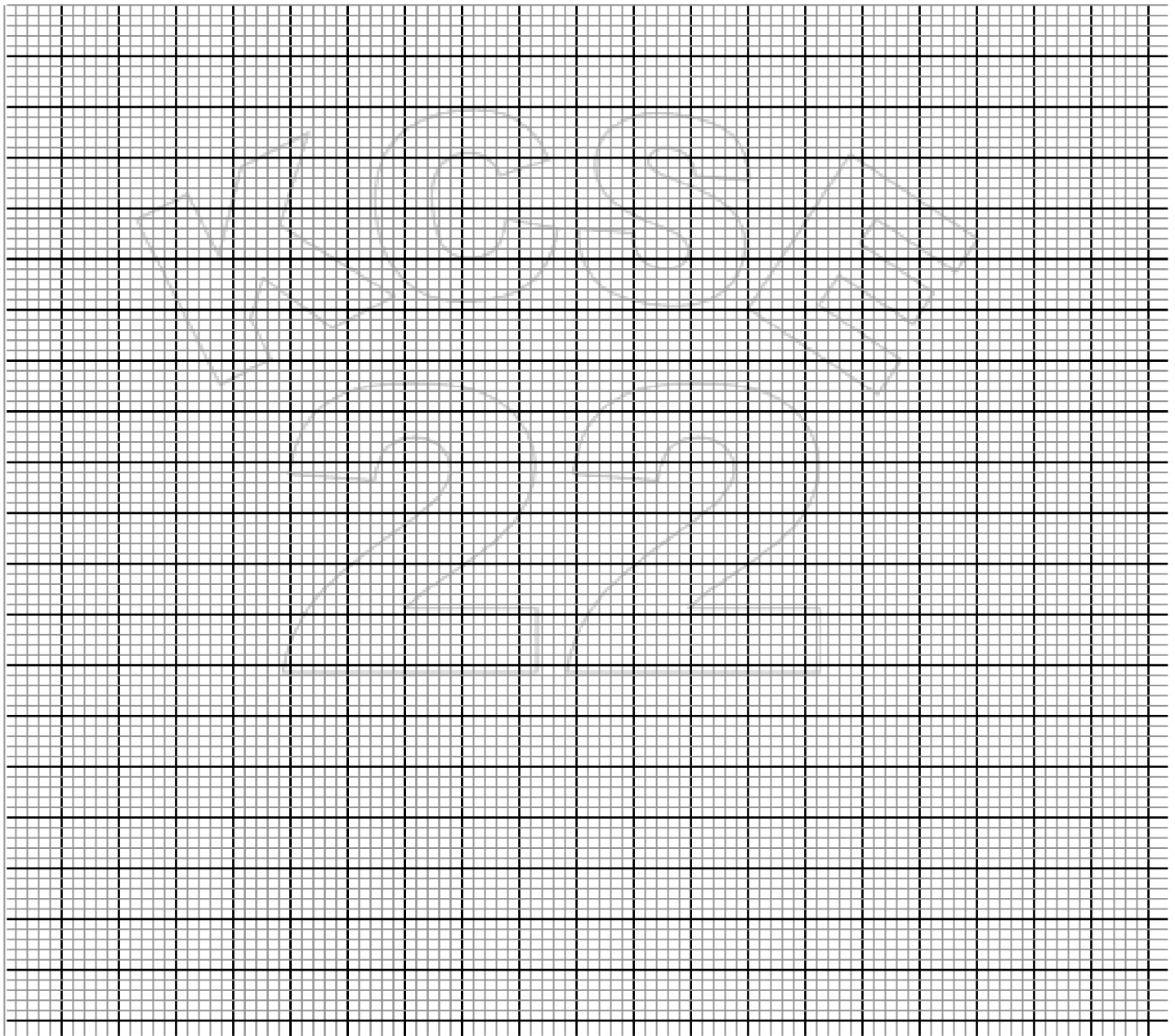
(i) Determine the slope (s) of the graph at a mass of 45g **(2 Marks)**

©*2022 The Kenya National Examinations Council*

....

....

....

(j) Given that m $= \dfrac{-255T}{(S+60)^2}$

Determine the value of T where (S) is the slope at 45g **(3 Marks)**

....

....

....

KCSE 2022 PREDICTION

SERIES 1

NAME…………………………………………… INDEX NO………………………

SCHOOL………………………………………… SIGN………………………………

DATE……………………………………………

121/1

MATHEMATICS

PAPER 1

Time: 2 ½ Hours

INSTRUCTIONS TO CANDIDATES.

(a) Write your name and admission number in the space provided at the top of this page.

(b) This paper consists of two sections; **section I** and **section II**

(c) Answer **ALL** questions in sections I and only **FIVE** sections in section II

(d) Show all the steps in your calculations; giving your answers at each stage in the spaces provided below each question.

(e) Marks may be given for correct working even if the answer is wrong

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

For examiners use only

Section I

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	Total

Section II

17	18	19	20	21	22	23	24	Total	Grand total

SECTION I (50 marks)

©2022 The Kenya National Examinations Council

<u>Answer all the questions in this section in the spaces provided.</u>

1. Evaluate $\frac{-4\{(-4+-15\div5)+-3-4\div2\}}{84\div-7+3--5}$ **(3 marks)**

2. Simplify completely the expression: $\frac{6x^2y^2-20xy+16}{2x^2y^2-8}$ **(3 marks)**

3. Given that $\cos\theta = \frac{3}{5}$, find $\sin\theta - \tan(90^0 - \theta)$ without using tables or calculator. **(2 marks)**

4. Under an enlargement, the images of points A(3,1) and B(1,2) are A[1](3,7) and B[1](7,5). Without construction, find the centre and the scale factor of enlargement. **(4 marks)**

5. List all the integral values of x that satisfy the inequalities; **(3 marks)**

$$x - \frac{3}{2} \leq 2x + 1 < 5$$

6. A bus travelling at an average speed of x km/h left station at 8.15 am. A car, travelling at an average speed of 80km/h left the same station at 9.00 am and caught up with the bus at 10.45 am. Find the value of x. ` **(3 marks)**

7. The interior angle of a regular polygon with 3x sides exceeds the interior angle of another regular polygon having x sides by 40^0. Determine the value of x. **(3 marks)**

8. Use squares, cubes and reciprocals tables to evaluate, to 4 significant figures, the expression:

$$\frac{1}{\sqrt[3]{27.56}} + \frac{3}{(0.071)^2}$$ **(3 marks)**

9. From a point 20m away on a level ground the angle of elevation to the bottom of the window is 27^0 and the angle of elevation of the top of the window is 32^0. Calculate the height of the window.

(3 marks)

10. Solve for x in the equation: $5^{3y+3} + 5^{3y-1} = 125.2$ **(4 marks)**

11. Mr. Kanja, Miss Kanene and Mrs. Nyaga have to mark a form three mathematics contest for 160 students. They take 5 minutes, 4 minutes and 12 minutes respectively to mark a script. If they all start to mark at 9.00 am non-stop, determine the earliest time they will complete the marking.

(4 marks)

12. Evaluate $4.\dot{4}\dot{1} - 0.\dot{2}\dot{1}$ **(2 marks)**

13. Two similar cylinders have diameter of 7cm and 21cm. If the larger cylinder has a volume of $6237cm^3$, find the heights of the two cylinders. (take $\pi = \frac{22}{7}$)   **(3 marks)**

14. The cost of providing a commodity consists of transport, labour and raw materials in the ratio 8:4:12 respectively. If the transport cost increases by 12%, labour cost by 18% and raw materials by 40%, find the percentage increase of producing the new commodity.   **(3 marks)**

15. Given that $4\boldsymbol{p} - 3\boldsymbol{q} = \begin{pmatrix} 10 \\ 5 \end{pmatrix}$ and $\boldsymbol{p} + 2\boldsymbol{q} = \begin{pmatrix} -14 \\ 15 \end{pmatrix}$, find value of **p** and **q**   **(4 marks)**

16. In the figure below ABCDE is a cross-section of a solid. The solid has a uniform cross-section. Given that AP is an edge of the solid, complete the sketch showing the hidden edges with a broken lines. **(3 marks)**
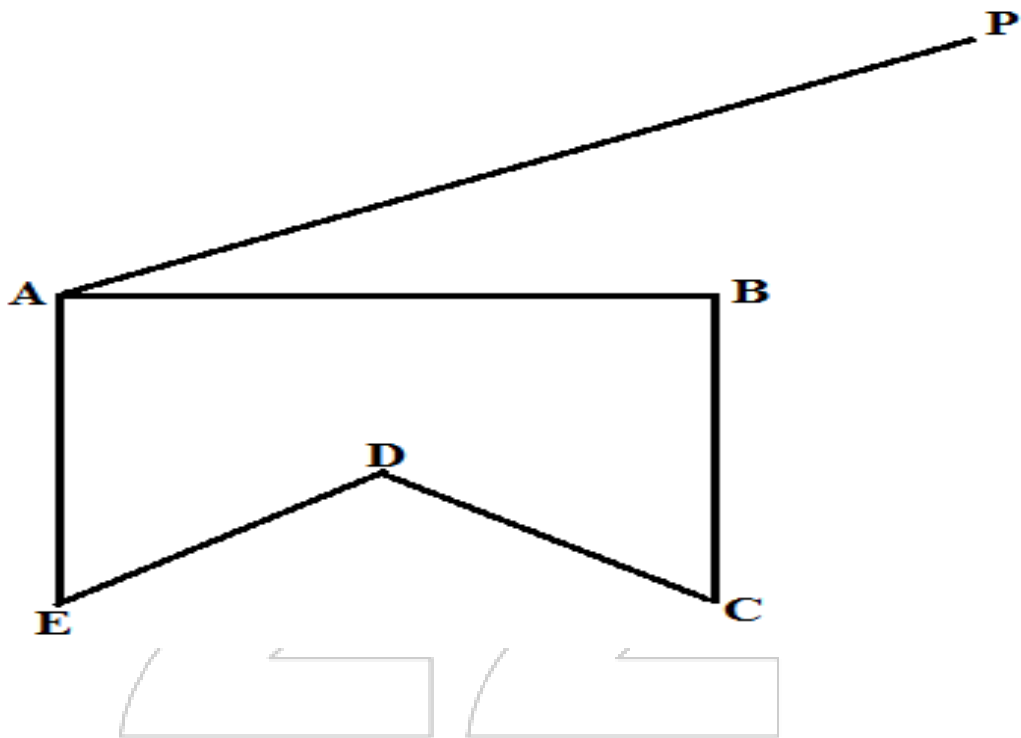
SECTION II (50 Marks)
*Answer any **five** questions from this section in the spaces provided.*

17.   The figure below represents a sector of a circle radius r units. The area of the sector is 61.6 cm^2 and the length of the arc AB is one tenth of the circumference of the circle from which the sector was obtained. (Take $\pi = \frac{22}{7}$)
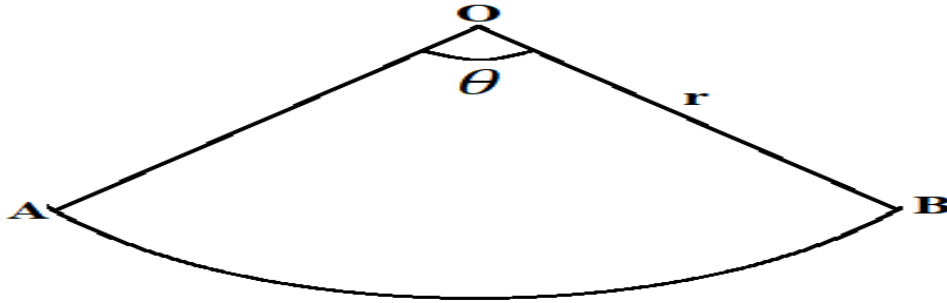
a)   Calculate;

i)   the angle θ subtended by the sector at the centre.   **(2 marks)**

ii)   The radius r of the circle.   **(3 marks)**

b)   If the sector above is folded to form a cone;

i)   Calculate the base radius of the cone.   **(2 marks)**

ii)   The volume of the cone.   **(3 marks)**

18. Two factories A and B produce both chocolate bars and eclairs. In factory A, it costs Kshs x and Kshs y to produce 1 kg of chocolate bars and 1 kg of eclares respectively. The cost of producing 1 kg of chocolate bars and 1 kg of eclairs in factory B increases by the ratio 6:5 and reduce by the ratio 4:5 respectively.

a) Given that it costs Kshs 460 000 to produce 1 tonne of chocolate bars and 800kg of eclares in factory A and Kshs 534 000 to produce the same quantities in factory B, form two simplified simultaneous equations representing this information. **3 marks)**

b) Use matrix method to find the cost of producing 1 kg of chocolate bars and 1 kg of eclaires in factory A. **(5 marks)**

c) Find the cost of producing 100 kg of chocolate bars and 50 kg of eclaires in factory B.**(2 mks)**

19. The vertices of triangle ABC are A(6,2), B(8,2) and C(6,0).

a) On the grid provided below, draw triangle ABC. **(1 mark)**
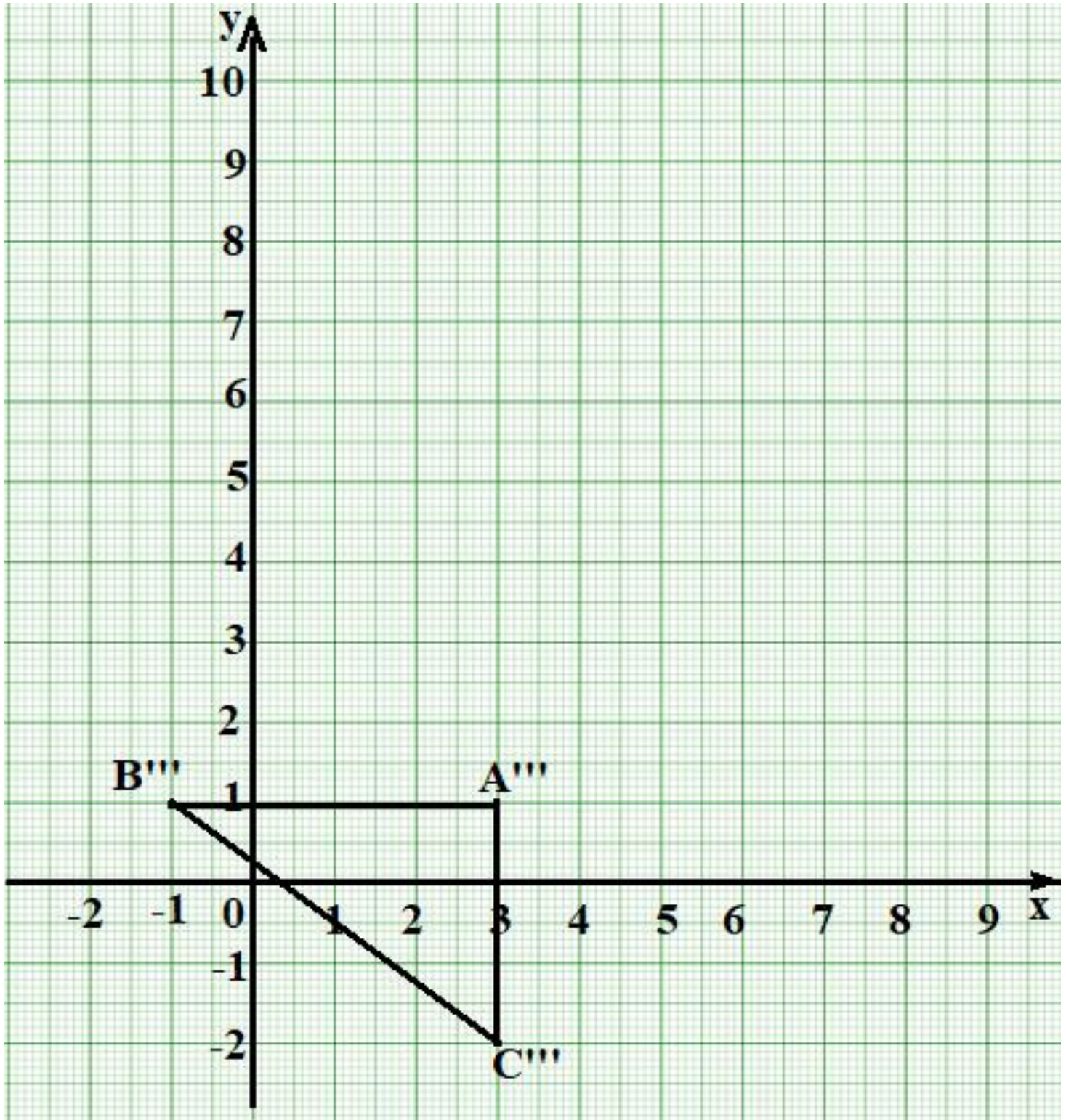
b) Triangle A'B'C' is the image of triangle ABC under a reflection in the line $y = x$. On the same grid draw triangle A'B'C' and state its coordinates **(2 marks)**

©2022 The Kenya National Examinations Council

c) Triangle A"B"C" is the image of triangle A'B'C' under and enlargement scale factor 2 about the centre (-1,9). On the same grid, draw triangle A"B"C" and states its coordinates**. (2 marks)**

d) By construction, find and write down the co-ordinates of the centre and angle of rotation which can be used to rotate triangle A"B"C" onto triangle A'''B'''C''' shown on the grid above.

(3 marks)

e) State any pair of triangles that are:

i) Oppositely congruent. **(1 mark)**

ii) Directly congruent. **(1 mark)**

20. The figure below shows a velocity-time graph of an object a which accelerates from rest to a velocity of V ms^{-1} then decelerated to rest in a total time of 54 seconds.
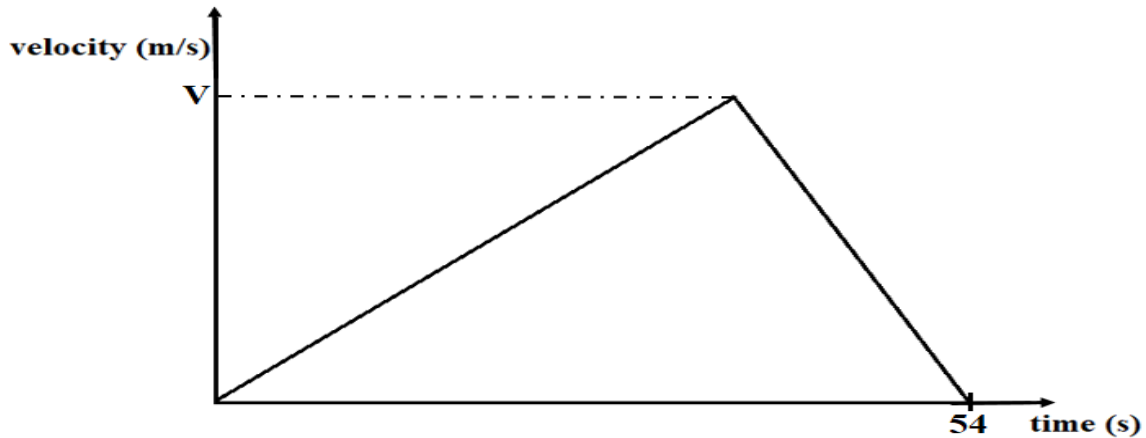
a) If it covered a distance of 810 metres;

i) Find the value of V. **(2 marks)**

ii) Calculate its deceleration, given that its initial acceleration was $1\frac{2}{3}ms^{-2}$ **(2 marks)**

b) A bus left town X at 10.45 am and travelled toward town Y at an average speed of 60 km/h. A car left town X at 11.45 am on the same day and travelled along the same road toward Y at an average speed of 100km/h. The distance between town X and town Y is 500km.

i) Determine the time of the day when the car overtook the bus. **(3 marks)**

ii) Both vehicles continued towards town Y at their original speeds. Find how long the car had to wait in town Y before the bus arrived. **(3 marks)**

21. The masses to the nearest kilogram of some students were recorded in table below.

Mass(kg)	41-50	51-55	56-65	66-70	71-85
Frequency	8	12	16	10	6
Height of rectangle					0.2

a) Complete the table above to 1 decimal place. **(2 marks)**

b) On the grid provided below, draw a histogram to represent the above information.**(3 mks)**
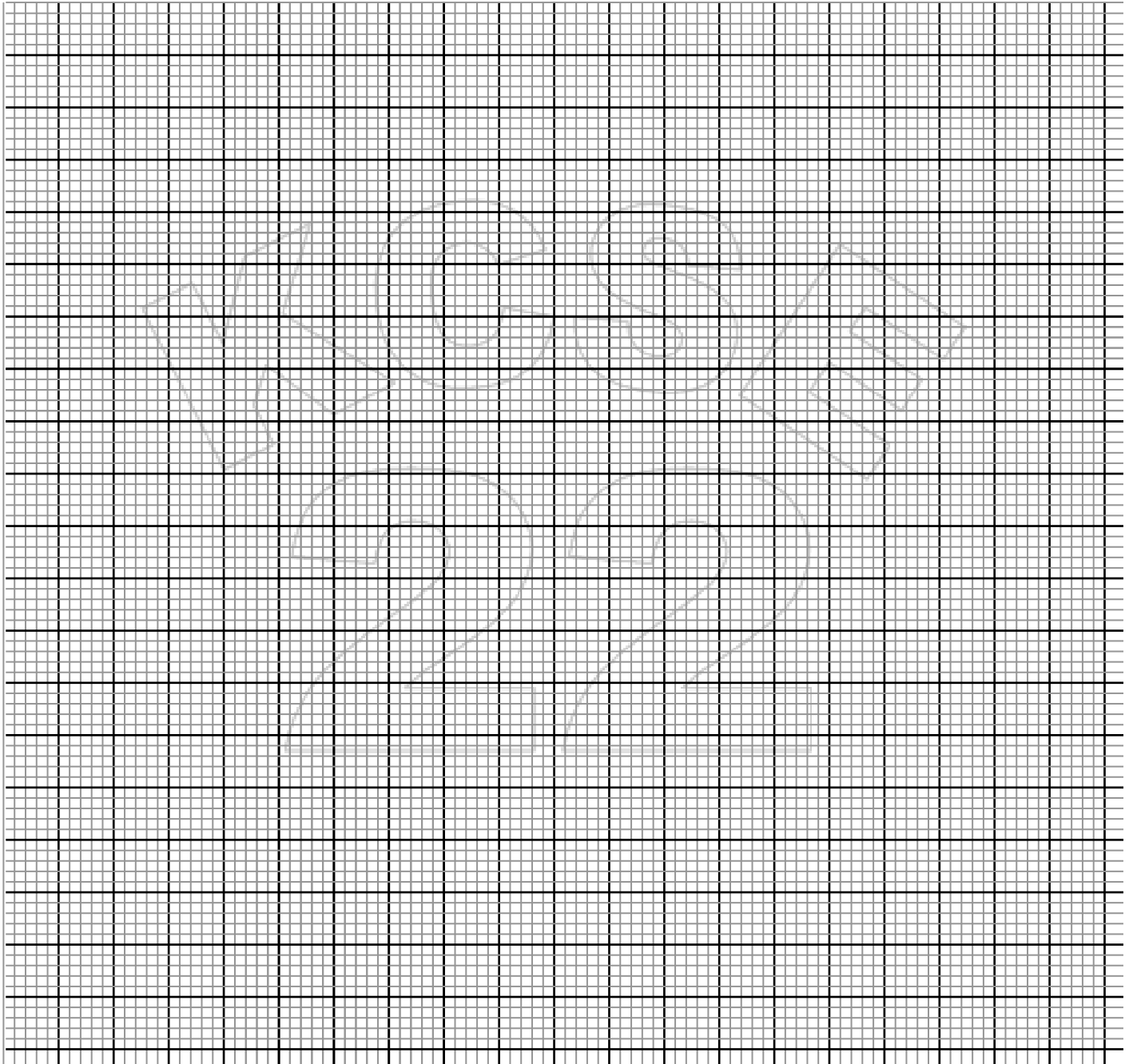
c) Use the histogram to:

i)   State the class in which the median mark lies.   **(1 mark)**

ii)   Estimate the median mark.   **(2 marks)**

iii)   The percentage number of students with masses of at least 74kg.   **(2 marks)**

22.   (a) a straight line L₁ whose equation is $9y - 6x = -6$ meets the x-axis at Z. Determine the coordinates of Z.   **(2 marks)**

(b) A second line L₂ is perpendicular to L₁ at Z. Find the equation of L₂ in the form $ax + by = c$, where ,b and c are integers.   **(3 marks)**

(c) a third line L_3 passes through the point $(2,5)$ and is parallel to L_1. Find:

i) The equation of L_3 in the form $ax + by = c$, where a, b and c are integers. **(2 marks)**

ii) The coordinate of point R at which L_2 intersects L_3. **(3 marks)**

23. In the diagram below, the coordinates of points O, P and Q are $(0,0)$, $(2,8)$ and $(12,8)$ respectively. A is a point on **OQ** such that $4\mathbf{OA}=3\mathbf{OQ}$. Line **OP** produced to R is such as **OR**=5**OP**.
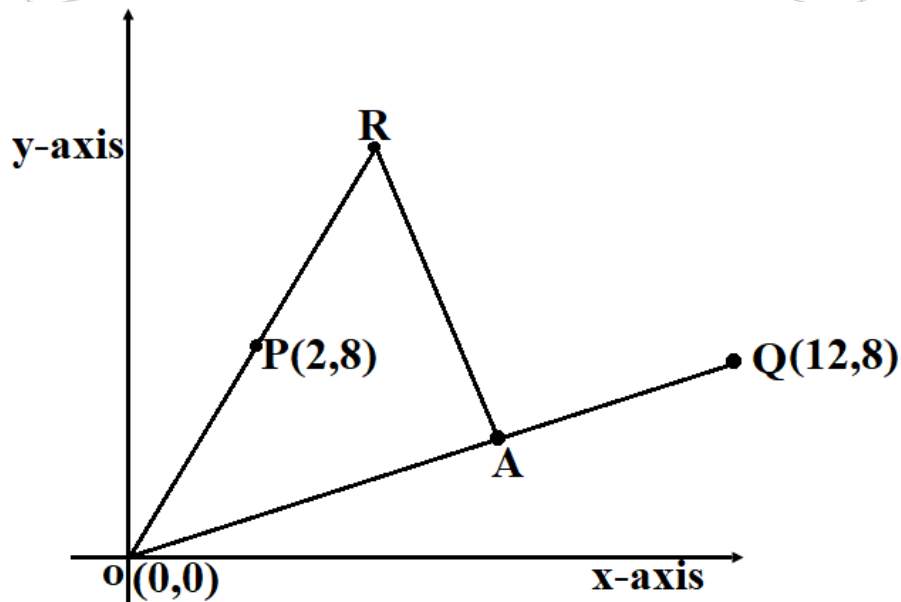
a) Find vector **RA**. **(3 marks)**

b) Given that point L is on **PQ** such that **PL**: **LQ**=12:5, find vector **RL**. **(4 marks)**

c) Show that R, L and A are collinear. **(2 marks)**

d) Find the ratio of **RL**:**LA**. **(1 marks)**

24. Five points, P, Q, R, V and T lie on the same plane. Point Q is 53km on the bearing of 055^0 of P. Point R lies 162^0 of Q at a distance of 58km. Given that point T is west of P and 114km from R and V is directly south of P and $S40^0E$ from T.

a) Using a scale of 1:1,000,000, show the above information in a scale drawing. **(3 mks)**

b) From the scale drawing determine:

i) The distance in km of point V from R. **(2 marks)**

ii) The bearing of V from Q. **(2 marks)**

iii) Calculate the area enclosed by the points PQRVT in squares kilometers. **(3 marks)**

KCSE 2022 PREDICTION

SERIES 1

NAME………………………………………… INDEX NO………………………

SCHOOL……………………………………… SIGN……………………………

DATE……………………………………………

121/2

MATHEMATICS

PAPER 2

TIME: 2 ½ HOURS

INSTRUCTIONS TO CANDIDATES

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

b)   *This paper consists of **TWO** sections: **Section I** and **Section II**.*

c)   *Answer **ALL** the questions in **Section I** only **five** questions from Section II.*

d)   *Show all the steps in your calculations, giving your answers at each stage in the spaces provided below each question.*

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 1   (50 MARKS)

1. Evaluate using squares, cubes and reciprocal tables **(4 marks)**

$$\left[\frac{1}{\sqrt[3]{27.56}} + \frac{3}{(0.071)^2}\right]^{-2}$$

2. Make x the subject in $\dfrac{x^4 - 4}{x^2 - 2} = K$ **(3 marks)**

3. Ali deposited Ksh.100,000 in a financial institution that paid simple interest at the rate of 12.5% p.a. Mohamed deposited the same amount of money as Ali in another financial institution that paid compound interest. After 4 years, they had equal amounts of money. Determine the compound interest rate per annum to 1 decimal place. **(3 marks)**

4. Simplify **(3 marks)**

$$\left(\frac{a^3 - ab^2}{a^4 - b^4}\right)^{-1}$$

5. Expand $(1 - 2x)^4$, hence find the value of $(1.02)^4$ correct to 3 significant figures.**(3 mks)**

6. If $\sin x = 2b$ and $\cos x = 2b\sqrt{3}$, find the value of b **(3 marks)**

7. Find the relative error in $\frac{a + b}{c - d}$ given that $a = 77ml$, $b = 23ml$,

$c = 36ml$, and $d = 16ml$. **(3 marks)**

8.   Without using a calculator or mathematical tables, express

$\dfrac{\sqrt{3}}{1 - \cos 30°}$ in surd form and simplify.   **(3 marks)**

9.   The equation $3x^2 - 8px + 12 = 0$ has real roots.

Find the value of P.   **(2 marks)**

10.   A construction company employs 200 artisans and craftsmen in the ratio 1:3 every week. An artisan is paid 2 ½ times as much as a crafts man. At the end of 3 weeks the company paid ksh 1485000 to those employees. Find how much each artisan and each craftsman is paid. (a working week has six days)   **(3 marks)**

11.   A dam containing 4158m³ of water is to be drained. A pump is connected to a pipe of radius 3.5cm and the machine operates for 8 hours per day. Water flows through the pipe at the rate of 1.5m per second. Find the number of days it takes to drain the dam.   **(4 marks)**

12. Two brands of coffee Arabica and Robusta costs sh.4,700 and sh.4,200 per kilogram respectively. They are mixed to produce a blend that costs shs.4,600 per kilogram. Find the ratio of the mixture. **(3 marks)**

13. Under a transformation represented by a matrix $\begin{pmatrix} 5X & 2 \\ -3 & X \end{pmatrix}$, a triangle of area 10cm² is mapped onto a triangle whose area is 110cm². Find x **(3 marks)**

14. Find the distance between the centre 0 of a circle whose equation is $2x^2 + 2y^2 + 6x + 10y + 7 = 0$ and a point $B(-4,1)$. **(3 marks)**

15. Solve for x in the equation:

$(\log_2 x)^2 + \log_2 8 = \log_2 x^4$ 	**(4 marks)**

16. The figure below shows a circle inscribed in an isosceles triangle ABC. If Q, P and R are the points of contact between the triangle and the circle, O is the centre of the circle, $BO = 19.5cm$ and $BQ = 18cm$. Find the radius of the circle and hence the length of the minor arc PQ. 	**(3 marks)**
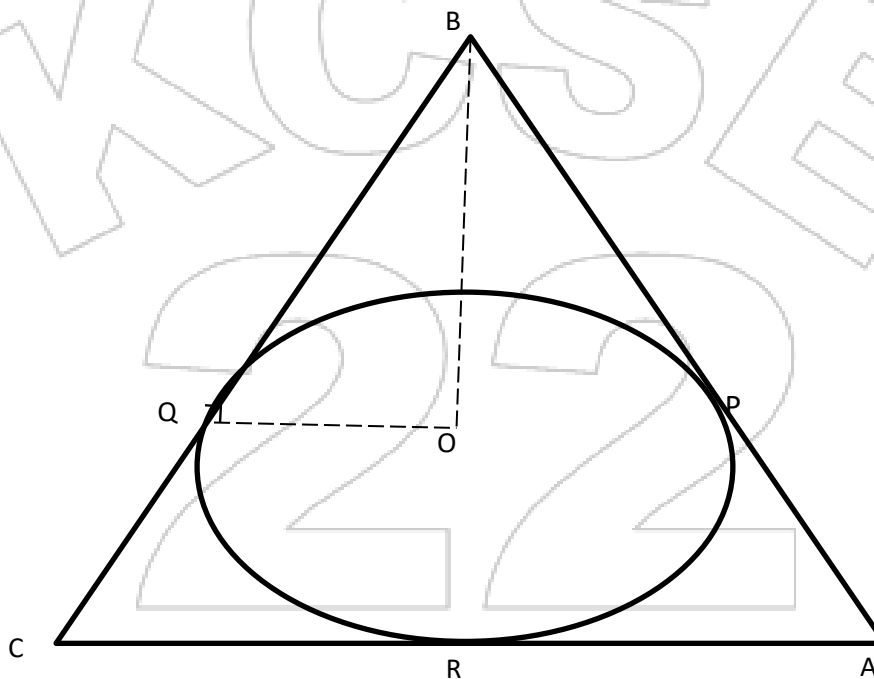
SECTION II (50 MARKS)

Answer Only Five Questions

17. (a) Mr. Mackey pays a tax of Kshs.5,800 per month according to the income tax table given below. He is married and entitled to a family relief of K£420p.a.

Taxable income	Rate (Ksh per K£)
(K£ p.a.)	
1 – 9,600	2
9,600 – 19,200	3
19,201 – 29,800	5
29,801 - 38,400	7
38,401 - 47,200	9
Over 47,200	10

Calculate Mackey's gross annual salary in K£ **(6marks)**
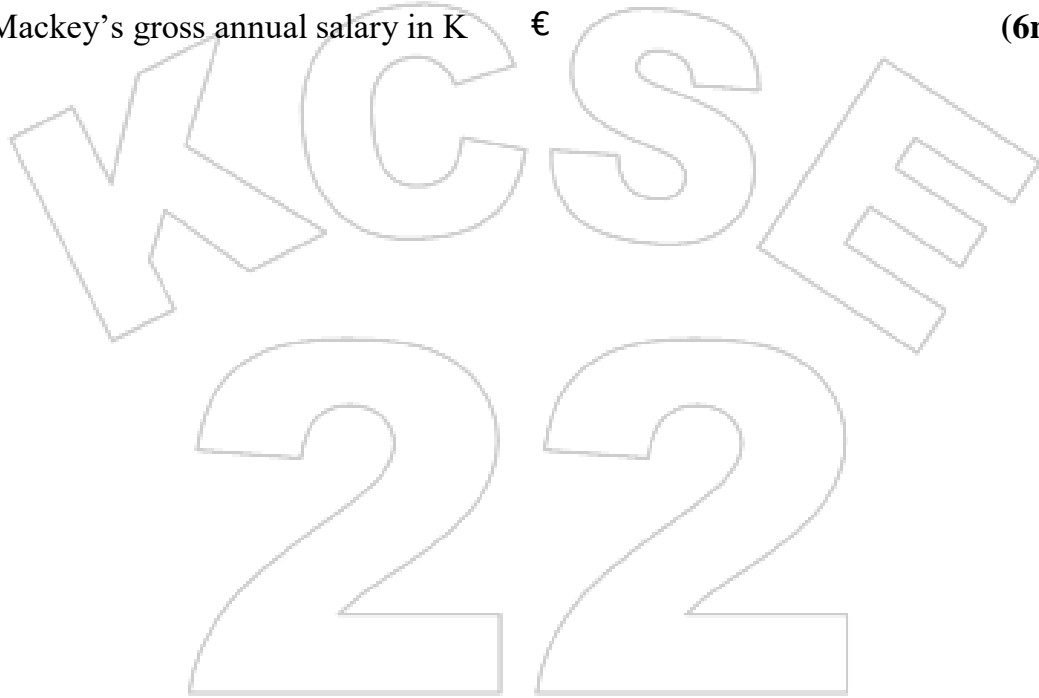
(b) The difference between compound interest and simple interest on Kshs.P over a duration of 36 months at the rate of 15% p.a. is Kshs.52,477.50. Calculate the value of P.

(4 marks)

18. (a) Complete the table below for $y = x^3 + 4x^2 - 5x - 5$ **(2 marks)**

X	-5	-4	-3	-2	-1	0	1	2
y			19			-5		

(b) On the grid provided, draw the graph of $y = x^3 + 4x^2 - 5x - 5$ for $-5 \leq x \leq 2$ **(3 marks)**

  (c) i) Use the graph to solve the equation

   $x^3 + 4x^2 - 5x - 5 = 0$ **(2 marks)**
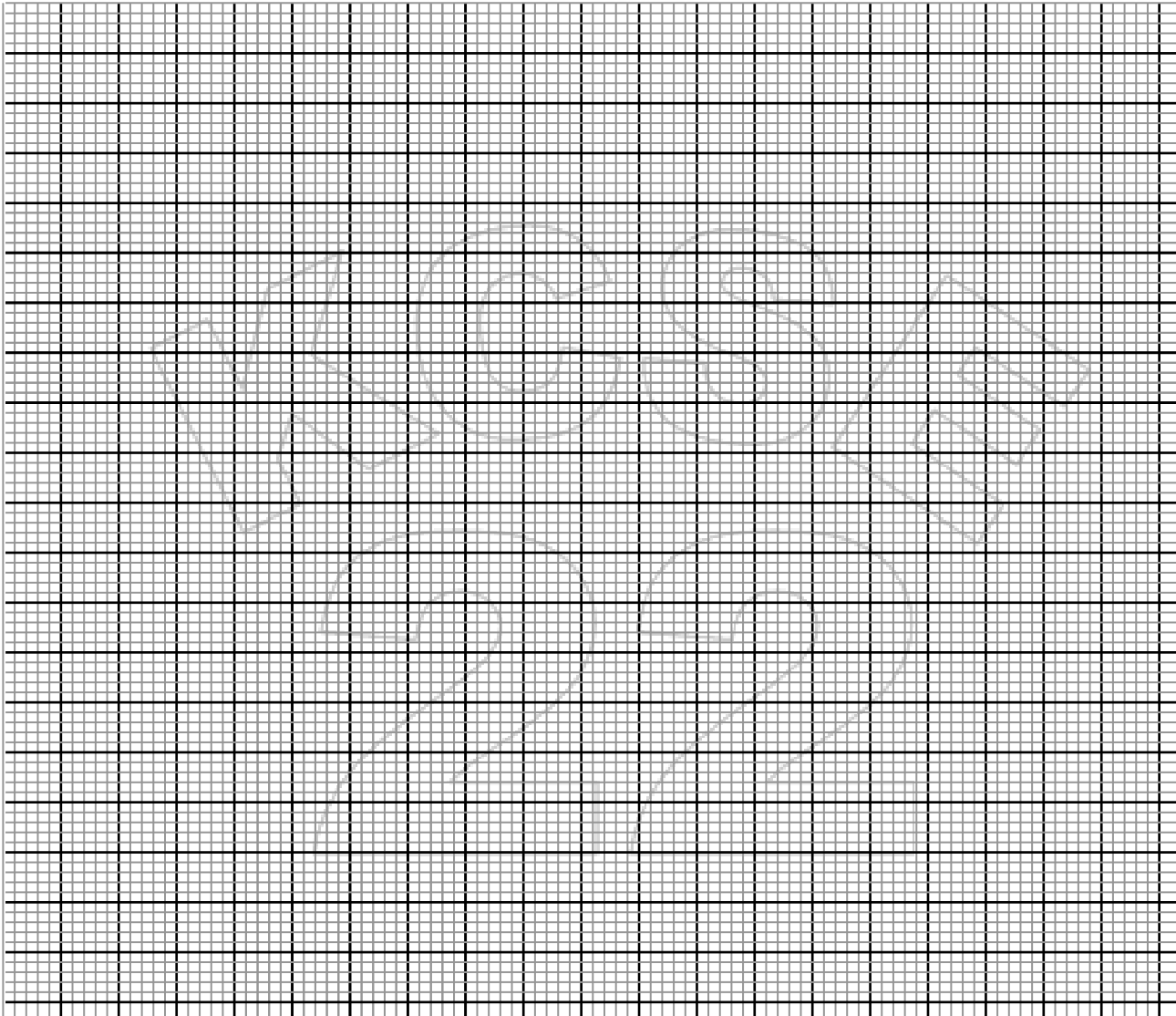
  ii) By drawing a suitable straight line on the graph, solve the equation

   $x^3 + 4x^2 - 5x - 5 = -4x - 1$ **(3 marks)**

19. OPQ is a triangle in which OP=*P* and OQ=q. x is a point on OP such that OP:XP=5:2 and y is another point on PQ such that PY:YQ=1:2. Lines OY and XQ intersect at T.

(a) Express the following vectors in terms of P and q

(i) *PQ* **(1 mark)**

(ii) *OY* **(1 mark)**

(iii) *OX* **(1 mark)**

(b) If $OT = kOY$ and $QT = hQX$ express OT in two different ways. Hence or otherwise find the values of h and k. **(6 marks)**

(c) Determine the ratio OT:TY **(1 mark)**

©2022 The Kenya National Examinations Council

20. If $\left(x - 1\frac{1}{8}\right)$, x and $\left(x + \frac{3}{2}\right)$ are the first three consecutive terms of a geometric progression;

(a) Determine the values of x and the common ratio. **(4 marks)**
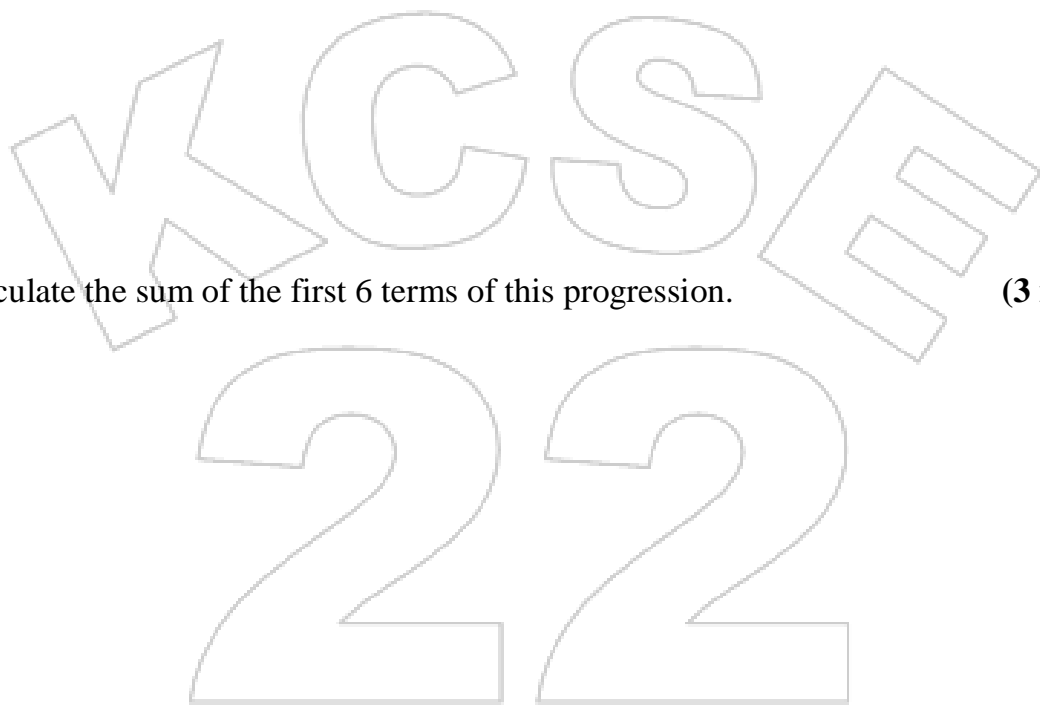
(b) Calculate the sum of the first 6 terms of this progression. **(3 marks)**

(c) Another sequence has the terms
-13, -16, -19, ……………………………-310.
Find the sum of this sequence. **(3 marks)**

21. The figure below shows a belt passing round two pulleys of centres A and B.
The radius of the pulleys is 4cm and 6cm respectively and the distance between the centres is 25cm.

4cm

6cm

25cm
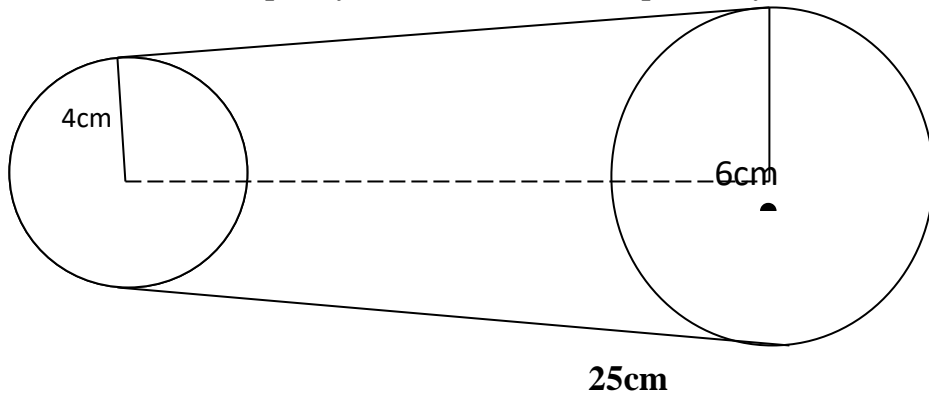
Calculate the length of the belt used for the pulley system. **(10 marks)**

22.   The points P(2,1), Q(4,1) R(4,3) and S(3, 3) are coordinates of a quadrilateral.

(a)   Plot the quadrilateral PQRS on the grid provided.   **(1 mark)**

(b)   Find the coordinates of $P^1Q^1R^1S^1$ the image of PQRS under the transformation represented by

the matrix $M = \begin{pmatrix} 1 & 1 \\ 2 & 0 \end{pmatrix}$ **(2 marks)**

(c)   Draw and label $P^1Q^1R^1S^1$ on the same grid.

(d)   Find the coordinates of $P^{11}Q^{11}R^{11}S^{11}$ on the image of $P^1Q^1R^1S^1$ under the transformation

represented by the matrix $N = \begin{pmatrix} -2 & 1 \\ 0 & 1 \end{pmatrix}$ **(2 marks)**

(e)   Draw and label $P^{11}Q^{11}R^{11}S^{11}$ on the same grid.   **(1 mark)**

(f)   Determine the matrix that maps PQRS directly onto $P^{11}Q^{11}R^{11}S^{11}$.   **(3 marks)**
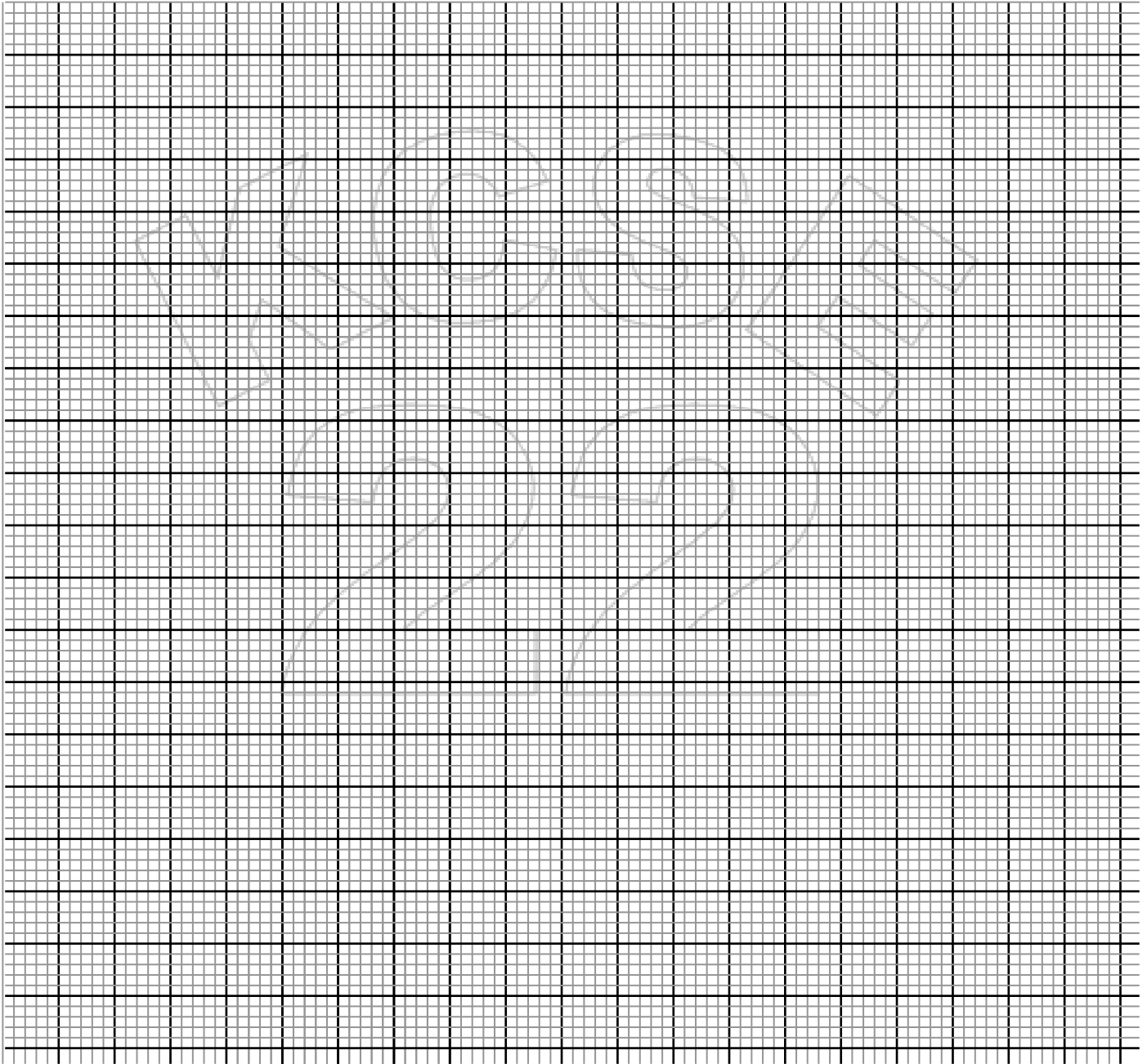
23.   The table below shows the ages of people in years who attended a wedding ceremony.

Age in years	10-19	20-29	30-39	40-49	50-59	60-69	70-79
Frequency	2	4	4	8	6	3	2

(a)   State the modal class   **(1 mark)**

(b)   Using an assumed mean of 44.5 calculate
(i)   The mean age   **(3 marks)**

(ii)   The standard deviation   **(3 marks)**

(iii)   The median age   **(3 marks)**

24. A supermarket is stocked with plates which come from two suppliers A and B. They are bought in the ratio 3:5 respectively, 10% of plates from A are defective and 6% of the plates from B are defective.

(a) A plate is chosen by a buyer at randon.Find the probability that

i) It is from A **(2 marks)**

ii) It is from B and it is defective **(2 marks)**

iii) It is defective **(2 marks)**

(b) Two plates are chosen at random. Find the probability that;

i) Both are defective **(2 marks)**

ii) At least one is defective **(2 marks)**

KCSE 2022 PREDICTION
SERIES 1

NAME………………………………………… INDEX NO………………………

SCHOOL……………………………………… SIGN…………………………….

DATE………………………………………………

101/1
ENGLISH
(Functional Skills)
TIME: 2 HOURS

INSTRUCTIONS TO CANDIDATES:-

a) Write your **Name, Admission number** and **Class** in the spaces provided above.
b) **Sign** and write the **date** of examination in the spaces provided above.
c) Answer **all** questions in this question paper.

For Examiner's Use Only:

QUESTION	MAXIMUM SCORE	CANDIDATE'S SCORE
1	20	
2	10	
3	30	
TOTAL SCORE	60	

©2022 The Kenya National Examinations Council

1. **QUESTION 1 : FUNCTIONAL WRITING** **(20 Marks)**

Imagine that you are the secretary of the **COVID 19** prevention and control team. You hold a meeting to plan the prevention and control of the entry of the virus into your school upon the resumption of all the students after the nine-month-long break. Write the minutes that you took during the meeting that you attended regarding the same.

A non- member has been invited to the meeting. Four out of the twelve members are absent and no one knows their whereabouts. Two others had informed the chairperson that they would not attend. There were only three items of discussion.

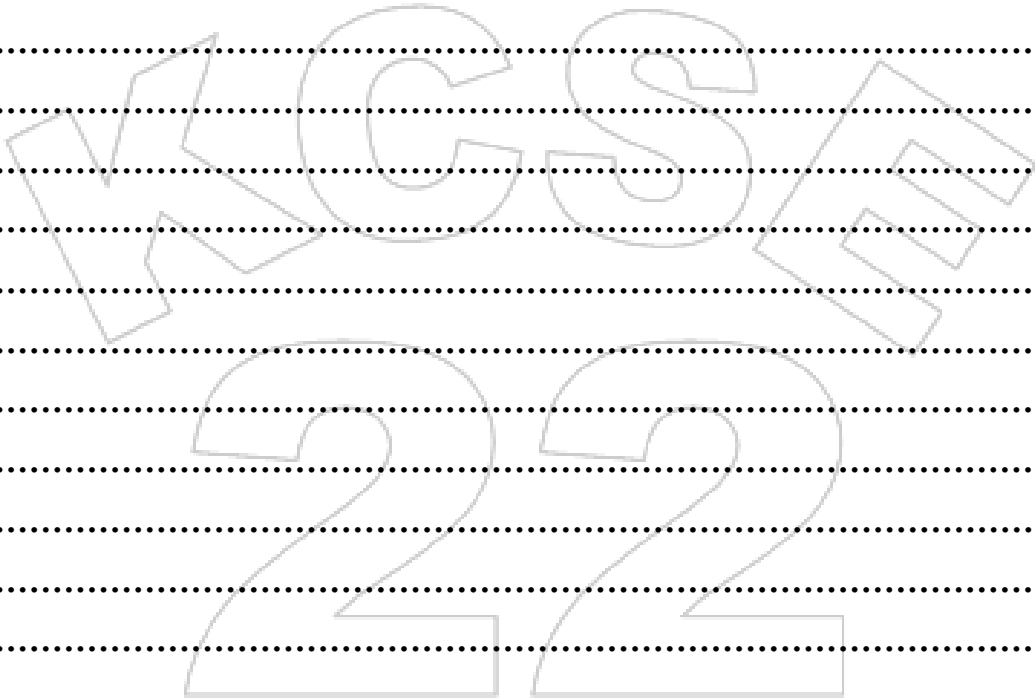...
....
....
....
....
....
....
....
....
....
....
....
....
....
....
....
....
....
....
....

………………………………………………………………………………………………………
………………………………………………………………………………………………………
………………………………………………………………………………………………………
………………………………………………………………………………………………………
………………………………………………………………………………………………………
………………………………………………………………………………………………………
………………………………………………………………………………………………………
………………………………………………………………………………………………………
………………………………………………………………………………………………………
………………………………………………………………………………………………………
………………………………………………………………………………………………………
………………………………………………………………………………………………………
………………………………………………………………………………………………………
………………………………………………………………………………………………………
………………………………………………………………………………………………………
………………………………………………………………………………………………………
………………………………………………………………………………………………………
………………………………………………………………………………………………………
………………………………………………………………………………………………………
………………………………………………………………………………………………………
………………………………………………………………………………………………………
………………………………………………………………………………………………………
………………………………………………………………………………………………………
………………………………………………………………………………………………………
………………………………………………………………………………………………………
………………………………………………………………………………………………………
………………………………………………………………………………………………………
………………………………………………………………………………………………………

2.   CLOZE TEST   (10 Marks)

Around the world, forests are being 1)_____ at a rate of 13 million hectares a year.

In 2)_____ , forests and other deforestation accounts for about 17% to 20% of

3)_____ global emissions. The destruction of forests emits1.6 Gt of carbon a

year, which severely 4)_____ forests capacity to absorb emissions from other

sources. However, the effects of deforestation extend beyond carbon. Rain forests

5)_____ a wide variety of ecosystem services from regulating rainfall to keeping

fertile soil from 6)_____. Deforestation damages food production and

7)_____ to clean water in an entire region. Rain forests are also home and a

8)_____ of income for many people in Africa, Asian and South America.

9)_____ this, economic pressures drive government in the developing world to

10)_____ these forests in unsustainable ways.

3.   ORAL SKILLS   (30MARKS)

(a)   Read the poem below and answer the questions that follow.

Words going around and around
Like in a washing machine,
Only there in my head,
I pluck one out and put it aside,
There is more going around again,
Through the dark tunnel the words continue to spread
The poem is almost done.

Reading it out aloud stuttering as I go,
I'm pleased with what I have done,
Writing words I don't stutter
As my oral words have done
I'm glad I wrote this poem,
I can write what I can't say,
And be understood in every way,
I've been given a voice.
                    Tracey McFayden

QUESTIONS

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

....

....

(ii) Other than rhyme, what two other mnemonic devices has the poet employed? **(4marks)**

....

....

....

....

(iii) How would you say the following lines in the poem? **(4marks)**

a) Line 1, stanza 1,

b) Line 2, stanza 2,

....

....

....

....

....

4.

Imagine that the school nurse has sent you to the principal's office to pass him urgent information. He is in the middle of a meeting and as you walk through the doors he rises and begins walking towards you.

a) What two things must you do before you begin talking to him? **(2 marks)**

....

....

....

b) What two non-verbal cues will you employ to pass the message without distracting the on-going meeting? **(2marks)**

©2022 The Kenya National Examinations Council

……

……

……

5. Pick the silent letters from the words listed below. **(4 marks)**

       a) Subtle   ____

       b) Handsome ____

       c) Nestle   ____

       d) Clothes _____

6. Indicate intonation in the sentences that are in bold. **(4 marks)**

Student: Sir, **I did not participate in the riots**.

Teacher: I can hear you, **speak on...**

Student: **Don't you believe me?**

Teacher: Keep talking Allan. **Why do you seem to doubt yourself?**

Student: Alright, I just hope that you will be fair and just in your decision.

Teacher: Don't worry. Leave everything to me.

Student: Alright Sir.

7. From the following sets of words, pick the one with an odd **sound.** **(4 marks)**

i) B**ir**d h**ear**d c**ar** w**or**ld**.** ……………………………………………

ii) c**u**p sl**a**p h**u**t b**u**d………………………………………………………

iii) wi**dg**et swi**tch** **j**ourney **g**ender………………………………………

iv   mea**s**ure plea**s**ure a**z**ure **s**ure…………………………………

8. Supply homophones to the following words. **(4 marks)**

       New   _____

       Due   _____

       Fairy   _____

       Write   _____

KCSE 2022 PREDICTION

SERIES 1

NAME…………………………………………… INDEX NO………………………

SCHOOL………………………………………… SIGN……………………………

DATE……………………………………………

101/2

ENGLISH

COMPREHENSION, LITERARY APPRECIATION AND GRAMMAR

TIME: 2 ½ Hours

INSTRUCTIONS TO CANDIDATES

- *Write your **Name**, **Admission number** and **class** in the spaces provided above.*
- ***Sign** and write the **date** of examination in the spaces provided above.*
- *Answer **all** questions in this paper.*

FOR EXAMINERS USE ONLY.

QUESTION	MAXIMUM SCORE	CANDIDATE'S SCORE
1	20	
2	25	
3	20	
4	15	
TOTAL SCORE	**80**	

©2022 The Kenya National Examinations Council

1.   COMPREHENSION ON UNSEEN TEXT: (20 MARKS)

There is statement that William Ellery Channing, a renowned theologian, made that sums up everything that books mean to those who love them. 'It is chiefly through books that we enjoy intercourse with superior minds.' He went on to say that great people talk to us and give us their most precious thoughts through books.

What William Ellery meant was that books are the greatest source of knowledge. If wehave to prosper, then we have to develop the urge, the thirst and the desire to read. People have really not understood the fact that the only way of shedding off ignorance, and making an informed and meaningful contribution to society is through acquisition of knowledge through reading.

It is sad to note that young people do not look up to widely read and knowledgeable people as their role models. They do not appreciate someone who has made accomplishments in the intellectual arena in the same spirit that they fall behind a sports personality or entertainment celebrity. Many young people imitate sports people and entertainers lavishly and look up to them as their only heroes and heroines.

The media is partially to blame for this **trend**. It has not always acted responsibly in the way it has featured personalities. In most cases, the media only features, as celebrities, people who excel in sports and entertainment. This ignores the fact that celebrities are found in all fields of life. Some of the personalities the media features, such as musicians and artists of dubious moral standing, alienate the youth from the grim realities of their society. Blinded by the glamour of the lives that the celebrities live, the youth lose interest in intellectual development.

Very few students in secondary school or even in universities are aware that reading can open up limitless possibilities to them. Some of those who have completed school or college education wrongly assume that the reading of books ends with the last examination one takes. Sooner or later such people become illiterate in thought. They stop being originators of ideas and turn into mere consumers of ideas because they are not close to the fountain of intellectual nourishment. What is the difference between them and those who have been unable to have access to education?

There must be sharing of ideas for development to take place. When people share ideas, they develop mentally as well as in other facets of life. There are very few reading clubs, meetings where members get together to exchange meaningful ideas acquired through reading. In their free time, people gather in social set-ups where nothing serious transpires. In bars, for example, there is no intellectual discourse that goes on.

Obnoxious and unimaginative exchange of obscene words can hardly measure up to anything constructive. The lack of interest in debates of national importance can be attributed to the bankruptcy of ideas as a result of the lack of a reading culture.

©2022 The Kenya National Examinations Council

The truth of the matter is that books are capable of doing many things for us. Very few young people know that they can turn their grades from E's, D's and C's to B's and A's by simply reading books. If only they improve their ability to read, they will be able to open any door they choose to go through. Reading also instills in young people the skill of self-confidence that they need in the competitive world they are living in.

Reading activates and exercises the mind. It forces the mind to discriminate between good and evil, and pushes us to use our imagination, thus making us more creative. In a sense, reading actually does activate our minds in the same way we activate muscles when we lift weights. The more active our minds are, the more agile they become, which results in a higher level of creativity. Someone wisely pointed out that the mind, once stretched by a new idea, never returns to its original **dimensions**.

Development psychologists estimate that less than five per cent of us are still creative by the age of 18. By this age, many young people will have 'wasted' themselves watching television shows and films where images and sounds are already packaged and ready for them at the click of a button. They use little imagination because everything is done for them. They do not critically think about how to dress, think or behave. Consequently, they do not develop the habit of thinking for themselves.

QUESTIONS

1. What is identified as the only way of shedding off ignorance? **(1 mark)**

……
……

2. In point form, list down the benefits of developing a reading culture. **(4 marks)**

……
……
……
……
……

3. What is the media accused of in this passage? **(2 marks)**

……
……
……

4. Why do people who have completed school or secondary education stop reading? **(1 mark)**

....

....

5. What is necessary for development to take place? **(1 mark)**

....

....

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

(a) dimensions

....

(b) trend

....

(c) obnoxious

....

7. Rewrite the following sentences according to the instructions given after each.

    (a) It is chiefly through books that we enjoy intercourse with superior minds.

           (Write in the interrogative form)

    (b) Blinded by the glamour of the lives that the celebrities live, the youth lose
interest in intellectual development. (Use:so…that) **(2 marks)**

8. How is reading similar to exercise? **(2 marks)**

....

....

....

9. Why are there only less than five per cent of people still creative by the age of 18? **(2 marks)**

....

....

....

©2022 The Kenya National Examinations Council

10. What is the attitude of the writer towards media? **(2 marks)**

……

……

……

2. **BLOSSOMS OF THE SAVANNAH BY H.R. OLE KULET**

Read the excerpt below and answer the questions that follow.

They were walking back from the homestead talking animatedly when they were accosted by a tall heavyset young man with a thick dark beard and moustache. He wore a pair of faded jeans and a dirty blue shirt. On his face was a wide imprudent grin. Taiyo glanced at the young man and looked away. She moved closer to Resian and nudged her to change direction. But the man walked directly to Taiyo. On seeing the man approaching, a heavy knobkerrie in his hand, Resian almost fainted.

"Please, do not harm us," she pleaded. "We do not have any money with us."

"Who told you I want any money?" the man jeered as he strode **menacingly** towards them." Are you the *intoiyenemengalana* from Nakuru town?" he asked laughing contemptuously. I want to have a good look at you and know what kind of stuff you are made off!" He roughly grabbed Taiyo's arm."Leave my sister alone!" Resian hissed indignantly lifting her eyes and glaring into his. "Let go her arm at once!"

"Let go of my hand," Taiyo demanded, trembling with anger. "We are not the kind of women you have in mind!"

"What women!" the man retorted acidly. "Soon, you will be able to differentiate decent women from *intoiyenemengalana.*

Taiyo tried to wrestle her arm from the man's grip without success. But suddenly, he seemed to change his mind. With a sour smile, he spat and glared at the girls. Then releasing Taiyo's hand, he toldthem: "You have not seen the last of me. Soon you will come to know that there is no place in our society for women of your **ilk**." He turned and disappeared down the road as suddenly as he had appeared.

The two girls sighed heavily and shook their heads as they watched him walk away. Although they had put up brave faces, they were terribly shaken. "Thank God his intention was not to rape us," Resian said tears streaming down her face. We would have been helpless in the hands of such a brute."

Taiyo bit her lower lip struggling to maintain control. "His intention could have been worse than rape."she said, tears of anger and indignation welling up in her eyes. "We would have been helpless in the hands of such a brute.

©2022 The Kenya National Examinations Council

QUESTIONS

(i) Place this excerpt in its immediate context. **(4 marks)**

....

....

....

....

....

(ii) "Soon you will be able to differentiate decent women from *intoiye nemengalana*." What does the man mean by this? **(2 marks)**

....

....

....

(iv) Identify two character traits of the man in this passage. Illustrate your answer. **(4 marks)**

....

....

....

....

....

(iv) Give another word to replace the underlined word in each of the sentence below.

(2 marks

....

....

....

a) "Who told you I want any money?" The man jeered as he strode <u>menacingly</u>.

b) Soon you will come to know that there is no place in our society for women of   your <u>ilk</u>.

c) "Taiyo bit her lower lip struggling to maintain control." Rewrite using a

participle. **(1 mark)**

©2022 The Kenya National Examinations Council

....

....

....

(v)   Explain two stylistic devices evident in this excerpt.   **(4 marks)**

....

....

....

....

....

a)   Using an illustration from the excerpt, explain the plight of women in Nasila.   **(2 marks)**

....

....

....

b)   Identify any other issue highlighted in the excerpt.   **(2 marks)**

....

....

....

(v)   From elsewhere in the text, identify instances where women are ill-treated**.**   **(4 marks)**

....

....

....

....

....

3.   POETRY: (20 MARKS)

Read the following poem and then answer the questions that follow.

In the city
All moving the lord knows where,

Dressed in suits and tatters,
Bowties, tights, ochred sheets and earrings,
All thinking of things to come,
Africa is in a state of opportunity,
All look for easy chances.

Of self- upliftment or underserved promotion
That often mirage further and further
Making frustrate
Minds that should be content.

It is a time of opportunity –

When one line makes a poet
And a little acquaintance or chance
Rockets one the highest office.

But the peasant, the pillar of the nation,
Has only to cope with prices that shift
Like the waves that rock the ship
Carrying yellow maize to the city.

The employed call out strikes
That only deplete the little funds
That may relieve the peasant.

The elder brother keeps the younger in hunger
At home, if there's any,
The child plays with an empty bottle,
Cries for more milk
When the cost is daily on the rise.

While the incomes remain static
And the higher brackets are daily filled
By youths that will not retire

©2022 The Kenya National Examinations Council

Within this century.

The child laughs gaily,
Displaying its only four teeth
That shows it grows to eat,
Unaware of all that shapes her decade
   Adapted from a poem by Joseph G. Mutiga

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

....

....

(b) Briefly describe what the poem is about?   **(3 marks)**

....

....

....

....

(c) Explain the significance of the first line in the poem.   **(2 marks)**

....

....

....

(d) Identify the aspect of style used in stanza six and show its effectiveness**.**   **(3 marks)**

....

....

....

....

(e) Describe the kind of society presented in this poem.   **(2 marks)**

....

....

....

(f)   What is the tone of the poem? Support your answer.   **(3 marks)**

....

....

....

(g)   Identify and discuss the use of sarcasm in the second last stanza.   **(3 marks)**

....

....

....

(h)   Explain the meaning of the following lines in the poem.   **(2 marks)**

        (i)   Africa is in a state of opportunity.

        (ii)   The pillar of the nation.

3.   GRAMMAR: (15 MARKS)

(a)   Rewrite the following sentences according to the instructions given. Do not change the meaning.   **(3 marks)**

        (i)   Why did the thieves break into the apartment? (Rewrite in the passive).

(ii)   The road has been graded. (Finish … road)

(iii)   Njenga told me that his sister is successful. (Use **of** in place of **that**).

(b) **Complete the sentences below using the correct form of the word in brackets.**

(3 marks)

(i) Mary's face ………………….. twitched whenever she was overwhelmed. (continue)

(ii) Such an …………………….. had never been seen. (occur)

(iii) When we saw the subject fidgeting, we knew ……………… that he was guilty. (doubt)

(c)In each case, give a phrasal verb that means the same as the underlined word.

(3 marks)

(i) Did you <u>meet</u> your boss in town?

(ii) The suspect <u>confessed</u> after a long interrogation.

(iii) Only very irresponsible parents can <u>abandon</u> their children.

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

(i) The hotel is now open ……………….. its customers from six to six.

(ii) They congratulated him ………………… his good performance.

(iii) The guest arrived and sat ………………… the host.

(e) **Choose the best alternative to complete the following sentences.** **(2 mks)**

(i) It was ……………………… who saw the accident first. (me, I)

(ii) How can you be so sure it was …………………..? (they, them)

(f) **Correct the error(s) in the following sentence.** **(1 mark)**

(i) Please don't dirtify the class.

KCSE 2022 PREDICTION

SERIES 1

NAME…………………………………………… INDEX NO………………………

SCHOOL………………………………………… SIGN………………………………

DATE……………………………………………

103/3

ENGLISH

PAPER 3

TIME: 2 ½ HOURS

(CREATIVE COMPOSITION AND ESSAYS BASED ON SET BOOKS)

INSTRUCTIONS TO THE CANDIDATES
a) Answer three questions only.
b) Questions 1 and 2 are compulsory
c) In question 1, choose either (a) or (b)
d) In question 3, choose only one of the optional text you have prepared on.
e) Where a candidate presents work on more than one optional text, the first one to appear will be marked.
f) Each of your essays must not exceed **450** words (2 pages).
g) All answers must be written in the answer booklet provided.
h) This paper consists of 3 printed pages.
i) Candidate should ascertain that both pages are printed as indicated and that no question is missing.

©2022 The Kenya National Examinations Council

QUESTIONS

1. IMAGINATIVE COMPOSITION (COMPULSORY)

Either

(a)   Discuss ways in which the youths in Kenyan schools can creatively fight corona   pandemic.

(20 mks)

Or

(b)   Write a story beginning;-

The birds had already started their morning songs and here I was wondering whether**…**

(20 mks)

2. COMPULSORY TEXT

"Nora is a riddle not just to Dr. Rank but to other characters as well." Validate this statement with evidence from a Dolls House by Henrick Ibsen**.**   **(20 mks)**

3. OPTIONAL SET BOOKS

   (a) **Memories we lost and other stories. – Chris Wanyonyi**

        The irony of life is that those closest to you betray you the most. Discuss this statement in reference to "stones bounce on water."   **(20 mks)**

   (b) **Drama.**

Inheritance - David Mulwa.

Drawing your illustrations from the play, comment on Melissa's point of view that the crown Lulu places on Launa's head does not fit.   **(20 mks)**

©2022 The Kenya National Examinations Council

(c)**Novel**

The Pearl – John Steinbeck

"Hypocrites and opportunists like to reap where they did not sow" Write an essay that agrees with the statement based on the novel, The Pearl. **(20 mks)**

KCSE 2022 PREDICTION

SERIES 1

NAME………………………………………… INDEX NO………………………

SCHOOL…………………………………… SIGN………………………………

DATE……………………………………………

102/1

KISWAHILI

Karatasi ya 1
(INSHA)
Muda: saa $1\frac{3}{4}$

Maagizo

(a) Andika insha **mbili**.

(b) Insha ya kwanza ni ya **lazima** kisha chagua insha nyingine moja kati ya hizo tatu zilizobakia

(c) Kila insha isipungue maneno **400**

(d) Kila insha ni alama 20

(e) Kila insha **lazima** iandikwe kwa lugha ya Kiswahili

Kwa matumizi ya mtahini pekee

Swali	Upeo	Alama
1	20	
	20	
Jumla	40	

©2022 The Kenya National Examinations Council

MASWALI.

1. LAZIMA

Wewe ni mwandishi wa habari. Umemwalika mwenyekiti wa tume ya utangamano na uwiano wa kitaifa nchini studioni ili kuangazia kwa kina swala la ukabila ambalo limekita mizizi katika taifa. Andika dayolojia kati yenu.

2. Nchi imekubwa na mizozo mingi ya kijamii hivi karibini. Huku ukipendekeza suluhisho, jadili vyanzo vya mizozo hiyo.

3. Andika kisa kitakachodhihirisha maana ya methali: Nyumba njema sio mlango, ingia ndani uone.

4. Tunga kisa kitakachoanza kwa maneno yafuatayo: Giza lilikuwa limechukua milki ya viumbe wote duniani. Nyota zilitoa mwanga hafifu na mwezi ulikuwa ushatua. Katika giza hilo la kaniki…

KCSE 2022 PREDICTION

SERIES 1

NAME…………………………………………… INDEX NO………………………

SCHOOL………………………………………… SIGN…………………………………

DATE……………………………………………

102/2

KISWAHILI

Karatasi ya Pili
LUGHA
Muda: Saa 2 ½

Maagizo

a)   *Andika jina lako na nambari yako katika nafasi ulizoachiwa hapo juu.*

b)   *Weka sahihi yako na tarehe ya mtihani katika nafasi ulizoachiwa hapo juu.*

c)   *Jibu maswali* <u>*yote.*</u>

d)   * Majibu yote yaandikwe katika nafasi ulizoachiwa katika kijitabu cha maswali.*

e)   *Majibu yote lazima yaandikwe kwa lugha ya Kiswahili*

<u>*Kwa Matumizi Ya Mtahini Pekee:*</u>

Swali	Upeo	Alama
1	15	
2	15	
3	40	
4	10	
Jumla	80	

©2022 The Kenya National Examinations Council

1. UFAHAMU

Soma kifungu kifuatacho kisha ujibu maswali

Ikolojia ni elimu ya kisayansi inayohusu uhusiano wa kimazingira kati ya vitu vyenye uhai (mimea na wanyama) na visivyokuwa na uhai (hali ya hewa na udongo.)Sayansi ya ikolojia ipo katika mfumo wa elimu ya mazingira. Mfumo huu umegawanyika katika sehemu mbili: mfumo wa mazingira ya nchi na mfumo wa mazingira ya majini (bahari, maziwa, mito na madimbwi)

Viumbe wamejirekebisha kulingana na mazingira yao. Kwa mfano, samaki wana matamvua yenye uwezo na kusharabu hewa ndani ya maji. Ng'ombe wana mapafu ya kuvuta hewa katika nchi kavu. Sehemu za mvua ya kawaida zina mimea yenye majani makubwa ili iweze kuhifadhi maji nyakati za shida. Mimea ,wanyama,udongo na viathiri vingine vya hali ya hewa vinahusiana sana kimazingira. Mimea huota kutegemea hali ya nchi, umbo au sura ya ardhi na aina ya udongo.

Hali ya nchi ni wastani wa hali ya jotoridi, wastani wa mvua, unyevunyevu hewani, upepo, msukumo na mwanga kwa muda wa miaka thelathini. Dunia imegawanyika katika kanda mbalimbali. Kila kanda ina mimea na wanyama wa aina yake kutegemea hali ya nchi. Ukanda wa istiwai una joto, mvua na unyevunyevu mwingi. Miti ya ukanda huu hufanya misitu minene, yenye miti mirefu. Miti hii ni mirefu kwa sababu ya msongamano unaofanya miti igombanie mwanga wa jua kwa kurefuka. Katika misitu hii, ipo mimea ya kangaga inayotambaa na kukwea miti mingine. Katika ukanda wa Savanna hali ya joto na mvua si kubwa kama katika ukanda wa istiwai. Kwa sababu hii, sehemu nyingi ni vichaka na nyika zenye uwezo wa kuota nyasi zisizohitaji mvua.

Upepo una faida na hasara katika mazingira. Upepo husaidia kusukuma mawingu yaletayo mvua. Upepo unapozidi hudhuru mimea na wanyama kwa sababu hukausha maji ardhini, huvunja na kuharibu mimea, huleta vifo kwa wanyama na pengine kuharibu mazingira ya watu. Mimea katika mazingira hutegemea sana nuru ya jua ili kutengeneza chakula chake. Kiasi cha mwanga upatikanao mahali fulani huathiri mimea na wanyama wapatikanao katika mazingira yale.

MASWALI

(a) Eleza dhamira ya mwandishi katika taarifa uliyoisoma   **(alama 2)**

…………………………………………………………………………………………………

…………………………………………………………………………………………………

…………………………………………………………………………………………………

(b) Eleza maana ya Ikolojia   **(alama 2)**

…………………………………………………………………………………………………

…………………………………………………………………………………………………

…………………………………………………………………………………………………

(c) Kwa nini wanyama huwa na sifa mbalimbali za kimaumbile? **(alama 2)**

....

....

....

(d) Ni kawa vipi Ukanda wa istiwai unatofautiana na ukanda wa Savanna? **(alama 2)**

....

....

....

(e) Ni kwa namna gani upepo unaweza kuwa na athari mbaya kwa mazingira? **(alama 4)**

....

....

....

....

....

(f) Eleza maana ya msamiati huu kama ulivyotumika katika kifungu. **(alama 3)**

i.Matamvua_____

ii. Kusharabu hewa_____

iii. Istiwai_____

2. UFUPISHO

Dhuluma kwa wanawake sio matokeo ya siasa baada ya uhuru, bali ni matokeo ya hali iliyokuwepo tangu enzi za mababu zetu; kabla ya ukoloni. Kubaguliwa na kudhulumiwa kwa wanawake kisiasa kunaoana na kunyonywa kwake kijamii kunakoshuhudiwa siku nenda miaka rudi.

Elimu ya jadi ilimwandaa mwanamke kuwa chombo kitiifu cha mwanamume. Mwanamke aliandaliwa katika unyago na katika mfumo mzima wa malezi kuwa chombo cha kutumikia mwanamume-kumstarehesha, kumfariji, kumlisha na kumzalia watoto. Mwanamke tangu jadi hakuruhusiwa kushiriki katika shughuli za kisiasa na utawala wala hakuna mtu aliyeamini kwamba mwanamke angeweza kushikilia wadhifa wowote wa uongozi.

Demokrasia ya jadi naihusudu sana; ambapo wazee walikaa chini ya mbuyu na kuamua mambo ya jumuiya. Mahakama ya kijiji ilikuwa aghalabu ni ya wazee na ya wanaume pekee yao. Hakukuwa na

mwanamke aliyeshirikishwa, hata kama alikuwa ajuza. Sifa waliyokuwa nayo wanawake ni ile ya usihiri na uganga. Mwanamke yeyote aliyezeeka alidhaniwa kuwa bingwa wa uchawi, ulozi na ushirikina. Kwa hivyo, wanawake ndio waliokuwa washirikina wakubwa, maana fursa ya kupata elimu pana zaidi hawakuwa nayo. Si ajabu kuwa mwanamke alipojitokeza na kusema jambo la busara, alipuuzwa na pengine kutukanwa hadharani.

Kwa bahati nzuri, kumezuka mwamko uliotuingiza katika enzi mpya. Vita vya wanawake vya kujihami na kujiendeleza katika ulimwengu unaotawaliwa na wanaume vimetapakaa kote katika kila sehemu ya dunia. Wanawake wengi wamekiuka misingi na mizizi ya utamanduni na kung'oa asasi za kijamii na itikadi ambazo daima zimeendelea kumyanyasa na kumuumbua utu mwanamke tangu jadi. Watetezi wa haki za wanawake zamani walilaumu suala la serikali za mataifa mwaka hadi mwaka. Huku masuala ya wanawake ya kijamii, utu na utamaduni yakishangiliwa kupitishwa, watetezi wameeleza wasiwasi wao ikiwa kupitishwa kwa maazimio kutasaidia kuleta maendeleo ya haraka kwa wanawake kimataifa au katika nchi moja. Fauka ya hayo, baadhi ya wachunguzi wanaonelea kuwa maazimio mengi hayadokezi hatua za kufikiwa haki za wanawake.

Maazimio mengine yanazungumzia juu ya kuondolewa kwa ubaguzi dhidi ya wanawake, kushiriki kwao katika uendelezaji wa amani ya kimataifa na ushirikiano wa kimataifa, majukumu yao katika jamii, mfumo wa Umoja wa Mataifa wa wanawake na kuimarisha hadhi ya wanawake katika sekretariati ya Umoja wa Mataifa miongoni mwa shughuli nyingine katika mkabala huu.

Wanawake wameonyesha vipaji vyao katika nyanja mbalimbali za maisha; siasa, uchumi, utawala na kadhalika. Wanawake wamejikakamua na kudhihirisha kuwa wao pia wana jukumu muhimu la kutekeleza ili kuyaongoza maisha yao na ya watu wengi. Wadumishaji wa dhuluma za kijinsia hawana budi kusalimu amri na kuukubali ukweli huu, wapende wasipende. Mtazamo juu ya haki sawa unatokana na kukubaliwa na kuondolewa kwa aina zote za ubaya dhidi ya wanawake wanaojitolea mhanga kutetea hadhi yao pamoja na ya wanyonge wengine. Wao huonekana kama waasi, wapinga mila na watovu wa utii.

MASWALI

a) Bila kubadilisha maana asilia, fupisha aya tatu za kwanza. (Maneno 45-55)   **(Alama 6)**

Matayarisho

………

………

………

………

………

………

………

………

………

………

………

………

Jibu.

………

………

………

………

………

………

………

………

………

b) Kwa kurejelea aya tatu za mwisho, pambanua hoja muhimu zinazoguziwa na mwandishi. (Maneno 60-65)   **(Alama 9)**

Matayarisho

………

………

………

………

………

………

………

………

………

………
………
………
………
………

Jibu

………
………
………
………
………
………
………
………
………
………
………
………
………

3. <u>MATUMIZI YA LUGHA (Alama 40)</u>

(a) Andika neno lenye sauti zifuatazo: **(alam 1)**

Kipasuo hafifu cha midomo, irabu ya mbele wastani, kikwamizo sighuna cha ufizi, irabu ya kati chini. _____

(b) Tunga sentensi moja moja yenye aina zifuatazo za vishazi: **(alama 2)**

(i) Cha nia

_____

_____

(ii) Kitegemezi cha wakati

_____

_____

(c) Andika maana ya maneno yaliyopigiwa mstari.   **(alama 2)**

Wali<u>sita</u> kufanya kazi hiyo baada ya saa <u>sita</u> usiku.

_____

_____

_____

(d) Tia shadda: **(alama 2)**

     i. pekee

     ii. alinyongwa

(e)Huku ukitoa mfano, onyesha miundo mitatu ya maneno katika ngeli ya U-I   **(alama 3)**

……………………………………………………………………………………………………

……………………………………………………………………………………………………

……………………………………………………………………………………………………

……………………………………………………………………………………………………

f) Tunga sentensi yenye vijisehemu vifuatavyo vya sarufi: **(alama 2)**

Kiambishi kiwakilishi cha kiima

Kiambishi kiwakilishi cha wakati

Yambwa

Mzizi - dhiki

Kauli ya kutendesha

Kiishio

……………………………………………………………………………………………………

……………………………………………………………………………………………………

(g) Tumia neno dhahiri kama: **(alama 3)**

i.Kitenzi_____

ii. Kivumishi_____

iii. Kielezi_____

(h) Huku ukitoa mifano, eleza miundo mitatu ya silabi za Kiswahili. **(alama 3)**

…………………………………………………………………………………………………

…………………………………………………………………………………………………

…………………………………………………………………………………………………

…………………………………………………………………………………………………

…………………………………………………………………………………………………

(i) Tofautisha mzizi na shina kwa mifano. **(alama 2)**

…………………………………………………………………………………………………

…………………………………………………………………………………………………

…………………………………………………………………………………………………

(j) Nyambua ziba katika kauli ya kutenduka kisha utungie sentensi. **(alama 2)**

…………………………………………………………………………………………………

…………………………………………………………………………………………………

…………………………………………………………………………………………………

(k) Bainisha hali zinazorejelewa katika sentensi hizi. **(alama 3)**

(i) Mwangeka hufika kituoni mapema._____

(ii) Mgonjwa angetibiwa angepona._____

(**ii**) Umekuwa nanasi, kutagia mibani?_____

(l) Andika katika udogo wingi. **(alama 2)**

Ugwe ulipitishwa juu ya ukuta puliomea uyoga na kufungiwa kwenye makuti.

……………………………………………………………………………………………………

……………………………………………………………………………………………………

……………………………………………………………………………………………………

(m) Onyesha kiarifu katika sentensi hii**.**   **(alama 1)**

Kilimia kimechomoka angani.

……………………………………………………………………………………………………

(n). Changanua kwa kielelezo cha mstari.   **(alama 3)**

Ndege aliruka angani ghafla.
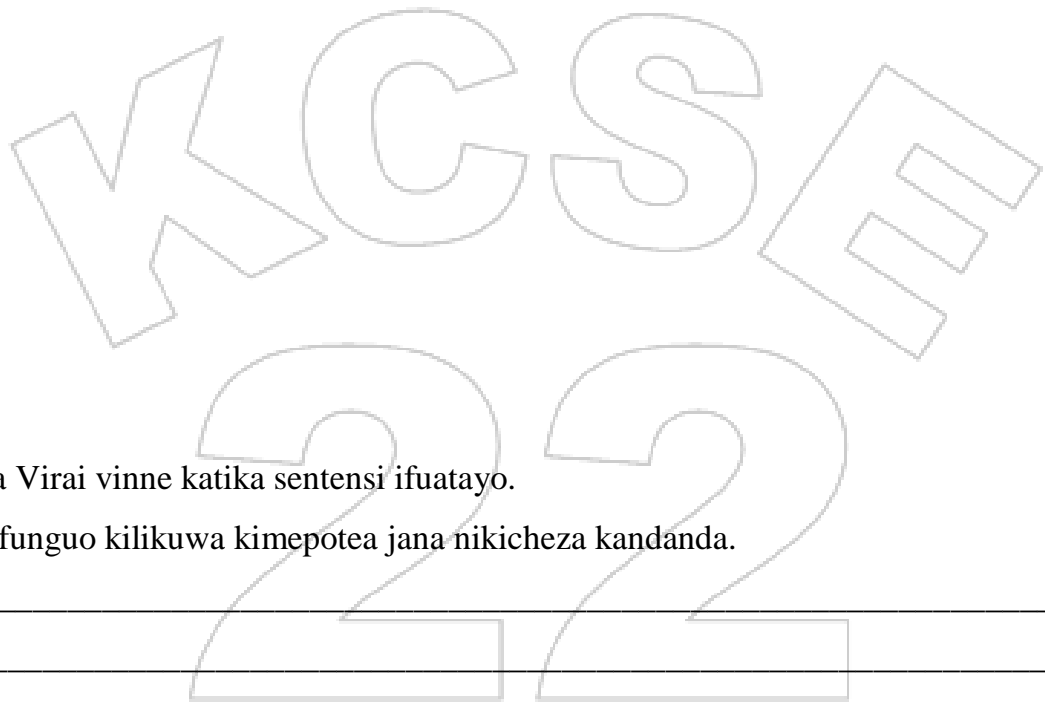
(o) Ainisha Virai vinne katika sentensi ifuatayo.   **(alama 2)**

Kicha cha funguo kilikuwa kimepotea jana nikicheza kandanda.

i_____

ii_____

iii_____

iv_____

(p) Tunga sentensi kuonyesha matumizi mawili ya nukta mkato.   **(alama 2)**

……………………………………………………………………………………………………

……………………………………………………………………………………………………

……………………………………………………………………………………………………

(q) Andika methali yenye maana sawa na jivu usilolilala usilipigie Jibwa.   (**alama 1**)

……

……

……

(r) Andika upya sentensi ifuatayo ukianza kwa shamirisho kitondo.   (**alama 2**)

Kaizari amewakatia ng'ombe majani kwa muundu.

……

……

……

(s) Damka ni kwa rauka, wakati ni kwa_____ oa ni kwa taliki uza ni kwa_____

(**alama 2**)
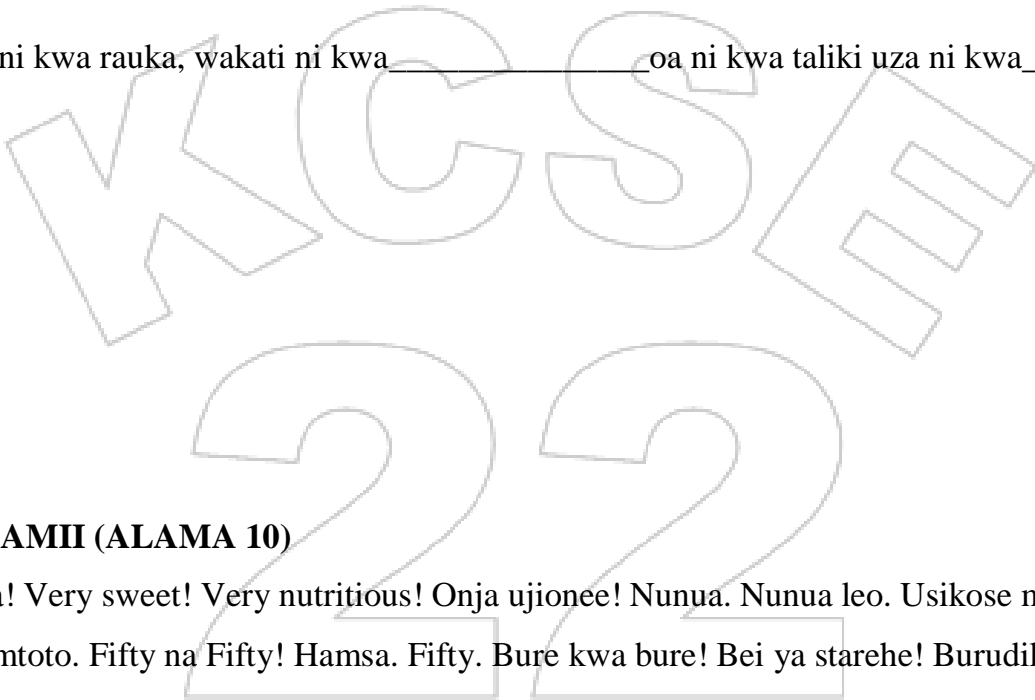
4. ISIMUJAMII (ALAMA 10)

Tamu sana! Very sweet! Very nutritious! Onja ujionee! Nunua. Nunua leo. Usikose mummy.

Mchukulie mtoto. Fifty na Fifty! Hamsa. Fifty. Bure kwa bure! Bei ya starehe! Burudika.

(i) Tambua sajili hii. _____   (**alama 1**)

ii) Eleza sifa tisa za sajili hii kwa kurejelea kifungu.   (**alama 9**)

……

……

……

……

……

……

……
……
……
……
……
……
……
……
……
……
……
……
……
……
……
……
……
……
……
……
……
……
……

KCSE 2022 PREDICTION

SERIES 1

NAME………………………………………… INDEX NO………………………

SCHOOL……………………………………… SIGN……………………………

DATE…………………………………………

102/3

KISWAHILI

KARATASI YA 3

FASIHI

MUDA :2½

MAAGIZO

a)   *Andika jina lako na nambari ya utahini katika nafasi ulizoachiwa hapo juu.*

b)   *Jibu maswali manne pekee.*

c)   *Swali la kwanza ni la lazima.*

d)   *Maswali hayo mengine matatu yachaguliwe kutoka sehemu zilizobaki ; yaani, **Tamthilia, Hadithi Fupi, Riwaya na Ushairi.***

e)   *Usijibu maswali mawili kutoka sehemu moja.*

f)   *Majibu yote lazima yaandikwe kwa lugha ya Kiswahili*

Kwa matumizi ya Mtahini Pekee.

Swali	Upeo	Alama
1	20	
	20	
	20	
	20	
	Jumla	

©2022 The Kenya National Examinations Council

SEHEMU YA A : FASIHI SIMULIZI (ALAMA 20)

SWALI LA LAZIMA

1. **a)** Fafanua sifa za nyimbo za watoto. **(alama 5)**

   b) Eleza maana ya; **(alama 5)**

   i. Vitanza ndimi
   ii. Tarihi
   iii. Vivugo
   iv. Matambiko
   v. Maapizo

   c) Jadili mifano mitano ya ngomezi za kisasa. **(alama 5)**

   d) Eleza tofauti kati ya vitendawili na methali. **(Alama 5)**

SEHEMU YA TAMTHILIA (ALAMA 20)

2. ' Wanaishia kuwa makabeji kwa kudungana sumu ya nyoka.'

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

   b) Eleza sifa za msemaji wa maneno haya. **(alama 4)**

   c) Thibitisha jinsi mwandishi wa tamthilia alivyofaulu kutumia mtindo wa kinaya. **(al 8)**

   d) Eleza changamoto zinazoikumba elimu. **(alama 4)**

AU

3. a) Tamthilia ya Kigogo ni taswira halisi ya matatizo yanayokumba mataifa mengi barani Afrika.Thibitisha. **(alama 10)**

   b) Huku ukitoa mifano, angazia nafasi chanya alizopewa mwanamke katika Tamthilia ya Kigogo. **(alama 10)**

SEHEMU C:HADITHI FUPI (ALAMA 20)

Alifa Chokocho (Tulipokutana Tena)

4. "Ile haikuwa ziara ya muda mfupi …   palikuwa jahanamu kwangu."

   a) Eleza muktadha wa dondoo hili. **(alama 4)**
   b) Eleza sababu iliyomfanya mzungumzaji kuenda katika "ziara". **(alama 2)**
   c) Kwa kutolea hoja zozote kumi na nne, fafanua vile mzungumzaji alipitia "jahanamu".

   (alama 14)

SEHEMU YA D : USHAIRI (ALAMA 20)

Jibu swali la 5 au 6

5. SIPENDI KUCHEKA

Pana jambo nanatukiya, kwangu hilo ni muhali
Kitenda naona haya, kujishusha yangu hali
Sipendi unipe hidaya, sipendi kutenda hili
Sipendi mimi kucheka

Sipendi mimi kucheka , kuchekea mawa
Sipendi ya dhihaka, kwangu nyemi hiwi
Sipendi kwa hakika, mwovu kistawika
Halafuye nikacheka!
Maskini akiteswa
Yatima akinyanyaswa
Mnyonge naye akinyonywa
Sipendi hata ikiwa
Unazo nguvu najuwa
Ni hili sitatekezwa

Mbona lakini nicheke, kwayo furaha?
Na wewe ukajiweke, uli na siha
Na yatima pweke, wa anahaha?
Amenyimwa haki yake, hanayo raha!
Na moyo wangu ucheke, kwa ha! ha! ha!
Kucheka kwa kuchewa mimi katu sitacheka.

a) Hili ni shairi la aina gani? Thibitisha jibu lako kwa kutaja mifano miwili. **(alama 3)**
b) Kwa nini mshairi hataki kucheka. **(alama 3)**
c) Eleza umbo la ubeti wa tatu wa shairi hili. **(alama 4)**
d) Tambua nafsineni katika shairi hili. **(alama 2)**
e) Tambua toni ya shairi hili. **(alama 1)**
f) Dhihirisha matumizi ya uhuru ufuatao katika shairi hili. **(alama 2)**
  i. Tabdila
  ii. Kuboronga sarufi
g) Andika ubeti wa pili kwa lugha ya nathari. **(alama 3)**
h) Eleza maana ya misamiati ifuatayo kama ilivyotumika katika shairi hili. **(alama 2)**
  i. Hidaya
  ii. Nyemi

©2022 The Kenya National Examinations Council

6. *Soma shairi lifuatalo kisha ujibu maswali.*

Naingia ukumbini, nyote kuwakariria,
Ushairi niwapeni, hoja nitawaachia,
Mnipe masikioni, shike nachoeleza,
Taifa sio taifa, pasi kuwa maadili.

Naanza kwa uzalendo, nchi yetu tuipende
Yadhihirishe matendo, nchi yetu tuipende,
Wa kila mtu mwendo, usije kawa mpinde,
Taifa sio taifa, pasi kuwa maadili.

Linda demokrasia, uongozi tushiriki,
Haki kujielezea, wachotaka na hutaki,
Changu naweza tetea, demokrasia haki,
Taifa sio taifa,pasi kuwa maadili.

Tuwe na uadilifu, twache tamaa na hongo,
Tusiwe na udhaifu, wa kuwa watu waongo,
Tukomeshe uhalifu, kisha tuache maringo,
Taifa sio taifa, pasi kuwa na maadili,

Ubinafsi si adili, ila ni kusaidia,
Ukiwa nayo mali, asiye nacho patia,
Kama mtu mswahili, ubinafsi mtu achia,
Taifa sio taifa , pasi kuwa na maadili.

Na inavyoelezea,katiba ni kielezi,
Tutii kwa mazoea, hadi kijacho kizazi,
Kwa hayo nitamwachia, hiyo ya ziada kazi,
Taifa sio taifa, pasi kuwa maadili.

a) Eleza mambo yoyote manne ambayo mshairi anashauri taifa lifanye ili kuwa na maadili.

(alama 4)

b) Eleza mtindo wowote ule uliotumika katika shairi hili. **(alama 2)**

c) Ainisha shairi hili kwa kuzingatia vigezo vifuatavyo: **(alama2)**

i. Mpangilio wa vina
ii. Vipande katika mshororo.

d) Bainisha nafsi neni katika shairi hili. **(alama 2)**

e) Eleza toni ya shairi hili. ` **(Alama 2)**

f) Eleza umuhimu wa aina mbili za uhuru wa kishairi zilizotumiwa katika ubeti wa nne. (alama 4)

g) Andika ubeti wa pili kwa lugha tutumbi. **(alama 4)**

SEHEMU YA E: RIWAYA: CHOZI LA HERI (alama 20)

7. 'Tawala Wahafidhina tawala, Mwanzi wetu tawala…. '

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

b) Ni mbinu gani imetumika hapa.   **(alama 2)**

c) Eleza makosa saba ya maneno haya.   **(alama 14)**

AU

8. a) Jadili dhana ya **Chozi** katika riwaya ya Chozi laHeri.   **(alama 10)**

b) Riwaya ya Chozi la Heri imejaa aina mbalimbali za migogoro. Jadili.   **(alama 10)**

KCSE 2022 PREDICTION

SERIES 1

NAME………………………………………… INDEX NO………………………

SCHOOL……………………………………… SIGN……………………………

DATE……………………………………………

Kenya Certificate of Secondary Education
443/1

AGRICULTURE

Paper 1
TIME:2 hours

INSTRUCTIONS

*This page consists of **three sections A, B** and **C**.*
*Answer **ALL** the questions in **sections A** and **B** and **only two** questions from **section C**.*

FOR EXAMINERS USE ONLY

SECTION	QUESTION	MAXIMUM SCORE	CANDIDATE SCORE
A	1-15	30	
B	16-17	20	
C	18-20	40	

©2022 The Kenya National Examinations Council

SECTION A (30MKS)
Answer ALL the Questions in this section

1) Give **four** advantages of large scale farming. **(2mks)**

…………………………………………………………………………………………………

…………………………………………………………………………………………………

…………………………………………………………………………………………………

…………………………………………………………………………………………………

…………………………………………………………………………………………………

2) a) Define nomadic pastoralism **(1mk)**

…………………………………………………………………………………………………

…………………………………………………………………………………………………

b) State **two** advantages of nomadic pastoralism. **(1mk)**

…………………………………………………………………………………………………

…………………………………………………………………………………………………

…………………………………………………………………………………………………

3) State **four** factors which determine soil depth. **(2mks)**

…………………………………………………………………………………………………

…………………………………………………………………………………………………

…………………………………………………………………………………………………

…………………………………………………………………………………………………

…………………………………………………………………………………………………

4) Give **four** natural factors that would encourage the gully erosion on a farm. **(2mks)**

…………………………………………………………………………………………………

…………………………………………………………………………………………………

…………………………………………………………………………………………………

…………………………………………………………………………………………………

5) State **four** ways in which trees help in soil conservation. **(2mks)**

....

....

....

....

....

6) State **four** disadvantages of communal land tenure system. **(2mks)**

....

....

....

....

....

7) State **four** factors that should be considered when selecting a forage crop species to be established in a given area. **(2mks)**

....

....

....

....

....

8) What do you understand by the following terms? **(3mks)**

a) Seed dressing

b) Seed inoculation

c) Chitting

9) Give **two** advantages of compound fertilizers **(1mk)**

………

………

………

10) State **two** effects of varying spacing in maize production. **(2mks)**

………

………

………

11) State **four** symptoms of viral diseases in crop production. **(2mk)**

………

………

………

………

………

12) List **four** branches of livestock farming. **(2mks)**

………

………

………

………

………

13) Name **four** varieties of dry beans **(2mks)**

………

………

………

………

………

14) Give **four** precautions taken to prevent pest attack in stored produce. **(2mks)**

....

....

....

....

15) What is organic farming? **(1mk)**

....

....

SECTION B (20MKS)

16) Study the diagrams below carefully and answer the questions that follow.

a)Identify the pests labelled **A** and **B** **(2mks)**

....

b) State **two** effects the pest labelled A causes on a maize plant. **(2mks)**

....

....

....

©2022 The Kenya National Examinations Council

c) List **three** effects of pest **B** in stores. **(3mks)**

....

....

....

 d)State **three** methods of controlling striga weed. **(3mks)**

....

....

....

17)   The diagram below shows a field management practice carried out on a fruit crop. Study it carefully and answer the question that follow.

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

....

b) Give **two** reasons for carrying out the above practice. **(2mks**

....

....

....

©2022 The Kenya National Examinations Council

c) State **three** reasons for storing beans after harvesting. **(3mks)**

....

....

....

d) State **three** advantage of processing farm produce. **(3mks)**

....

....

....

....

e) Define the term drainage. **(1mk)**

....

....

SECTION C (40MKS)
Answer any two questions from this section

18) a)Describe **eight** farming activities that would encourage soil erosion **(8mks)**

b) Describe the harvesting of cotton. **(8mks)**

c) Describe seedbed preparation for carrot production. **(4mks)**

19) a) Describe **ten** factors that would determine the nutrient content of hay. **(10mks)**

b)Describe **ten** advantages of using organic matter for mulching. **(10mks)**

20) a)Explain **six** morphological features of weeds that influence selectivity of herbicides.

(6mks)

b)Give **five** disadvantages of zero grazing system. **(5mks)**

c)Describe nine factors considered in the selection of planting materials. **(9mks)**

....

....

....

....

....

....

....

....

....

....

....

....

....

....

....

....

....

....

....

....

....

....

....

....

....

....

....

KCSE 2022 PREDICTION

SERIES 1

NAME………………………………………… INDEX NO………………………

SCHOOL……………………………………… SIGN………………………………

DATE……………………………………………

443/2

AGRICULTURE

PAPER 2

Time: 2 Hours

<u>INSTRUCTIONS TO CANDIDATES.</u>

a) Write your name & Index Number in the spaces provided.

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

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

d) Answer **ALL** the questions I Section **A** and **B**

e) Answer two question from Section **C.**

FOR EXAMINERS USE ONLY

SECTION	MAXIMUM SCORE	CANDIDATE SCORE
A	30	
B	20	
C	40	

©2022 The Kenya National Examinations Council

SECTION A (30MKS)
Answer ALL the Questions in this section

1) State **four** causes of stress in poultry.   **(2mks)**

....

....

....

....

2) State **four** factors that determine the amount of feed an animal consumes   **(2mks)**

....

....

....

....

....

3) State **four** advantages of artificial calf feeding.   **(2mks)**

....

....

....

....

....

4) Name **two** methods of service in livestock breeding   **(1mk)**

....

....

....

5) Name **two** species of camel.   **(1mk)**

....

....

....

6) State **four** functions of vitamins in livestock body (**2mks**)

………

………

………

………

7) **Define** the following terms (**2mks**)

(a) Cockerel-

(b) Broiler-

(c) Ewe-

(d) Kid—

8) List **two** main parts of a farm building. (**1mk**)

………

………

9) State **two** reasons why lubrication or greasing of farm machines is important (**1mk**).

………

………

10) Give **two** reasons for seasoning timber before it is used for construction. (**1mk**).

………

………

11) **State** the functional difference between a drenching gun and a bolus gun. (**1mk**).

………

………

12) Name **four** tools which a farmer uses for dehorning cattle. (**2mks**)

………

………

………

13) List **two** reasons why bees are fed with syrup **(1mk)**

……………………………………………………………………………………………

……………………………………………………………………………………………

14) **Differentiate** between inbreeding and outbreeding **(1mk)**

……………………………………………………………………………………………

……………………………………………………………………………………………

……………………………………………………………………………………………

15) Identify **four** abnormalities which can be identified in eggs through candling **(2mks)**

……………………………………………………………………………………………

……………………………………………………………………………………………

……………………………………………………………………………………………

……………………………………………………………………………………………

16) Name **two** dual purpose breeds of sheep **(1mk)**

……………………………………………………………………………………………

……………………………………………………………………………………………

……………………………………………………………………………………………

17) State **four** factors which influences the rate of respiration in farm animals **(2mks)**

……………………………………………………………………………………………

……………………………………………………………………………………………

……………………………………………………………………………………………

……………………………………………………………………………………………

18) Mention **four** preventive measures farmers uses to control diseases in animals**(2mk)**

……………………………………………………………………………………………

……………………………………………………………………………………………

……………………………………………………………………………………………

……………………………………………………………………………………………

©2022 The Kenya National Examinations Council

19) State **four** harmful effects of lice in sheep. (2mks)

....

....

....

....

20) Name **two** examples of two host ticks. (1mks)

....

....

....

SECTION B (20MKS)
Answer all the questions in this section.

21) Study the diagram below and answer the questions that follows.
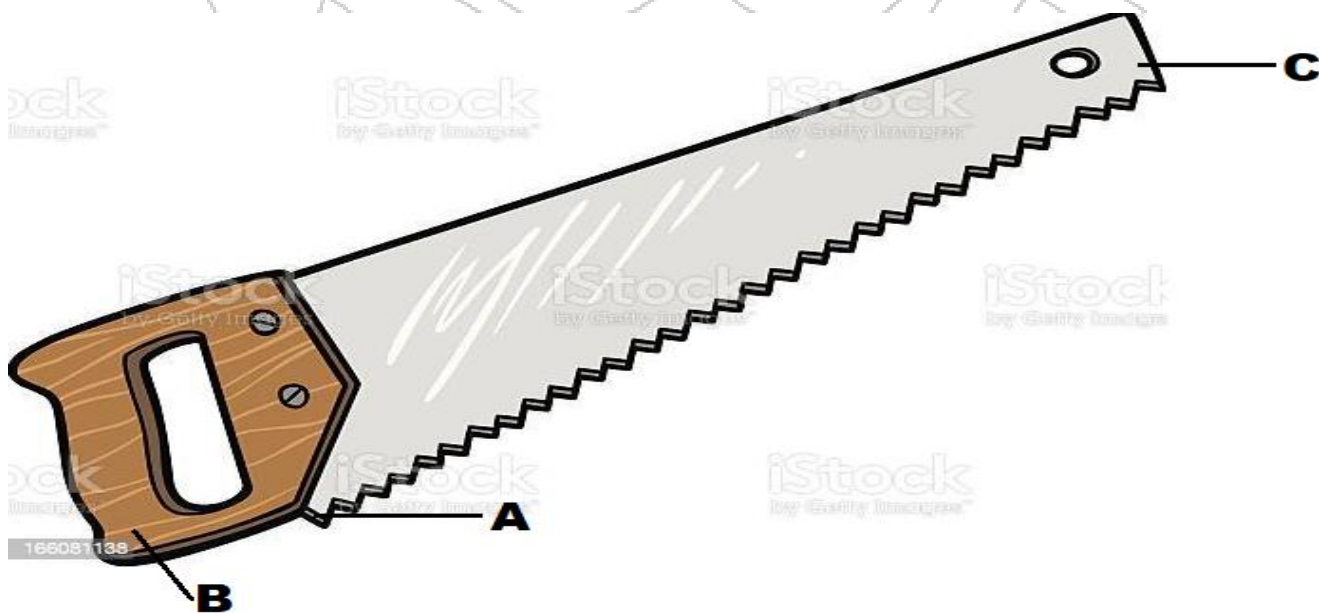
Identify the tool. (1mk)

....

Name the parts labelled A,B,C (3mks).

....

....

....

State **two** maintenance practices of the tool above (2mks)

....

....

....

22) Using Pearson's square method, **compute** a 200 kg ration with 20% DCP from oats which contains 10% DCP and sim sim seedcake containing 60% DCP (3mks)

....

....

....

....

....

23) Study the illustration below and answer the questions that follow.
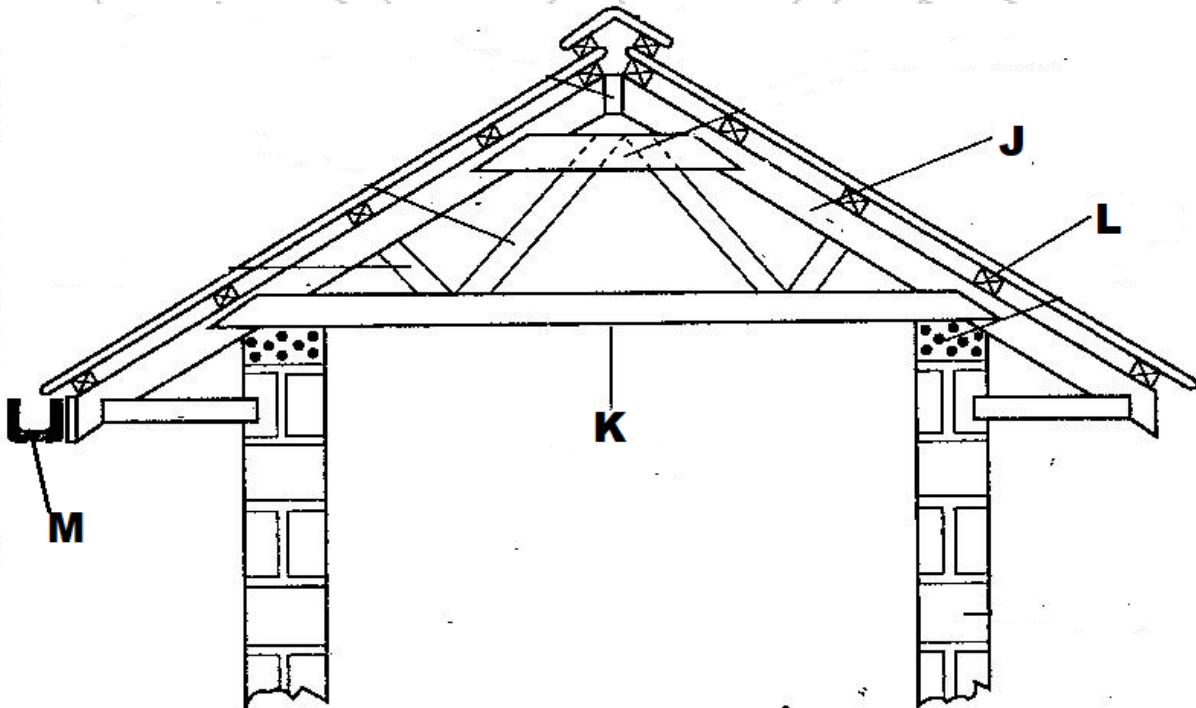
Identify the parts labeled (2mks)

(a) J --

(b) K --

(c) L --

(d) M --

State **one** use of the part labelled L. **(1mk).**

....

....

(c) State **one** reason why it is important to have the structure labelled M at the edge of the roofing materials. **(1mk).**

....

....

24) Below is an illustration of a sheep with parts marked E, F and G.
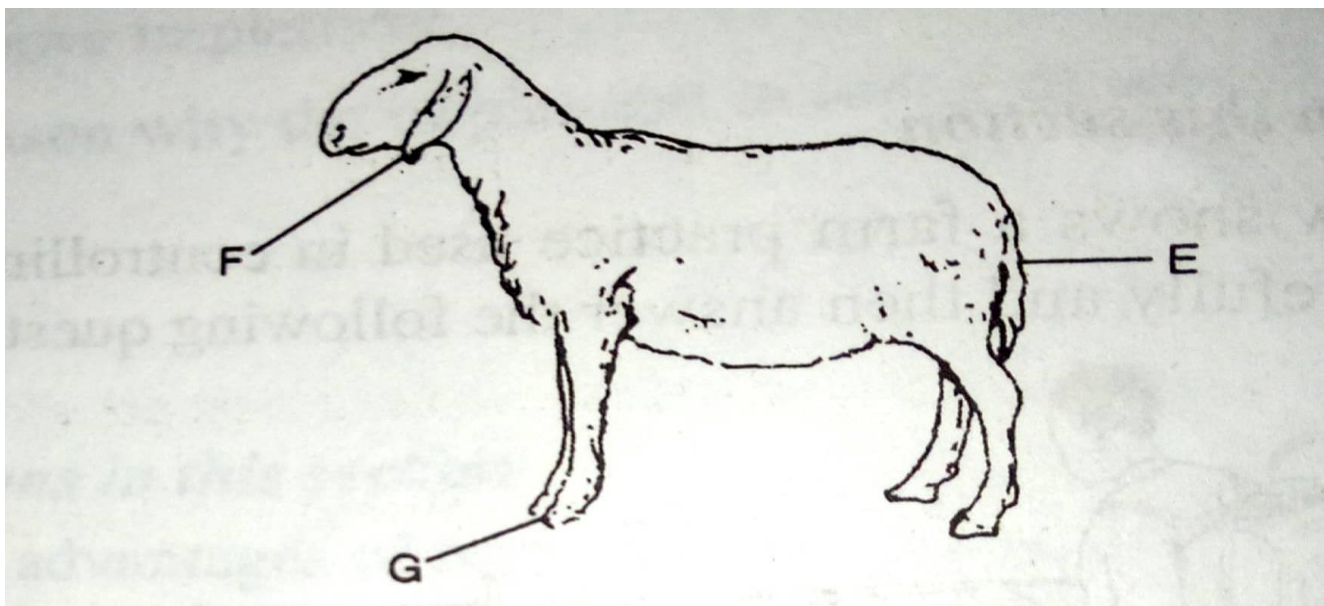
(a)**State** the operations that are carried out on the parts labelled **(2mks).**

i. E--

ii. G--

(b)State **two** reasons for carrying out the operation identified in E **(2mks)**

....

....

....

(c) At **what** age should the operation stated in E be carried out. **(1mk).**

....

....

(d).State **two** methods of carrying out the operation named in E.   **(2mks)**

………………………………………………………………………………………………

………………………………………………………………………………………………

………………………………………………………………………………………………

SECTION C (40MKS)
Answer any two questions from this section

25)   (a).Give **nine** reasons why the battery cage system of rearing poultry is popular for used by large scale poultry farmers.   **(9mks)**

Describe **five** management practices carried out on a fish pond.   **(5mks)**

Describe **six** symptoms observed on a calf heavily infested with internal parasites   **(6mk)**

26)   (a)State **six** advantages of animal power over tractor power in seedbed preparation.

          (6mks)

(b)Explain **nine** factors to consider in siting farm structures   **(9mks)**

(c)State **five** importance's of farm buildings.   **(5mks)**

27)   (a).Name **two** causes of pneumonia in livestock.   **(2mks)**

(b)State **four** predisposing factors of pneumonia disease in livestock   **(4mks)**

(c).Describe **four** types of stores that can be found on a farm.   **(8mks)**

(d).State **six** differences between Petrol and diesel tractor engines.   **(6mks)**

KCSE 2022 PREDICTION

SERIES 1

NAME……………………………………………… INDEX NO………………………

SCHOOL…………………………………………… SIGN………………………………

DATE…………………………………………………

565/1

BUSINESS STUDIES

PAPER 1

TIME: 2 HOURS

INSTRUCTIONS TO CANDIDATES

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

FOR EXAMINER'S USE ONLY

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

Questions	15	16	17	18	19	20	21	22	23	24	25
Marks											

Total Marks

QUESTIONS

1.   Outline four internal environment factors that may negatively influence the operations of a business. **(4 marks)**

i)_____

ii)_____

iii)_____

iv)_____

2.   State the characteristic of human wants that match the descriptions given below: **(4 marks)**

Description	Characteristics
a)Satisfaction of one want automatically leads to creation of another	
b)Some human wants are experienced by all human beings	
c) Human wants can never be fully satisfied	
d) After some wants are satisfied, they recur	

3.   Give for reasons why direct production is undesirable in a country.   **(4 marks)**

i)_____

ii)_____

iii)_____

iv)_____

4.   Highlight four reasons why the Kenyan government encourages entrepreneurship in the country. **(4 marks)**

i)_____

ii)_____

iii)_____

iv)_____

5.   State four modern developments in office management.   (**4 marks**)

i)_____

ii)_____

iii)_____

iv)_____

6.   Give four differences between a Public Limited Company and a Public Corporation. (4 mks)

Public Limited Company	Public Corporation
i)	i)
ii)	ii)
iii)	iii)
iv)	iv)

7.   Highlight four advantages of mail-order business.   (**4 marks**)

i)_____

ii)_____

iii)_____

iv)_____

8.   Give four reasons for the popularity of Mpesa as a means of payment in Kenya.   (**4 marks**)

i)_____

ii)_____

iii)_____

iv)_____

9. The following balances were extracted from books Hussein trades on 30th October 2019.

Cash   20,000

Bank   160,000

Premises   200,000

Debtors   40,000

Creditors   95,000

2 years loan   258,000

Stock   210,000

Prepare the balance sheet for Hussein Traders as at 30th October 2019.   **(5 mks)**

10. State four reasons for government involvement in business activities.   **(4 marks)**

i)_____

ii)_____

iii)_____

iv)_____

11. Outline four problems associated with boda boda (motor cycle)as a means of transport.**(4 mk)**

i)_____

ii)_____

iii)_____

iv)_____

12. For each of the statements below, state the appropriate term as used in insurance. **(4 marks)**

Statement	
a)Specified amount of money paid at regular intervals by the insured to the insurer for coverage against losses	
b)People employed by an insurance company to compute expected losses and value of premiums	
c)Amount of money refundable to the insured by the insurer in case the former terminates contract before it matures	
d) Loss incurred by a business as a result of disruption of business in the event of the insured risk occurring	

13. Highlight four problems that would be experienced by consumers in the absence of

warehousing. **(4 marks)**

i)_____

ii)_____

iii)_____

iv)_____

14. State four benefits of advertising to a consumer. **(4 marks)**

i)_____

ii)_____

iii)_____

iv)_____

15. Identify the source documents used to record the following transactions in the books of original entry. **(4 marks)**

Transaction	Source Document
a) Credit purchases	
b) Sales returns	
c) Cash sales	
d) Cash purchases	

16. Outline four circumstances that may make a producer to bypass the wholesaler when distributing his goods. **(4 marks)**

i)_____

ii)_____

iii)_____

iv)_____

17. Highlight four external economies of scale that a firm may get as a result of growth in the industry. **(4 marks)**

i)_____

ii)_____

iii)_____

iv)_____

18. Highlight four characteristics of oligopoly market structure. **(4 marks)**

i)_____

ii)_____

iii)_____

iv)_____

19. State the type of unemployment relating to each of the following descriptions: **(4 marks)**

a) Caused by alternating trading patterns occurring at similar times

_____

b) Arises where workers have more skills and higher qualifications than the job requirements

_____

c) Arises out of a mismatch between the skills possessed by potential employees and the location of the jobs available _____

d) Arises when people are unwilling to take up jobs due to low pay _____

20. The diagram below shows a change in the supply of a product. Outline four factors which may have caused such a change. **(4 marks)**
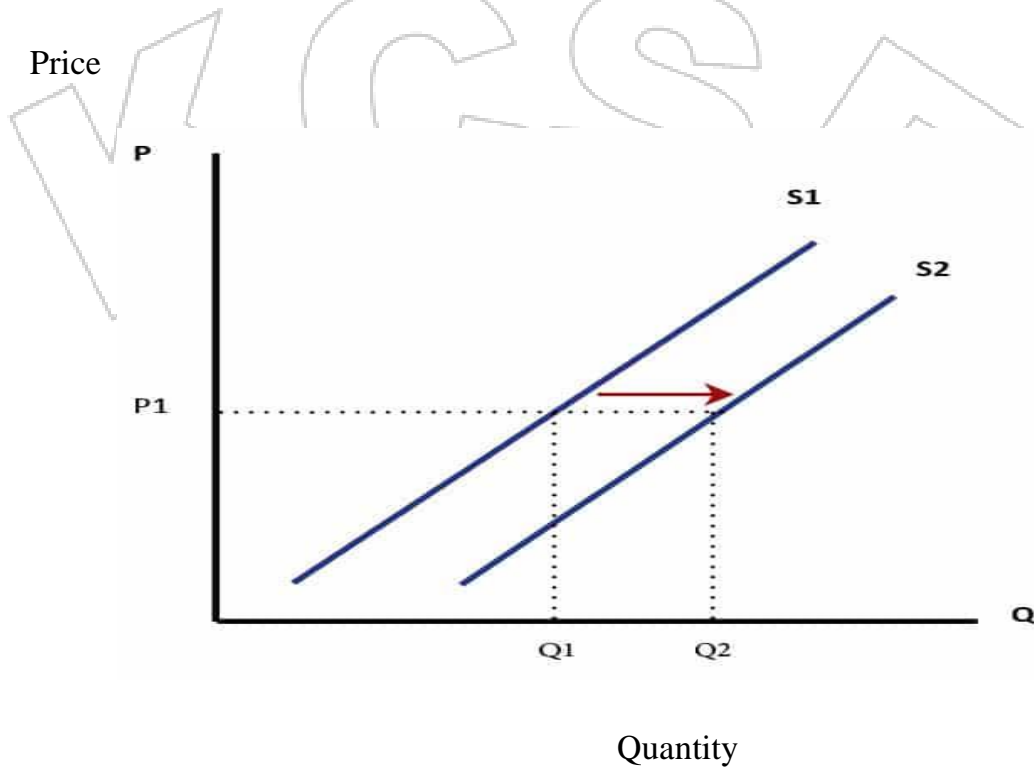
i)_____

ii)_____

iii)_____

iv)_____

21. The following information relates to Jumbo Traders on 31/12/2020

Details	Shs
Capital (31/12/2020)	940,000
Net loss	20,000
Additional Investments	420,000
Monthly drawings	5,000

Determine the capital as at 1/01/2021 **(3 marks)**
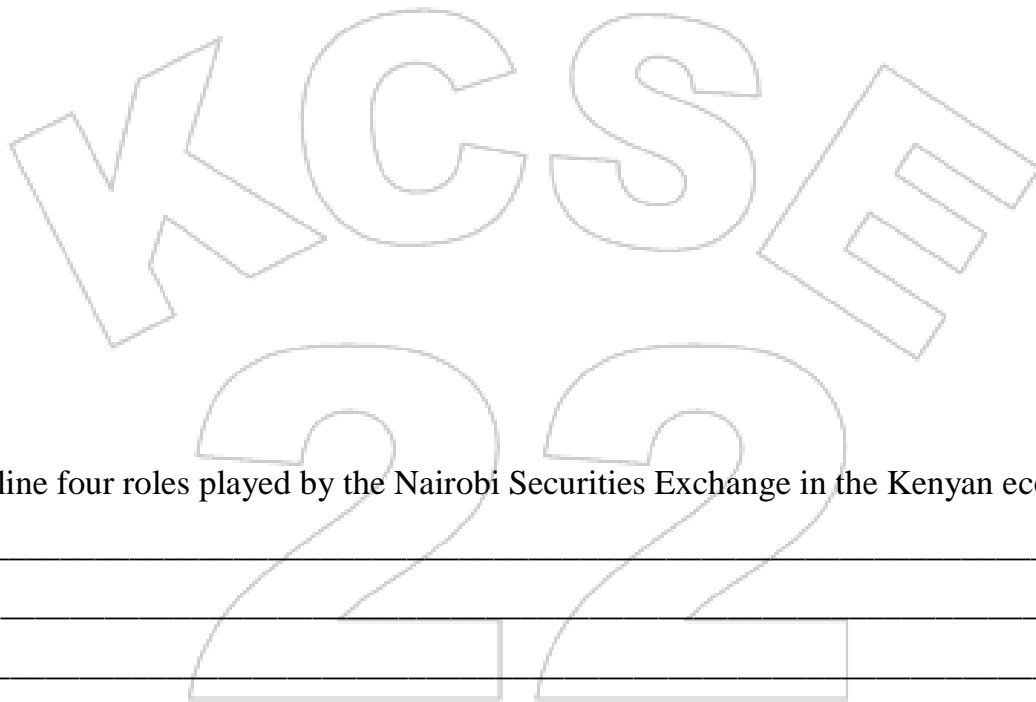
22. Outline four roles played by the Nairobi Securities Exchange in the Kenyan economy.**(4 mks)**

i)_____

ii)_____

iii)_____

iv)_____

23. Listed below is a set of transaction. In each case state whether the transaction will increase, decrease or have no effect on capital.   (4 marks)

	Transaction	**Effect**
a)	Additional cash invested by the owner	
b)	Receiving cash from a debtor	
c)	Losses incurred by a business	
d)	Owner takes some stock for own use	

24. Mention four disadvantages of an ageing population to a country. (**4 marks**)

i)_____

ii)_____

iii)_____

iv)_____

25. Given below is a cash book extract from the books of accounts of Patel Enterprises.

Dr   **Cr**

Date	Details	F	Discount allowed	Cash	Bank	Date	Details	F	Discount received	Cash	Bank
2009						2009					
1/12	Bal b/d			1,500	90,000	14/12	Bank	C		30,000	
2/12	Rono		2,000	36,000		20/12	Equipment				80,000
14/12	Cash	C			30,000	30/12	Drawings			7,000	

In relation to the entries appearing in the cash book extract, state the transactions that took place on each of the following dates. (**4 marks**)

a) 2nd December 2009

b) 14th December 2009

c) 20th December 2009

d) 30th December 2009

KCSE 2022 PREDICTION

SERIES 1

NAME………………………………………… INDEX NO………………………

SCHOOL………………………………………… SIGN…………………………………

DATE……………………………………………

565/2

BUSINESS STUDIES

PAPER 2

TIME: 2 ½ HOURS

INSTRUCTIONS TO CANDIDATES.

1. This paper consist of six questions with section a and b.

2. Answer only five questions, both a and b in the writing material provided.

3. Indicate clearly the questions answered

For examiner's use only

QUESTION	1	2	3	4	5	6
SCORE						

TOTAL	

©2022 The Kenya National Examinations Council

QUESTIONS

1 .a) There has been rapid rate of unemployment over the years in Kenya. Explain **five** measures the government may put in place to curb this trend**.**   **(10 marks)**

 b) Explain **five** uses of national income statistics   **(10 marks)**

 2.a) Explain **five** benefits a country may get by locating industries in different parts of the country   **(10 marks)**

 b) Explain **five** differences between shares and debentures   **(10 marks)**

 3.a) Explain **five** principles that guide operation of insurance companies in Kenya.

                    (10 marks)

 b) Explain **five** roles played by non-governmental organizations(NGOs) in protecting consumers

                    (10 marks)

 4.a) Explain **five** factors a business should consider while deciding on the office machine to buy

                    (10 marks)

 b. The following information was extracted from the books of Bondo retailers in December 2019.

Dec 2:   Bought a computer worth sh.10, 000 on credit from digital traders.

Dec 5:   Bought office furniture worth sh. 5,000 on credit from office suppliers limited.

Dec 11:   Settled a debt owed to Kamau, a creditor by giving up stock worth sh. 6,000

Dec 15:   Sold a printer worth sh.15,500 for sh 18,000 to Kiamaiko ltd on

          credit

Dec 23:   Settled a debt of sh 200,000 owed to a creditor Omoka by giving up a motor vehicle
          Worth the same amount

Dec 25. Sold an old set of chairs for sh 53,000 to Milele traders

Dec 27: Sold a motor vehicle worth sh 87,000 for sh 80,000 on credit to Gitau

 Dec 30: realized that goods worth sh 10000 sold on credit to Muasya had been recorded in
          The books of account as sh 1000

Record the information in the relevant book of original entry   **(10 marks)**

©2022 The Kenya National Examinations Council

5.a) Explain **five** benefits a trader may enjoy by operating a unit shop   **(10 marks).**

 b. Explain **five** reasons why the demand curve for second hand clothes may shift to the

left   **(10 marks)**

 6.a)   Explain **five** circumstances   under which a business may decide to offer its customers after

sale services   **(10 marks).**

 b) On 1ˢᵗ May 2020, ,Kihenjo ltd had cash in hand sh.178,000 and a bank overdraft of shs.23,400.

 During the month, the following transactions took place:

 May 3: Cash sales sh 16,500 paid direct into the bank.

 May 4: Bought goods for sh.15,000 and paid by cheque.

 May 6: Cash sales sh.50, 000.

 May 9: Received a cheque for Sh.76, 500 from Mwikali in full settlement of her debts.

 May 13: Paid insurance premium sh.16,000 in cash.

 May 14: Paid Otieno by cheque Sh.9,700 in full settlement of his account having deducted 3% cash

discount.

 May 21: Withdrew Sh 30,000 from bank for office use.

 May 23: Received a cheque of sh 23,750 from Kimani in full settlement of his account less 5% cash

discount.

 May 25: Paid wages of shs. 20,000 in cash.

 May 26: Cheque received from Mwikali was dishonored, the bank charged sh 350.

 May 30: Banked all cash except Sh 3,000.

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

KCSE 2022 PREDICTION

SERIES 1

NAME………………………………………… INDEX NO………………………

SCHOOL…………………………………… SIGN……………………………

DATE………………………………………………

313/1

CHRISTIAN RELIGIOUS EDUCATION

PAPER 1

TIME: 2 ½ HOURS

INSTRUCTIONS:

1. There are **six** questions in this paper.

2. This paper has **three** pages.

3. Answer any **five** questions.

4. Each student must verify that all pages and questions are present in the paper.

5. All answers must be in the answer sheets provided.

6. All answers must be in English.

FOR EXAMINERS' USE ONLY

Question	1	2	3	4	5	6	TOTAL
SCORE							

©2022 The Kenya National Examinations Council

Answer Any Five Questions

1.a) Explain how the study of Christian religious education in schools promotes international cooperation. **(7 marks)**

b) Give <u>six</u> reasons why the Bible had to be compiled into its present form by the early Christians. **(6 marks)**

c) State <u>**seven**</u> factors that discourage Christians from reading the Bible in the church today.

(7 marks)

2.a) With reference to Genesis 12:1 – 9 outline seven promises given to Abraham by God at the time of his call. **(7 marks)**

b) Give <u>**seven**</u> reasons why God renewed the Covenant with the Israelites during the time of Moses (Exodus 34:1 – 35). **(7 marks)**

c) State <u>**six**</u> attributes of God as shown in the celebration of Jewish Passover. **(6 marks)**

3.a) Outline <u>**seven**</u> duties performed by Prophet Samuel in Israel. **(7 marks)**

b) Why did the people of Israel demand for an earthly King from Prophet Samuel? **(7 marks)**

c) Outline <u>**six**</u> factors that have affected the true worship of God today. **(6 marks)**

4.a) Describe the social-economic background of Prophet Amos. **(8 marks)**

b) Outline <u>eight</u> reasons why Israel would face God's judgement according to the teachings of Prophet Amos. **(8 marks)**

c) State <u>**six**</u> reasons why Christians repent their sins. **(6 marks)**

5.a) Give **any seven** religious challenges that Nehemiah faced in Judah. **(7 marks)**

b) Explain **four** reasons that made Nehemiah to rebuild the wall of Jerusalem. **(8 marks)**

c) What **five** lessons can a Christian learn from Nehemiah's reforms. **(5 marks)**

6.a) Explain **four** factors that contribute to harmony and mutual responsibility in Traditional African Communities. **(8 marks)**

b) Explain Traditional African view on land. **(6 marks)**

c) Outline **six** ways in which Traditional African communities showed respect to their dead.

(6 mks)

……
……
……
……
……
……
……
……
……
……
……
……
……
……
……
……
……
……
……
……
……
……
……
……
……
……

KCSE 2022 PREDICTION

SERIES 1

NAME…………………………………………   INDEX NO………………………

SCHOOL………………………………………   SIGN………………………………

DATE……………………………………………

313/2

CHRISTIAN RELIGIOUS EDUCATION

PAPER 2

TIME: 2 ½ HOURS

Kenya Certificate of Secondary Education

INSTRUCTIONS:

1.   *There are **six** questions in this paper.*
2.   *This paper has **three** pages.*
3.   *Answer any **five** questions.*
4.   *Each student must verify that all pages and questions are present in the paper.*
5.   *All answers must be in the answer sheets provided.*
6.   *All answers must be in English.*

FOR EXAMINERS' USE ONLY

Question	1	2	3	4	5	6	TOTAL
SCORE							

©2022 The Kenya National Examinations Council

QUESTIONS

1.   **a).** Basing your answer on the infancy narratives in Luke 1:5-56, describe what took place when Mary visited Elizabeth.   **(6mks)**

b). Identify six lessons that Christians learn from the lives of Zechariah and   Elizabeth.

(6mks)

(c). State eight ways through which Christians in Kenya express their joy for the birth of Jesus.

(8mks)

2.   **(a).** Describe the incident when Jesus was rejected at Nazareth (Luke 4:16-30)   **(7mks)**

(b). Give four reasons why Jesus faced opposition from the Pharisees in Galilee (**Luke 5: 12-6: 11**)

(8mks)

(c). Mention five ways Christian leaders should respond to those who oppose them in their work

(5mks)

3.   **(a).** Describe the triumphant entry of Jesus into Jerusalem (Luke 19:28-40   **(6mks)**

b). Outline the events that took place from the time Jesus was arrested up to the time he was sentenced to die.   **(7mks)**

c). State seven lessons Christians learn from the suffering and death of Jesus.   **(7mks)**

4.   **(a)** Explain how Peters life was transformed on the day of Pentecost   **(6mks)**

(b) Describe unity of believers expressed in the concept of the body of Christ   **(7mks)**

(c) Outline sevens in which the gifts of the Holy Spirit are misused in church today.

(7mks)

5. **(a)** Identify seven causes of premarital sex among the youth today **(7mks)**

(b) Highlight the importance of children in traditional African communities. **(7mks)**

(c) Give six reasons why young people are choosing to remain unmarried in Kenya today.

(6mks)

6. **(a)** State seven similarities in the traditional African view of work and Christian view of work

(7mks)

(b) Give seven reasons for the importance of manual work in Kenya today **(7mks)**

(c) Identify ways in which the church is helping to reduce the rate of unemployment

(6mks)

……
……
……
……
……
……
……
……
……
……
……
……
……
……
……
……
……
……
……
……
……
……
……
……
……
……

KCSE 2022 PREDICTION

SERIES 1

NAME…………………………………………… INDEX NO………………………

SCHOOL………………………………………… SIGN……………………………

DATE……………………………………………

312/1

GEOGRAPHY

PAPER 1

TIME: 2¾ HOURS

Kenya Certificate of Secondary Education

<u>INSTRUCTIONS TO CANDIDATES</u>

a) *This paper has **two** sections: A and **B**.*
b) *Answer **all** the questions in section **A**.*
c) *Answer question **6** and any other **two** questions from Section **B**.*
d) *Each question in section B must be answered in separate foolscaps.*
e) *Candidates should check the question paper to ascertain that all pages are printed as indicated and that no questions are missing.*

QUESTION	A	6	7	8	9	10	TOTAL
MARKS							

©2022 The Kenya National Examinations Council

SECTION A

*Answer **all** the questions in this section.*

1. (a) State **three** reasons why it is important to study Geography. **(3 marks)**

....

....

....

(b) What is the relationship between Geography and Agriculture? **(2 marks)**

....

....

....

2.(a) What is weather forecasting? **(2 marks)**

....

....

(b) List **three** elements of weather. **(3 marks)**

....

....

....

3. Study the diagram below and use it to answer questions (a) and (b) below:
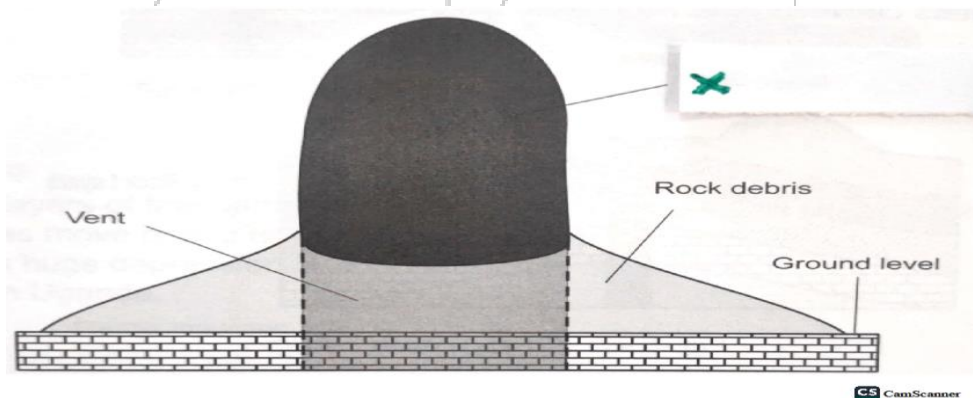
(a) Identify the feature marked **X.** **(1 mark)**

....

....

©2022 The Kenya National Examinations Council

(b)   Describe how the feature is formed.   **(4 marks)**

....

....

....

....

....

4.(a)   What is karst landscape?   **(2 marks)**

....

....

(b)   State **three** factors that influence the occurrence of underground water.   **(3 marks)**

....

....

....

5.   The diagram below shows lowland glaciated features. Study the diagram and answer questions (a) and (b).
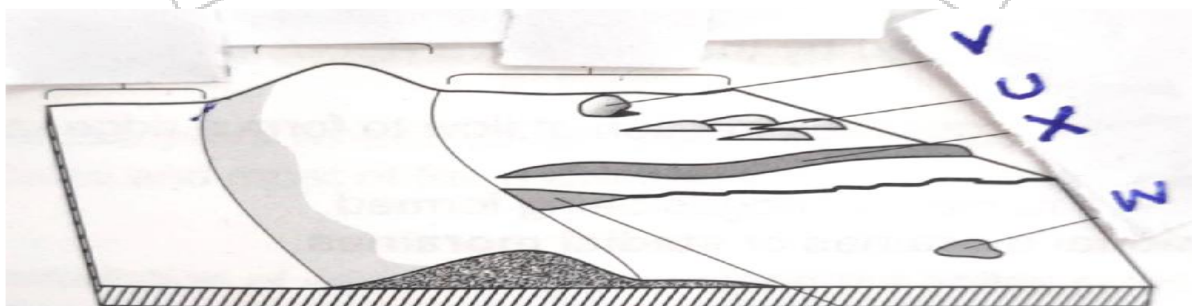
(a)   What is an outwash plain?   **(2 marks)**

....

....

....

(b)   Name the features marked **U**, **V** and **W**.   **(3 marks)**

....

....

....

SECTION B

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

6. Study the map of Nyeri **1:50000** (sheet **120/4**) provided and answer the following questions

(a) (i) Name the *two* districts in the northern part of the map extract. **(2 marks)**

(ii) Give the latitudinal extent of they are covered by the map. **(2 marks)**

(iii) According to the marginal information provided in the map, what is the magnetic variation of the area when the map was drawn. **(2 marks)**

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

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

(c) Citing evidence from the map, explain *three* factors that favours the growing of coffee in Nyeri area**. (6 marks)**

(d) Explain **three** factors that have influenced settlement in the area covered by the map.

(6marks)

7. (a) (i) Differentiate between rocks and minerals. **(2 marks)**

(ii) Describe the following characteristics of minerals.

- Color. **(2 marks)**

- Hardness. **(2 marks)**

(b) (i) What are igneous rocks? **(2 marks)**

(ii) State *three* differences between plutonic and volcanic rocks. **(3 marks)**

(c) Describe the formation of the following rocks.

(i) Mechanically formed sedimentary rocks. **(3 marks)**

(ii) Chemically formed sedimentary rocks. **(3 marks)**

(d) (i) Identify the missing type of rocks. **(3 marks)**

Original rock	Metamorphic rock
Limestone	(i)
(ii)	Graphite
Granite	(iii)

(ii) Suppose you were to carry out a field study on rocks at the Kenyan coast. State *two* reasons as to why you would ask for permission from the school administration. **(2marks)**

(iii) What reasons would you give for the widespread of sedimentary rocks at the coastal plain?

(3marks)

9. (a) (i) Name *three* types of river erosion **(3 marks)**

(ii) Describe the following river erosional presses.

- Abrasion **(4 marks)**
- Solution **(3 marks)**

(b) **(i)** What is river rejuvenation **(2 marks)**

(ii) Identify *three* features that result from river rejuvenation. **(3 marks)**

(c) **(i)** Name *two* types of submerged highland coasts. **(2 marks)**

(ii) State *two* factors influencing deposition by ocean waters. **(2 marks)**

(d) Explain *three* significance of oceans to human activities. **(6 marks)**

10. **(a)** **(i)** Differentiate between soil texture and soil structure. **(2 marks)**

(ii) Apart from living organisms, name *four* other components of soil. **(4 marks)**

(b) The diagram below shows different layers of soil. Use it to answer questions (b) (i), **(ii)** and (ii)

W

X

Y

Z
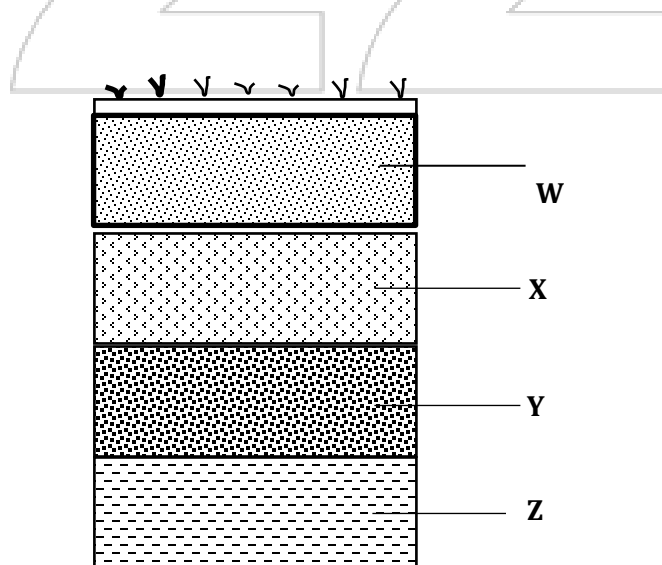
(i) Name the soil layers **X ,Y** and **Z** **(3 marks)**

(ii) Give *two* main processes of soil formation which takes place in horizon W.

(2 marks)

(iii) State *four* characteristics of soil in horizon X. **(2 marks)**

(c) Explain how the following farming practices may result to loss of soil fertility

(i) Continuous irrigation**.** **(2 marks)**

(ii) Over grazing**.** **(2 marks)**

(iii) Over cultivation**.** **(2 marks)**

(d) Explain ways in which natural vegetation may prevent soil from erosion. **(4 marks)**

KCSE 2022 PREDICTION

SERIES 1

NAME………………………………………… INDEX NO………………………

SCHOOL……………………………………… SIGN………………………………

DATE…………………………………………

312/2

GEOGRAPHY

PAPER 2

TIME: 2¾ HOURS

INSTRUCTIONS TO CANDIDATES

a) *This paper has **two** sections: **A** and **B**.*

b) *Answer **all** the questions in section A.*

c) *Answer question **6** and any other **two** questions from Section **B**.*

d) *Each question in section B must be answered in separate foolscaps.*

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

QUESTION	A	6	7	8	9	10	TOTAL
MARKS							

©2022 The Kenya National Examinations Council

QUESTIONS

1. a) What is Human Environment? **(2 mks)**

....

....

....

b) Identify <u>three</u> areas of study under Human Environment. **(3 mks)**

....

....

....

2. a) The diagram below shows the occurrence of petroleum in the earth's crust.
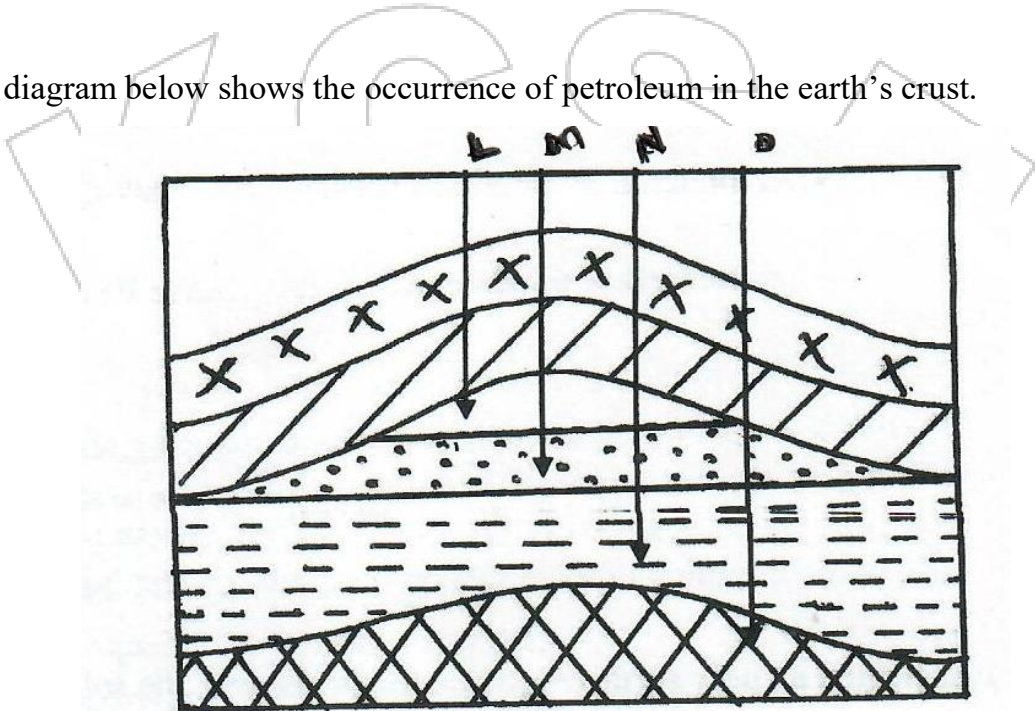
Name the substances labelled L, M and N. **(3 mks)**

....

....

....

b) Give <u>two</u> by-products obtained when crude oil is refined. **(2 mks)**

....

....

....

3. a) State <u>three</u> environmental conditions which favour commercial beef farming in Kenya.

(3 mks)

....

....

....

 b) Name <u>two</u> exotic breeds of cattle reared in commercial ranches in Kenya.   **(2 mks)**

....

....

....

4. a) Give <u>two</u> reasons why wildlife conservation is encouraged in Kenya.   **(2 mks)**

....

....

....

 b) Apart from national parks, outline three other ways in which wildlife is conserved in Kenya.

(3 mks)

....

....

....

5 .a) Name <u>two</u> polders that were created in Zulderzee project.   **(2 mks)**

....

....

....

 b) State <u>**three**</u> ways in which the salinity of the polders is reduced in the Netherlands. **(3 mks)**

....

....

....

SECTION B

*Answer question **six** (**6**) and any other two questions from this Section.*

6. The data below represents crop exports from Kenya between 1995 and 1998. Use it to answer the questions that follow: -

Crops/Year	1995	1998
Maize	224	286
Coffee	168	310
Tea	320	368
Others	200	461
Total	**912**	**1,445**

a) Using a scale of 1 cm represents 10 units, prepare proportional divided circle from the data above using the square root method. **(9 mks)**

b.i) Name <u>two</u> varieties of coffee grown in Kenya. **(2 mks)**

ii) State <u>three</u> reasons why Brazil leads in the production of coffee. **(3 mks)**

c) Discuss the processing of sugarcane after harvesting. **(6 mks)**

d.i) The map below represents cocoa growing areas in Ghana. Identify the towns marked A and B. **(2 mks)**
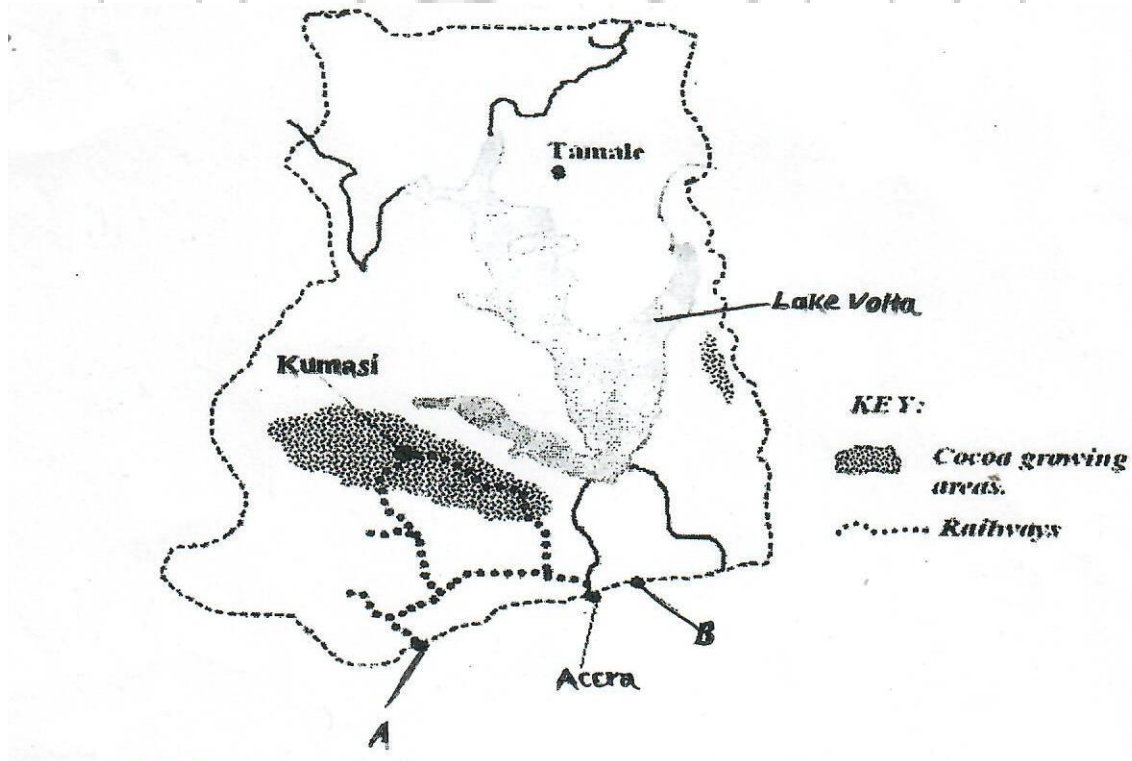
ii) Give the reasons for each of the following stages in the processing of Oil palm. **(3 mks)**

- Steaming
- Stripping
- Pulping

©2022 The Kenya National Examinations Council

7. a.i) Apart from Coniferous forest, name two other types of natural forests. **(2 mks)**

    ii) State <u>two</u> characteristics of Coniferous forests. **(2 mks)**

b) Explain four factors that favour the exploitation of softwoods in Canada. **(8 mks)**

c) i) List <u>any four</u> indigenous softwood tree species that grow on the Kenya highlands. **(4 mks)**

ii) State <u>three</u> problems facing forestry in Kenya. **(3 mks)**

d) Your class intends to carry out, field study on forestry in Karura Forest. **(3 mks)**

i) List <u>three</u> objectives of your study. **(3 mks)**

ii) List three types of sampling techniques used during filestury. **(3 mks)**

8.a. i) Name any two types of fishing. **(2 mks**

    ii) What is fish farming**?** **(2 mks)**

b) Describe harpooning as a method of fishing. **(4 mks)**

c) The map below shows the major fishing grounds of the world. Use it to answer questions (i) and (ii).

Major Fishing ground
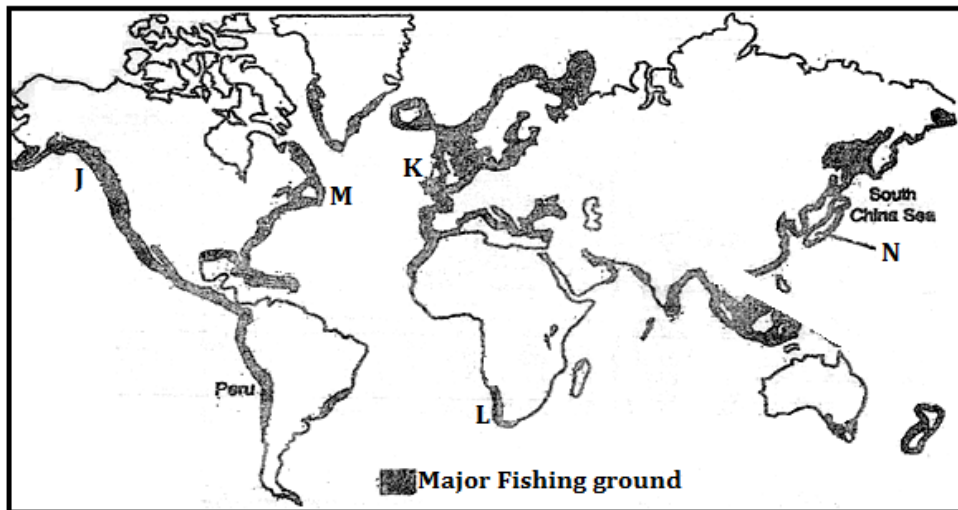
i) Name the fishing grounds labeled J, K, and M. **(3mks)**

(ii) Explain **three** physical factors that have favoured fishing along the grounds marked N. **(6mks)**

(d) Explain **four** measures being fronted by the Kenya government to reduce overfishing in Lake Victoria. **(8 marks)**

9. (a) Identify **three** sources of non- renewable energy**.** **(3 mks)**

b) State **three** advantages of biomass as a source of energy**.** **(2 mks)**

c) Apart from the HEP projects in Kenya and Uganda, name three other HEP projects in Africa.

(3 mks)

d i) What is energy crisis? **(2 mks**

ii) Explain **four** ways in which energy crisis has impacted on developing countries. **(8 mks)**

e) You are planning to carry out a field study on hydro- electricity production in the Kenyan seven folks dam.

i) State **two** types of hypotheses you would use for the study **.** **(2mks)**

ii) What are possible follow-up activities that you will be involved in after the study? **(3 mks)**

iii) Give two reasons why you would require a route map. **(2mks)**

10. The table below shows the population of a country in Western Europe in '000's. Use it to answer Part a – c.

Age Group	Male	Female
0 – 9	460	455
10 – 19	447	449
20 – 29	630	632
30 – 39	635	639
40 – 49	610	615
50 – 59	541	563
60 – 69	470	468
70 – 79	460	459
80+	451	453

a) Using a scale of 1 cm to represent 100,000 people, draw a population pyramid from the above data. **(10 mks)**

b) Give five characteristics of the above population structure shown by the pyramid. **(5 mks)**

c) Explain three problems likely to be experienced due to the population trend in the above country. **(6 mks)**

ii) State four causes of urban-urban migration. **(4 mks)**

©2022 The Kenya National Examinations Council

KCSE 2022 PREDICTION

SERIES 1

NAME……………………………………………… INDEX NO………………………

SCHOOL…………………………………………… SIGN…………………………………

DATE…………………………………………………

311/1

HISTORY AND GOVERNMENT

PAPER 1

TIME: 2 ½ HOURS

Instructions to candidates

*(a) Write your **name, index number** and the **name** of your school in the spaces provided above.*
*(b) **Sign** and **write** the **date** of examination in the spaces provided above.*
(c) This paper consists of THREE sections A, B and C
(d) Answer ALL questions in section A (25 marks)
(e) Answer any THREE questions in section B (45 marks)
(f) Answer any TWO questions in section C (30 marks)

FOR EXAMINER'S USE ONLY

SECTION	MAXIMUM SCORE	CANDIDATE'S SCORE
A	25	
B	45	
C	30	
TOTAL SCORE	100	

©2022 The Kenya National Examinations Council

SECTION A (25 MARKS)
Answer all the questions

1. Distinguish the term pre-history from history. **(2mks)**

……………………………………………………………………………………………………

……………………………………………………………………………………………………

……………………………………………………………………………………………………

2. Give two characteristics of historical event. **(2mks)**

……………………………………………………………………………………………………

……………………………………………………………………………………………………

……………………………………………………………………………………………………

3. Which is the main method historian use to obtain historical information about Kenyan communities. **(1mark)**

……………………………………………………………………………………………………

……………………………………………………………………………………………………

4. In what two ways has the HIV/AIDS pandemic contributed to food shortages in Kenya.**(2mks)**

……………………………………………………………………………………………………

……………………………………………………………………………………………………

……………………………………………………………………………………………………

5. What was the main reason for the migration of the Eastern Bantu from Shugwaya during Pre-colonial period**.** **(1mar**

……………………………………………………………………………………………………

……………………………………………………………………………………………………

6. Name the community classified as southern cushite in Kenya. **(1mk)**

……………………………………………………………………………………………………

……………………………………………………………………………………………………

©2022 The Kenya National Examinations Council

7. Give the evidence that proofed that the Greeks were amongst the early visitors to the east African coast upto 1500. **(1mk)**

……

……

8. Give **two** reasons why Kenyan Communities fought against each other during the pre-colonial period. **(2 marks)**

……

……

……

9. Identify the **two** main items of trade from the interior of Kenya during the long distance Trade. **(2 marks)**

……

……

10. Name one treaty that led to the abolition of slave trade in East Africa. **(1mark)**

……

……

11. Give the meaning of the term Human rights. **(1mark)**

……

……

12. Give one negative methods of conflict resolution. **(1mk)**

……

……

13. What constitutional amendment made Kenya return to a multi-party state? **(1 mark)**

……

15. Identify **two** economic benefits of the Kenya-Uganda railway during the colonial period.

(2 marks)

………

………

………

15. Stated two powers granted to the Imperial British East Africa Company through the royal charter of 1888. (2mks)

………

………

………

16. Give **two** ways through which the colonial government acquired land in Kenya during the Colonial period. (2 marks)

………

………

………

17. State **one** change introduced by the Lyttleton constitution of 1954 that benefitted the Africans in the struggle for independence. (1 mark)

………

………

SECTION B 45 Marks

Answer any three questions

18. a) Outline five features of the earliest people who occupied Kenya. (5Marks)

b) Describe the economic organization of the Akamba during the pre-colonial period. (10mks)

©2022 The Kenya National Examinations Council

19. a) State five factors that facilitated the spread of Christianity in East Africa.   **(5marks)**

   b) Discuss five positive effects of slave trade on people of East Africa.   **(10mks)**

20. a) Outline three social factors that contributed to the scramble and partition of East   Africa.

(3mks)

   b) Discuss six factors that facilitated the establishment of the British control over Kenya during the 19th century.   **(12mks)**

21. a) Give three reasons why the Bukusu resisted the British rule.   **(3mks)**

   b) Describe the structure of the colonial administration in Kenya.   **(12mks)**

SECTION C 30 Marks
Answer any two questions.

22. a) Outline five Key changes in the New Kenya Constitution 2010.   **(5 mks)**

   b) Describe five constitutional reforms agreed by Inter Party Parliamentary Group (IPPG to level the ground before the 1997 general elections.   **(10mks)**

23. a) Outline three consumer rights that are entitled to citizens.   **(3mks)**

    b) Explain six factors that undermine national unity in Kenya.   **(12mks)**

24. a) What are the qualifications of a voter in an electoral process in Kenya.   **(5mks)**

   b) Describe the role of the speaker of the national assembly.   **(10mks)**

KCSE 2022 PREDICTION

SERIES 1

NAME……………………………………………… INDEX NO………………………

SCHOOL…………………………………………… SIGN………………………………

DATE………………………………………………

311/2

HISTORY AND GOVERNMENT

PAPER 2

TIME: 2 ½ HOURS

INSTRUCTIONS TO THE CANDIDATES

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

- *Answer **all** questions in **section A**, **three** in **section B** and **two** in **section C**.*

- *All answers must be written in the answer booklet provided*

FOR EXAMINERS' USE ONLY

SECTION	SECTION	SECTION B				SECTION C			TOTAL
QUESTIONS	1-17	18	19	20	21	22	23	24	
SCORE									

©2022 The Kenya National Examinations Council

SECTION A (25 MARKS)
Answer ALL questions in this section

1. Identify **two** chemical methods of dating fossils **(2 marks)**

....

....

2. State **two** features of a government. **(2 marks)**

....

....

3. Name **one** source of information on the creation theory. **(1 mark)**

....

4. Give **two** symbols of authority in pre-colonial Buganda Kingdom. **(2 marks)**

....

....

5. Name **two** participants of the Trans-Saharan trade apart from the Tuaregs. **(2 marks)**

....

....

6. Apart from scrolls, give one other material on which messages were written in
ancient times. **(1 mark)**

....

7. Give **two** political effects of the Industrial Revolution in Europe. **(2 marks)**

....

....

8. Give **one** importance of the Odwira Festival in the ancient Kingdom of Asante.**(1 mark)**

....

....

9.　　　　　　Give **two** factors that determine the form of a constitution.　　　**(2 marks)**

....

....

10.　　　Mention **one** social factor that led to the African resistance during the colonial period.

(1 mark)

....

11.　　　State **one** undiplomatic method used by the Europeans to acquire colonies in Africa. **(1 mar**

....

12.　　　Name the underground movement established by African National Congress to fight against apartheid system in South Africa.　　　**(1 mark)**

....

13.　　　State **two** functions of emirs in Northern Nigeria.　　　**(2 marks)**

....

....

14.　　　State the main reason why U.S.A. took a neutral stand at first during the

First World War.　　　**(1 mark)**

....

15.　　　State the immediate incident that sparked off the Second World War　　　**(1 mark)**

....

16.　　　What is Veto power as adopted by United Nations Security Council?　　　**(1 mark)**

....

17.　　　Name **one** two political parties that fought for independence in Ghana　　　**(1 mark)**

....

....

©2022 The Kenya National Examinations Council

SECTION B (45 MARKS)

Answer ANY THREE questions in this section

18. **(a)** Identify **five** factors that facilitated early agriculture in Mesopotamia. **(5 marks)**

(b) Explain **five** causes of food shortage in Africa today . **(10 marks)**

19 . **(a)** State **three** disadvantages of using coal as a source of energy. **(3 marks)**

(b) Explain **six** effects of scientific inventions on industry. **(12 marks)**

20. **(a)** State **three** factors that enabled Europeans to colonize Africa in the 19th Century.

(3 marks)

(b) Explain *six political effects* of partitioning Africa. **(12 marks)**

21. **(a)** State *five conditions* that one had to fulfill in order to be fully assimilated in Senegal. **(5 marks)**

(b) Explain *the effects* of British Direct rule in Zimbabwe. **(10 marks)**

SECTION C (30 MARKS)

Answer ANY TWO questions in this section

22. **(a)** Give *three parts* into which the Asante kingdom was divided into **(3 marks)**

(b) Explain *six aspects* of the political organization of Shona kingdom during the pre-colonial period. **(12 marks)**

23. **(a)** Name any *three treaties* that formed the Treaty of Versailles. **(3 marks)**

b) Explain *six reasons* why the League of Nations failed to preserve world Peace and security **(12 marks)**

24 **(a)** Identify any *three Pan- Africanists* from Africa. **(3 marks)**

(b) Explain *six achievements* of Pan-Africanism. **(12 marks)**

KCSE 2022 PREDICTION

SERIES 1

NAME……………………………………… INDEX NO……………………

SCHOOL………………………………… SIGN…………………………

DATE…………………………………………

451/1

COMPUTER STUDIES

Paper 1
THEORY
Time: 2 ½ Hours

INSTRUCTIONS TO CANDIDATES

- Write your **Name, Class, Admission Number** and **Index Number** in the spaces provided.
- Answer **ALL** the questions in **section A**
- Answer **question 16 (Compulsory)** and **any other three** questions from **section B.**

FOR OFFICIAL USE ONLY

Question	Maximum score	Actual score
1-16		
17		
18		
19		
20		
TOTAL SCORE		

©2022 The Kenya National Examinations Council

SECTION A: (40 MARKS)
Answer ALL Questions in This Section

1. During a visit to the typing room, Jane a computer student observed a type of printer that uses a beam to create an image on a rotating drum. As the beam hits the drum, some regions attract ink toner particles. The toner is then fused onto a piece of paper.

I. State the name of this type of printer and indicate whether it is an impact or non-impact printer. **(1mark)**

_____
_____

II. List **two** advantages of using the printer mentioned in a. above. **(2marks)**

_____

_____

_____

2. Bunam Water Company sends out field officers to take consumer meter readings. The data collected by the officers is then keyed into the computer. The system then generates utility bills which are printed and sent to the consumers.

i. State **two** transcription errors that are likely to occur during meter reading or input. **(1 mark)**

_____

_____

ii. State **two** ways such errors can be avoided. **(1 mark)**

_____

_____

3. Highlight the dangers associated with the following in a computer laboratory set up:

a. Purchasing software before assessing requirements. **(1 mark)**

_____

_____

b. Using foreign flash disks on the computer. **(1 mark)**

_____

_____

4. To process an instruction, the CPU goes through a cycle of three stages. Name each of the stages. **(3 marks)**

_____

_____

_____

_____

5. Explain the importance of the following spreadsheet operations. **(2 marks)**

(i) Freezing columns

_____

_____

(ii) Data validation

_____

_____

(b) Name **two** types of relationships that can be applied in database design. **(1 mark)**

_____

_____

©2022 The Kenya National Examinations Council

6. Briefly explain any Four block operations that can be performed on data in word processing

(4 marks)

_____

_____

_____

_____

7. **(a)** Mutiso wanted to upgrade the RAM of his computer. State two factors Mutiso should consider when purchasing a RAM module. **(1 mark)**

_____

_____

(b) Define the following terms: **(2 marks)**

(i) Computer Port

_____

_____

(ii) Power supply unit

_____

_____

8. Mkulima Bora is a society that embraced E-Commerce recently. The manager is convinced that there is illegal access to the company's system. State TWO ways in which the society can overcome this problem. **(2 marks)**

_____

_____

_____

_____

9. (a) Study the diagram below and answer the questions that follow.
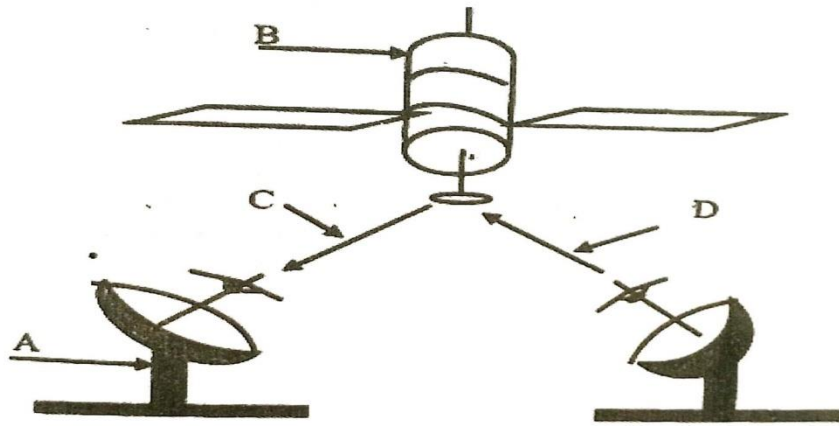
(i) Name the communication media depicted in the above diagram **(1 mark)**

_____

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

A_____

B _____

C _____

D _____

10. In a desktop publishing document, an image embedded can be transformed in various ways.

Name any **three** ways one can use to make the image fit in a designated area. **(3 marks)**

_____

_____

_____

_____

11. Differentiate between source program and object program. **(2 marks)**

....

....

....

12. Differentiate between the following terms in Internet **(4 marks)**

(i) Drafts and outbox

©2022 The Kenya National Examinations Council

_____
_____

(ii) cc and bcc

_____
_____

13. State **two** characteristics of a computer that is infected by computer viruses.　　**(2 marks)**

_____
_____
_____
_____

14. Identify each of the following symbols as used in system flowchart.　　**(1 mark)**

(a)

_____

(b)

_____
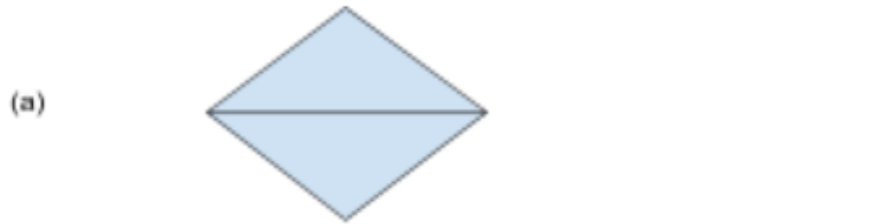
15. Differentiate between bullets and numbering as used in DTP　　**(2 marks)**

_____
_____
_____
_____

SECTION B (60 marks)

Answer question 16 and any other three questions from this section in the spaces provided.

16. a) State any **three** activities that occur in a program compilation process.   **(3 marks)**

_____

_____

_____

_____

b) A program is needed for calculating the average age of students in a class. Write a pseudocode that will read the age of the students and calculate the average age. The program should terminate if the value of 999 is entered for age and output the number of times the statements within the loop were executed.   **(10 marks)**

....

....

....

....

....

....

....

....

....

....

....

....

....

....

....

....

....

………………………………………………………………………………………………………
………………………………………………………………………………………………………
………………………………………………………………………………………………………
………………………………………………………………………………………………………
………………………………………………………………………………………………………
………………………………………………………………………………………………………

c) Give **two** types of errors that may be detected during program testing. **(2 marks)**

_____
_____
_____
_____

17. a) State **four** functions which are specific to Network Operating Systems. **(4 marks)**

_____
_____
_____
_____

b) State **two** advantage of using fibre optic cables over satellite in data communication. **(2 marks)**

_____
_____
_____
_____

c) (i) The figure below shows how data is transmitted through a public telephone . **(4 marks)**
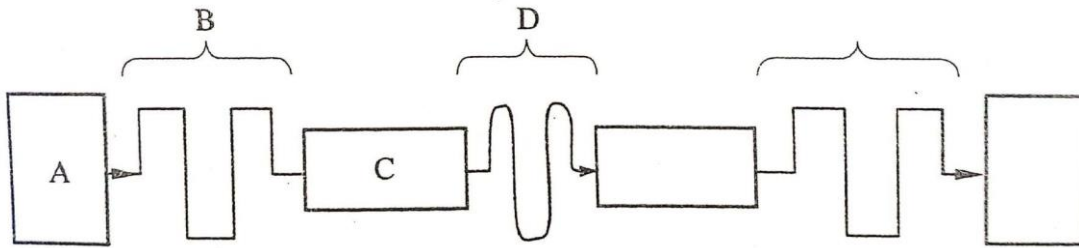
Name A, B, C, and D

_____

_____

_____

d) (i) List any **two** items that may be referred to as data terminal equipments in a network**(2 mks)**

_____

_____

_____

(ii) Write the acronym MODEM in full **(1 mark)**

_____

_____

(iii) Explain the purpose of a modem when connecting to the internet. **(2 marks)**

_____

_____

_____

_____

18. (a) State **three** roles of a programmer in system development life cycle. **(3 marks)**

_____

_____

_____

(b) State **four** activities that may be carried out when disposing off an old system in an

organization **(4 marks)**

_____

_____

_____

(c) Distinguish parallel changes over from straight change over as used in system implementation.

(2 marks)

_____

_____

_____

_____

(d) Discuss **any two** fact finding methods. **(4 marks)**

_____

_____

_____

(e) Differentiate between an open system and a closed system. **(2 marks)**

_____

_____

_____

19. a) State **three** standard coding scheme used computing and electronic systems. **(3 marks)**

_____

_____

_____

_____

b) Convert each of the following numbers

i) 1001.001_2 to octal. **(2 marks)**

_____

_____

ii) 125.5_{10} to hexadecimal. **(3 marks)**

_____

iii) Add 1100.011_2 to 11001.0101_2 and leave your answer in decimal **(3 marks)**

_____

_____

c) Using <u>two</u> compliment perform the following arithmetic leaving your answer in binary form. **(4 marks)**

13_{10} - 15_{10}

....

....

....

....

....

20. (a) Distinguish between axis labels and data labels as used in spreadsheets. **(2 marks**

....

....

....

....

....

(b) Name an electronic spreadsheet feature that allows one to perform the following actions. **(4 marks)**

Action	Feature
Provide pictorial summary of data	
Make one cell out of many	
List items from Highest to lowest or vice versa	
Make many cells out of one	

©2022 The Kenya National Examinations Council

(c) Explain the difference between the printing of multiple pages and multiple copies as used in word processing. **(2 marks)**

_____

_____

(d) Describe the following categories of software **(4 marks)**

    i)   Firmware

_____

_____

    ii)   Proprietary software

_____

_____

(e) Explain the meaning of solid state storage media giving **two** examples of it. **(3 marks)**

_____

_____

_____

_____

KCSE 2022 PREDICTION

SERIES 1

NAME……………………………………………   INDEX NO……………………

SCHOOL…………………………………………   SIGN…………………………

DATE……………………………………………

451/2

COMPUTER STUDIES

Paper 2

(PRACTICAL)

Time: 2½ hours

Instructions to candidates

1.   *Write your name and Index number at the right hand corner of each print out.*

2.   *Write your name and Index number on the CD provided.*

3.   *Write the name and version of the software used for each question attempted in the answer sheet*

4.   *Answer **all** the questions*

5.   *Passwords **should not be used** while saving in the CD provided.*

6.   *All answers **must** be saved in your CD provided.*

7.   *Arrange your printouts and staple them together*

8.   *Hand in all the **printouts** and the CD used*

©2022 The Kenya National Examinations Council

QUESTION 1

a) Use DTP software to design the following business card using the following layout specifications:

(i) Paper size A4 portrait. **(2 marks)**

(ii) Set the margins to 0.5 inches all round. **(2 marks)**

(iii) Divide the page into TWO columns **(2 marks)**

(iv) The border should occupy the first column **(2 marks)**

b) Prepare the publication as exactly as it appears and save it as Business card. **(10 marks)**
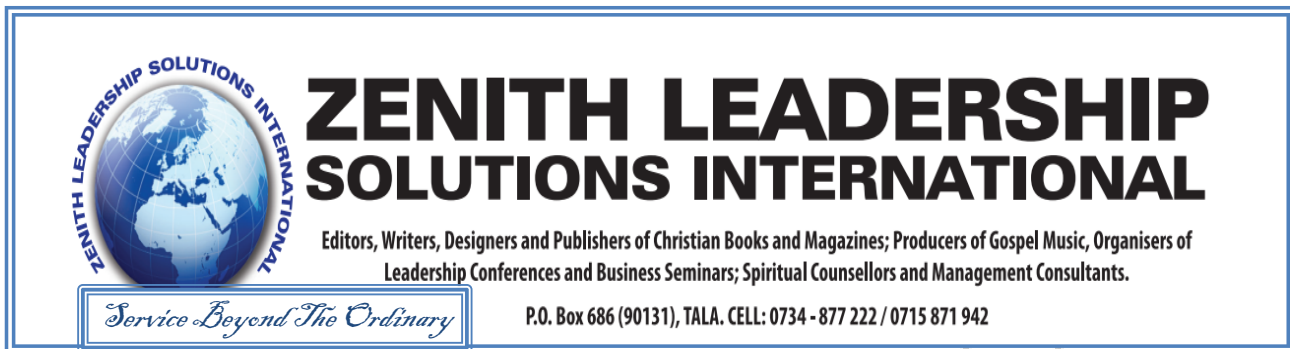
c) Insert your full name above the heading "ZENITH LEADERSHIP…" and centre it across **(5 marks)**

d) Create the logo to occupy between 0.8" to 1.80" left and 0.70" to 1.85" from top. **(5 marks)**

e) The title should occupy between 1.70" to 7.50" across and 0.75" to 1.45" from top. Font Arial black with italics and fill effect pattern of dark horizontal. **(5 marks)**

f) The words "ZENITH LEADERSHIP" should occupy 2.50" to 5.70" across and 1.50" to 2.00" from top. Font Book antique size 26, bold and centered. **(4 marks)**

g) The rest of the text is in font Bodoni MT size 12. **(2 marks)**

(i) Align all the text as shown. **(2 marks)**

(ii) Group the publication as one. **(2 marks)**

(iii) Fit FOUR copies of the design into a single page. **(2 marks)**

h) Include a page header with your index number. **(2 marks)**

i) Save as Updated Business card. **(1 mark)**

j) Print the publication **Business card** and **Updated Business Card**. **(2 marks)**

©2022 The Kenya National Examinations Council

Question 2

The table below shows records extracted from Motors Sales Company Database. Create a database and name it MOTOR SALES. **(1 mark)**

Customer Name	Customer Address	Customer Town	Car Reg No	Car Type	Car Make	Car price	Customer ID	Amount paid
Ogutu	254	Nakuru	KBJ 001T	Truck	Nissan	1,100,00	B001	800,000
John	678	Eldoret	KCM 002M	Bus	Mazda	2,400,00	B002	2,000,00
Uhuru	963	Nairobi	KBB 003V	Saloon	Toyota	800,000	B003	800,000
Ogutu	147	Nakuru	KCJ 004E	Pick u	Peugeot	1,000,00	B004	700,000
Chumba	456	Bungoma	KCH 678E	Lorry	Isuzu	3,000,00	B005	2,000,00
Kariuki	789	Webuye	KBB 006N	Pick u	Toyota	1,800,00	B006	1,600,00
John	678	Eldoret	KBJ 007I	Bus	Scania	7,500,00	B002	7,500,00
Uhuru	963	Nairobi	KCC 678C	Truck	Toyota	1,800,00	B003	1,800,00
Phillip	159	Kisumu	KCJ 009H	Saloon	Nissan	9,00,000	B007	900,000
Ogutu	254	Nakuru	KCH 010I	Pick u	Isuzu	1,500,00	B001	1,200,00
Uhuru	357	Kisumu	KCJ 011J	Saloon	Peugeot	600,000	B008	600,000
Kariuki	789	Webuye	KBG 012I	Bus	Isuzu	10,000,00	B006	9,500,00
Ogutu	147	Nakuru	KDA 013A	Truck	Nissan	2,700,00	B004	2,700,00

a) Using the data above, create a table that will hold Car details and another table to hold Customer details. Name them **TABLECAR** and **TABLECUSTOMER** respectively and set appropriate *primary keys.* **(4 marks)**

b) Enforce referential integrity between two tables. **(2 marks)**

c) Create different input forms for each table. Name them **FORMCAR** and **FORMCUSTOMER**. Use them to enter data into the tables. **(12marks)**

d) Display a report only showing the details of the Customers who have cleared paying for the Car. Name the report **REPORTCLEARED.** Add "**CLEARED CUSTOMERS''** as the title of the report**. (7 marks)**

e) Using the two tables create an *outlined report* showing the *customer details*, *the total amount paid by each customer* and *the total amount received* by the company. Name the report **SUMMARY** and the title as "**OVERALL CUSTOMERS REPORT**.''

(8 marks)

f) Create a query to display the Car details with balances of less than 300,000. Name the query as **BALQUERY.** **(4marks)**

g) Create a report showing the *Car type, the total sales for each car type* and *the grand total*. Name the report as **REPORTGRAND.** **(6 marks)**

h) Using landscape orientation, print **REPORTCLEARED**, **SUMMARY** and **REPORTGRAND** with *footers bearing your lastname* and *index number* at the *center of the page*.

(6 marks)

KCSE 2022 PREDICTION

SERIES 1

NAME………………………………………… INDEX NO……………………

SCHOOL……………………………………… SIGN…………………………

DATE…………………………………………

441/1

HOME SCIENCE

THEORY
PAPER 1
2½ HOURS

INSTRUCTIONS TO CANDIDATES

➢ *Write your name and index number in the spaces provided above.*

➢ *Sign and write the date of examination in the spaces above.*

➢ *This paper consist of three sections: A,B and C.*

➢ *Answer all questions in section A and B and any two questions from section C in the spaces provided.*

FOR EXAMINER'S USE ONLY.

SECTION	QUESTION	MAXIMUM SCORE	CANDIDATE SCORE
A	1-25	40	
B	26	20	
C		40	
TOTALSCORE		100	

©2022 The Kenya National Examinations Council

SECTION A (40MARKS)

Answer all questions in the spaces provided.

1. What is a dessert? Give **one** example. **(1mk)**

_____

_____

_____

_____

2. State **two** symptoms of a two-year –old child suffering from choking. **(2mks)**

_____

_____

_____

_____

3. Mention **two** disadvantages of using old blanket pieces for mops. **(2mks)**

_____

_____

_____

_____

4. Give two advantages of being able to draft your own patterns for garment construction.
(2mks)

_____

_____

_____

_____

5. Explain why vitamin D deficiency is not common in most parts of Kenya. **(2mks)**

_____

_____

_____

_____

6. Give two reasons why lemon juice is sometimes added to fruit salads. **(1mks)**

_____

_____

_____

_____

7. Other than burning test, state **two** ways of identifying textile fibres. **(1mk)**

_____

_____

_____

_____

8. List **four** preparations to make on a fabric before laying out patterns. **(2mks)**

_____

_____

_____

_____

9. Why is soup an integral part of an invalid diet? **(1mk)**

_____

_____

_____

_____

10. When some accidents occur in the home, a doctor must be consulted immediately. Identify **two** such accidents and explain why the doctor should be consulted. **(2mks)**

_____

_____

_____

_____

11. Irene was machine stitching her apron then the needle broke suddenly. Give two causes for this.

(2mks)

_____
_____
_____

_____

12. Explain briefly the meaning of housing the family. **(1mk)**

_____
_____
_____

_____

13. (i) Define a stitch? **(½ mks)**

_____
_____
_____

_____

(ii)State **two** qualities of a well made stitch. **(1 mks)**

_____
_____
_____

_____

14. List down **two** details that are included in a label for any garment commercially made.

(1mk)

_____
_____
_____

_____

15. Mention **three** classifications of washing machines. **(1 ½mks)**

_____
_____
_____

_____

16.   Suggest **three** advantages of making a budget.   **(1 ½ mks)**

_____

_____

_____

_____

17.   Give **two** reasons for artificial feeding.   **(2mks)**

_____

_____

_____

_____

18.   Differentiate between indirect and semi-direct methods of lighting.   **(2mks)**

_____

_____

_____

19.   Give **two** reasons why fullness is introduced in garment during construction.   **(2mks)**

_____

_____

_____

20.   State **two** common methods of buying goods and services.   **(2mks)**

_____

_____

_____

_____

©2022 The Kenya National Examinations Council

21. Your sister has taken up modeling as a career. She has been starving herself and inducing vomiting after feeding in order to slim. Name two nutritional disorders she is suffering from?

(1mk)

_____

_____

22. State **two** possible causes of large holes in a rubbed in cake mixture. (2mks)

_____

_____

_____

_____

23. Give **one** reason for each of the following practices in cleaning. (2mks)

i) Cleaning a glass window from outside to inside

_____

_____

ii) Scrubbing a wall from down up

_____

_____

iii) Sweeping with long low strokes

_____

_____

iv) Pouring hot water down a kitchen sink drain.

_____

_____

24. Give **two** reasons for fitting airbricks on the outer wall of a room. (2mks)

_____

_____

_____

_____

25. State four disadvantages of the corridor plan arrangement. **(2mks)**

_____

_____

_____

_____

SECTION B (20MARKS)

This is a compulsory question.

26. Your family is planning to visit and spend a weekend with relatives at a campsite. Giving reasons, describe how you would:

a) Describe how you will thoroughly clean her paraffin stove with wicks and leave it ready for use. **(9 mks)**

……………………………………………………………………………………………………
……………………………………………………………………………………………………
……………………………………………………………………………………………………
……………………………………………………………………………………………………
……………………………………………………………………………………………………
……………………………………………………………………………………………………
……………………………………………………………………………………………………
……………………………………………………………………………………………………
……………………………………………………………………………………………………
……………………………………………………………………………………………………
……………………………………………………………………………………………………
……………………………………………………………………………………………………

b) Launder your fast coloured nylon raincoat in readiness for camping. (7mks)

....

....

....

....

....

....

....

....

....

....

....

c) Clean an aluminum cooking pan **(4mks)**

....

....

....

....

....

....

....

....

....

....

....

....

SECTION C (40 MARKS)

Answer any two questions in this section.

27.a) Using well-labeled diagrams explain how you would prepare an interfaced waistband with an extended facing before attachment. **(10mrks)**

b) A well-drained house is a comfortable house to live in. explain five points to support the above statement. **(5mks)**

c) Outline five reasons why it is advisable for women to deliver in the hospital. **(5mks)**

28. a) Define;

(i) A raising agent **(1mk)**

(ii) Give the three ways of introducing raising agents in flour mixtures. **(3mks)**

b) Explain six ways of introducing air into flour mixtures mechanically. **(6mks)**

c) With the aid of two clearly labeled diagrams, show the front and the back measurements required for making a blouse with long sleeves. **(8mks)**

d) State two characteristics of a well- made seam. **(2mks)**

29. a) Give five points on how to ensure the purchase of quality goods by consumers. **(5mks)**

b) Explain five considerations to make when furnishing a sitting room. **(5mks)**

c) State five precautions to take when caring for the sick to avoid the spread of infection. **(5mks)**

d) State five qualities of a well made round bottom patch pocket. **(5mks)**

....
....
....

……
……
……
……
……
……
……
……
……
……
……
……
……
……
……
……
……
……
……
……
……
……
……
……
……
……
……

KCSE 2022 PREDICTION

SERIES 1

NAME………………………………………… INDEX NO……………………

SCHOOL………………………………………… SIGN……………………………

DATE………………………………………………

441/2

HOME SCIENCE

(CLOTHING AND CONSTRUCTION)
PAPER 2
PRACTICAL
CONFIDENTIAL

Instructions to schools.

Provide the following to each candidate.

(a)Light weight plain cotton fabric 35cm by 90cm wide.

(b)Sewing thread to match the fabric.

(c)Embroidery thread 130cm long.

(d)A4 envelop.

©2022 The Kenya National Examinations Council

KCSE 2022 PREDICTION

SERIES 1

NAME…………………………………… INDEX NO…………………

SCHOOL………………………………… SIGN…………………………

DATE……………………………………

441/2

HOME SCIENCE

(CLOTHING AND CONSTRUCTION)

PAPER 2

PRACTICAL

TIME: 2 ½ HOURS.

Practical.

A pattern of a skirt is provided. You are advised to study the sketches, instructions and layout carefully before you begin the test.

Materials provided.

Pattern pieces.

A   skirt Front.

B   skirt Back

C   Yoke

D   pocket

E   waist band

F   Interfacing for Front and Back waistband.

2. Plain light weight cotton fabric 70cm wide by 55cm long.

3. Cotton thread to match the fabric.

4. Embroidery thread 130cm long.

5. A4 Envelop.

©2022 The Kenya National Examinations Council

THE TEST

Using the materials provided, cut out and make the LEFT HALF of the skirt to show the following process.

1. Cutting out.

2. Working of a single pointed dart at the skirt back to include the working of satin stitch to fill "O" on the pocket.

4. Preparation of gathers on the skirt front. DO NOT REMOVE GATHERING STITCHES.

5. Joining the skirt front to the yoke using overlaid seam.

6. Working the side seam using an open seam, edge stitch the raw edges.

7. Making of the waist band.

8. Managing the hem on the lower edge of the skirt by:-

   a) Hold the hem using even tacking. DO NOT REMOVE TACKING.

   b) Working hemming stitches at the front part of the skirt.

9. Presentation.

NB:

At the end of the examination, firmly sew on your work on single fabric a label bearing your name, class and admission number. Remove the needles, pins and unnecessary threads from your work. Fold your work neatly and place it in the envelop provided.

DO NOT PUT SCRAPS OF FABRIC IN THE ENVELOP AND DO NOT SEAL THE ENVELOP.

©2022 The Kenya National Examinations Council

KCSE 2022 PREDICTION

SERIES 1

NAME……………………………………………… INDEX NO……………………

SCHOOL…………………………………………… SIGN…………………………

DATE……………………………………………

441/3

HOMESCIENCE

PAPER 3

PRACTICAL

(FOOD AND NUTRITION)

TIME: 1¼ HOURS

INSTRUCTIONS TO CANDIDATES

PLANNING SESSION: 30 MINUTES

PRACTICAL SESSION: 1¼ HOURS

1. *Read the Test carefully.*

2. *Write your **Name** and **Index number** on every sheet of paper used.*

3. *Text books and recipes may be used during the planning session as reference materials.*

4. *You will be expected to keep to your order of work during practical session.*

5. *You are only allowed to take away your reference materials at the end of the planning session.*

6. *You are <u>not</u> allowed to bring additional notes to the practical session.*

7. *This paper consists of two printed pages.*

8. *Candidates should check the question to ascertain that both pages are printed as indicated and no page is missing.*

©2022 The Kenya National Examinations Council

THE TEST

You and your friend are on half term and are going for a girls outing fun day. Using the foodstuffs and ingredients listed below. Prepare, cook and pack a one course meal for the two of you. Include a refreshing drink.

INGREDIENTS

- Tomatoes
- Potatoes / Wheat flour / Rice
- Spinach/ kales/ cabbage
- Beef cube/ Royco
- Cooking oil
- Salt
- Onions
- Dhania
- Sugar
- Garlic
- Capsicum
- Beef/ chicken
- Pilau mix
- Fruits is season

PLANNING SESSION: 30 MINUTES

Use separate sheets of paper for each task listed below. 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 foodstuffs and equipment you will require.

©2022 The Kenya National Examinations Council

KCSE 2022 PREDICTION

SERIES 1

NAME………………………………………… INDEX NO…………………

SCHOOL………………………………………… SIGN…………………………

DATE……………………………………………

501/1

FRENCH

PAPER 1

LISTENING COMPREHENSION, DICTATION AND CREATIVE WRITING.

TIME: 2 HOURS.

SECTION 1

Listening comprehension (15marks)

Write answers to Questions 1-6 in the spaces provided.

PASSAGE 1

1.   a. Le monsieur cherche le bureau de …………………………………… qui donne …………………………………… d' …………………………… aux candidats.   (1 ½ mark)

b.   Quand il sort de la réception, l'homme va tourner …………………………………
  (1 ½ mark)

c.   Il cherche la porte numéro …………………………………………………**(1 ½ mark)**

PASSAGE II

Complétez ce tableau:

2.   a.

Programme: <<Connaître …………………………………………………>> (½ mark)

Distance du village à la capital: …………………………………… (½ mark)

Population: ………………………………………………………… (½ mark)

Moyen de transport: ………………………………………… (½ mark)

Deux produits agricoles: …………………………………… (½ mark)

b. On présente ce programme chaque …………………………………………………… (½ mark)

PASSAGE III

3.   a. A qui est destiné le message?

………………………………………………………………….. (½ mark)

b. L'objet doit être:

i.   ……………………………………………………………………………………
………………… (½ mark)

ii.   ……………………………………………………………………………………
……………….. (½ mark)

c. Les ……………………………………………. et les

…………………………………………… sont interdits.   (½ mark)

PASSAGE IV

4.   a. Emmanuel est âgé de

……………………………………………………………………. (½ mark)

b. A l'avenir il voudrait devenir ………………………………………………………...
(½ mark)

c. Ses deux loisirs sont ……………………………………. et ……………………………..
(1 mark)

d. En quelle langue va-t-il communiquer avec son correspondant?

……………………………………………………….. (½ mark)

e. On peut le contacter à ……………………………………………. @ jeunemail.com (½
mark)

PASSAGE V

5.   *Remplissez cette fiche de plaints avec les détails de l'objet présenté par la cliente.*

a.

Fiche de plaintes

Jour: ……………………………………………………… (½ mark)

Objet: …………………………………………………… (½ mark)

Couleur: ………………………………………………… (½ mark)

Taille: …………………………………………………… (½ mark)

Prix: ……………………………………………………… (½ mark)

b.   Qu'est-ce que le vendeur offer à la cliente?

……………………………………………………………………………………………………
(1 mark)

Dictation (5 marks)

Write the dictation passage in the spaces provided.

……

……

……

……

……

……

……

……

……

……

……

……

……

……

……

……

……

……

……

……

……

……

SECTION III

Creative writing (15 marks)

In 120 – 150 words, write in French on :-

Either

1.   Begin as follows:

Ce jour là, je me suis levé(e) très tôt le matin car-------------

Or

2.   End as follows

---------------- c'était vraiment un jour inoubliable.

………
………
………
………
………
………
………
………
………
………
………
………
………
………
………
………
………
………

KCSE 2022 PREDICTION

SERIES 1

NAME………………………………………… INDEX NO……………………

SCHOOL………………………………………… SIGN…………………………

DATE…………………………………………

501/2

FRENCH

PAPER 2

(Reading comprehension, Grammar and Functional writing)

2¹/₄HRS

Instructions to Candidates

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

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

c) *This paper has **three** sections: **I, II and III.***

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

e) ***Candidates should answer the questions in French.***

For Examiner's Use Only.

Section	Maximum Score	CandidatesScore
I	15	
II	15	
III	10	
Total Score	**40**	

©2022 The Kenya National Examinations Council

SECTION I

Reading comprehension (15 marks)

Read the passages below and answer the questions that follow each passage.

PASSAGE 1

Se loger coûte cher. C'est pourquoi deux tendances apparaissent. II y a les jeunes qui décident de rester chez leurs parents le plus longtemps possible. Un quart d'entre eux, environ 25%, habitent encore chez leurs parents entre 25 et30 ans. En général, ce sont plutôt les garçons que les filles. Pourquoi ? Les filles disent qu'elles préfèrent être indépendantes. Elles n'ont pas besoin de dire à leurs parents ce qu'elles font et à quelle heure elles rentrent. Et il y a les jeunes qui décident de partir de la maison. Alors, comme les loyers sont chers, ils doivent trouver un logement à partager avec d'autres personnes, c'est la colocation.

a) Donnez un titre à ce passage.   (1 mark)

……………………………………………………………………………………………………

b) D'après le texte, quelles deux options ont les jeunes pour se loger.

i)……………………………………………………………………………………………

ii) ……………………………………………………………………………………………

(2 marks)

c) Qu'est-ce que c'est la colocation?   (1 mark)

……………………………………………………………………………………………………

PASSAGE 2

Ces temps — ci, il y a des crises à la maison. Des scènes terribles entre moi et mes parents toujours pour la même raison ils me posent des questions, me suspectent de cacher les pires choses et à ce moment-là, je me réfugie dans ma chambre.

J'allume la radio pour m'isoler, mais ils continuent de me questionner derrière la porte: "Si tu nous répondais, on pourrait discuter. Quand tu étais petit, tu nous parlais, maintenant on n'a même plus le droit d'entrer dans ta chambre".

J'ai interdit l'accès de ma chambre et je trouve ça normal. Ma mère n'a pas le droit de regarder toutes mes affaires sous prétexte de ranger ou de faire le ménage. La dernière fois, elle a vu une photo de

Véronique (la fille que j'aime) et j'ai eu droit à un interrogatoire: "Eh bien, elle est mignonne. C'est ta petite amie? Depuis quand?

Qu'est-ce qu'elle fait, hem, dis- moi!"

En un sens, je comprends sa curiosité: je suis son fils et elle s'intéresse à moi. D'ailleurs, si elle m'ignorait, je n'aimerais pas non plus. Mais sa façon de se mêler de mes histories m'énerve.

Je ne sais pas si tous les parents sont pareils, mais les miens sont paniques par l'adolescence. Ils devraient se calmer! Bon, c'est vrai que mes notes ont baissé depuis que je connais véronique mais sinon, tout va bien. Ils ont leurs secrets, moi aussi c'est pas plus compliqué que ça!

Teffany (17 ans)

a) Qui a écrit le texte?

(½mark)……………………………………………………………………………………

b) Quel est l'âge de cette personne? (1mark)

………………………………………………………………………………………………

c) Qui est Véronique? (½mark)

………………………………………………………………………………………………

d) Donnez du texte les synonymes des expressions suivants: (1 mark)

(i) demander……………………………………………………………..

(ii) S'occuper de…………………………………………………………

PASSAGE 3

Hier, à environ trois heures de L'après-midi à la Banque Indosuez, quelques clients attendaient patiemment quand, soudain deux jeunes gens âgés d'une vingtaine d'années sont entre dans la salle bruyamment. Ils étaient armés d'un pistolet et un automatique.

« Que personne ne bouge! » a commandé l'un d'eux pendant que l'autre, les yeux caches derrière des lunettes de soleil, braquait un pistolet sur M. Gerard Monneir, le directeur de l'agence.

« J'ai alors fait signe à la caissière de leur remettre l'argent » a dit ce dernier, une heure après les faits.

Les deux ont fourré 75,000 Euros dans un sac en plastique et puis ils ont pris la fuite tranquillement à pied en direction de la gare routière. Selon un des clients de l'agence, la scène n'a duré qu'a peine deux minutes.

a) Quel est L'âge approximatif des deux voleurs?

(½mark)………………………………………………………………………

b) Quelles armes portaient-ils? (½ mark)

………………………………………………………………………………………………

c) Quelle somme d'argent a été mise dans le sac? (½ mark)

…………………………………………………………………………………………………

d)   Par quel moyen se sont – ils échappés?   (1 mark)

…………………………………………………………………………………………………

e)   L'incident a duré approximativement combien de temps?   (½ mark)

………………………………………………………………………………………………….

Passage 4

Le Chômage

Dans le monde entier et surtout au Kenya, il existe une crise grave de manque d'emploi, soi-disant le chômage. Les Jeunes sont les plus vulnérables, particulièrement ceux qui viennent de terminer leurs études à l'école secondaire et cherchent le premier emploi.

Pourquoi y a- t – il le chômage? Il y a plusieurs réponses possibles à cette question. Par exemple, la poussée démographique a provoqué un afflux considérable des jeunes qui cherchent l'emploi. D'ailleurs les jeunes n'avaient pas pu acquérir pendant leur scolarité une réelle formation professionnelle au besoin d'un marché du travail. Parfois, un titulaire d'une licence bien mentionnée ne peut pas trouver de cadre parce qu'on est débutant; donc, il obtient un travail qui ne correspond pas à son diplôme. Quelquefois, l'employeur a le choix de passer un contrat avec quelqu'un expérimenté ou avec un débutant, mais dans la plupart du temps, les employeurs préfèrent l'expérimenté au lieu d'un débutant. Ainsi, Celui qui n'a pas réussi laisse la place à l'autre chômeur. Il est souhaitable que le gouvernement protège les intérêts du Marché du travail par l'assurance d'un bon système d'éducation et par le recrutement d'enseignants bien formés pour faire les jeunes aux école s'adapter à des technologies nouvelles à fin qu'ils obtiennent de bon travail après l'école.

a)   Ce passage, de quoi s'agit-il?

          ………………………………………………………………………………… (1

mark)

b)   D'après le passage, qui sont les chômeurs?

……………………………………………………………………………… (1mark)

   c) Donnez deux raisons du chômage au Kenya?

(i) …………………………………………………………………………….. (½ mark)

(ii) ………………………………………………………………………… (½ mark)

d)   Est-ce que les employeurs préfèrent-ils les jeunes chômeurs débutants?

…………………………………………………………………………………… (1mark)

e)   Qu'est-ce que le gouvernement doit-il faire pour résoudre ce problème?

……………………………………………………………………………… (1 mark)

SECTION II

Grammar (15 marks)

4. Rewrite the sentences below as guided, making any appropriate changes.

a)   Papa dit: « les enfants chantent bien »

Papa dit………………………………………………………………. (1 mark)

b)   Son père lui donne un bonbon.

Le bonbon que…………………………………………………………… (1 mark)

c)   Tu manges encore les pommes frites ?

Non,…………………………………………………………………...($^1/_2$ mark)

d)   De nos jours, Shamim rentre trop tard le soir.

Auparavant,…………………………………………………………. (1 mark)

e)   Il a mal au ventre.

Son ventre…………………………………………………………...($^1/_2$ mark)

f)   On joue le football au terrain de sport.

Le football……………………………………………………….. (1 mark)

g)   Je trouve ta mère très gentille car elle parle…………………………...($^1/_2$ mark)

h)   Vous n'êtes pas kenyane ?

Si,…………………………………………………………………...($^1/_2$ mark)

i)   J'ai mal à la tête.

Mon tête……………………………………………………………….($^1/_2$ mark)

j)   Le cycliste a évité un accident car il a freine a temps.

En……………………………………………………………….. ($^1/_2$ mark)

5. Complete the following letter, filling each space with ONE word only.   (6pts)

Chère Antoine,

Bonjour ! Comment ça va ? Je (1)………………remercie pour ta lettre(2)……………………………j'ai reçu la semaine dernière. Ici au Kenya, il(3)…………………très chaud car c'est(4)……saison sèche. Quel temps fait-il(5)……………..France ?

J'accepte entièrement(6)………………invitation(7)………………………'aller à Toulouse. Mes parents étaient si ravis(8)………………………ils ont décidé (9)…………m'accompagner jusqu'à l'aéroport Jomo Kenyatta. Je te prie(10)……………m'attendre en compagnie de tes camarades français.

Dis bonjour(11)…………….tes parents de ma part.

Bien (12)…………………..toi,

5. For each situation below write in French an appropriate response. (2pts)

a)   Vous êtes intéressé a` faire partie d'une activité scolaire.

………………………………………………………………………………………………

b)   Votre ami (amie) est malade.

………………………………………………………………………………………………

SECTION III

Composition (10 marks)

6. Write your composition in the spaces provided. Indicate clearly whether your choice is 6 (a) or 6 (b).

6. In 120 to 150 words, write in French on:

Either

a)   Ecrivez une lettre à votre ami francophone pour lui expliquer les activités que vous faites pendant les vacances scolaires.

b)   Votre ami(e) à beaucoup apprécie ce qu'il/elle a mangé chez vous et il/elle en demande la recette. Ecrivez cette recette.

KCSE 2022 PREDICTION

SERIES 1

NAME………………………………………… INDEX NO……………………

SCHOOL……………………………………… SIGN…………………………

DATE…………………………………………

314/1

ISLAMIC RELIGIOUS EDUCATION

Paper 1

2 ½ hours

Instructions to candidates

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

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

c) This paper consists of SIX questions

d) Answer any FIVE questions in the spaces provided at the end of question six

e) Candidates should check the question paper to ascertain that all the questions are available

f) Candidates should answer the questions in English

For Examiner's Use Only

QUESTION	1	2	3	4	5	6	TOTAL SCORE
CANDIDATE'S SCORE							

©2022 The Kenya National Examinations Council

QUESTIONS

1.   (a) State the teachings a Muslim can learn from surah Nasir (Q:110)   **(5 mks)**

(b) Explain the circumstances that led to the revelation of Surah An Nur (Q.24).   **(5 mks)**

(c) Give reasons why the nature of the Quran changed from short to long verses when it was

revealed in Madina   **(10 mks)**

2.   (a) State the teachings of Ayatul Qursi on the attributes of Allah.   **(5 mks)**

(b) Explain five problems in translating the Quran into other languages.   **(5 mks)**

(c) Describe the language of Quran.   **(10 mk**

3.   (a) Name the main shia collections of Hadith.   **(4 mks)**

(b) Explain the methods used by Imam Bukhari in collecting and compiling Hadith.   **(6 mks)**

(c) Discuss the effect of anger.   **(10 mks)**

4.   (a) Outline four differences between Sharia and fiqh.   **(4 mks)**

(b) Discuss the contribution made by Imam Abu Hanifah to Islam.   **(8 mks)**

(c) Describe the benefit of Tawba.   **(8 mks)**

5.   (a) Describe the undesirable act s in prayers.   **(5 mks)**

(b) State the difference between Zakatul Mal and Zakatul fitr.   **(5 mks)**

(c) Discuss how Hajj helps a Muslim to advance spiritually.   **(10 mks**

6.   (a) Outline the qualities of an Imam according to the shia belief.   **(5 mks)**

(b) Discuss the significance of believing in Qadar (predestination).   **(7 mks)**

(c) State the characteristics of the revealed scriptures.   **(8 mks)**

KCSE 2022 PREDICTION

SERIES 1

NAME……………………………………… INDEX NO……………………

SCHOOL………………………………… SIGN…………………………

DATE……………………………………………

314/2

ISLAMIC RELIGIOUS EDUCATION

Paper 2
2 ½ hours

Instructions to candidates

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

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

c) *This paper consists of SIX questions*

d) *Answer any FIVE questions in the spaces provided at the end of question six*

e) *Candidates should check the question paper to ascertain that all the questions are available*

f) *Candidates should answer the questions in English*

FOR EXAMINER'S USE ONLY

Question	1	2	3	4	5	6	Total score
Candidate's score							

©2022 The Kenya National Examinations Council

QUESTIONS

1. (a) Identify any five activities that would lead to Muunkarat.   **(5 mks)**

    (b) Explain the basic beliefs on which Islamic morality is based.   **(8 mks)**

    (c) State seven main objectives of practicing Husunul khulug.   **(7 mks)**

2. (a) State five types of sexual perversion according to Islam.   **(5 mks)**

    (b) Identify the identities a muslim should retain in a changing society.   **(5 mks)**

    (c) Discuss the measures put forward by Islam to curb the spread of HIV/AIDs.   **(10 mks)**

3. (a) Discuss reasons why the family is considered the bedrock of Islamic society.   **(8 mks)**

    (b) Outline six duties of a husband in a Muslim family.   **(6 mks)**

    (c) Highlight the position of a woman in Islam.   **(6 mks)**

4. (a) Give eight factors that may invalidate an Islamic contract.   **(8 mks)**

    (b) Discuss ways of eliminating corruption in the society.   **(12 mks)**

5. (a) State the significance of the two covenants of Al-Agaba entered between the prophet (P.B.U.H) and Madinans.   **(5 mks)**

    (b) Explain any five events that led to the formation of the khawarij movement.   **(10 mks)**

    (c) Describe the factors that influenced the spread of Islam in North Eastern Kenya. **(5 mks)**

6. (a) Discuss the contribution of Sheikh Abdallah Al-Farsy to education in East Africa **(10 mks)**

    (b) Discuss the views of Ibn Khaldun on eduction.   **(10 mks)**

THE END

TO ALL CANDIDATES;

Incase a Significant Number of these Questions Appear in KCSE Exam, Don't panic!

TAKE IT EASY

FOR MARKING SCHEMES CONTACT

0746 222 000

kcsepredictions@gmail.com

SUCCESS

TO ALL

KCSE CANDIDATES