

KCSE JOINT PREMOCK

SERIES 2 EXAMS-2023

ALL SUBJECTS

*Kenya National Schools Pre-mock Examination Tests for the Our Current
KCSE 2023 Candidates. This is in preparation for the Upcoming Mocks,
Post-mocks and the final KCSE Examinations.*

SUBJECTS TESTED;

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

SERIES 2

For Marking Schemes

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

MWALIMU CONSULTANCY

KCSE JOINT PREMOCK

SERIES 2 EXAMS-2023

BIOLOGY

231/1

PAPER 1 (THEORY)

TIME: 2 HOURS

NAME.....

SCHOOL..... SIGN.....

INDEX NO..... ADM NO.....

(Kenya Certificate of Secondary Education)

INSTRUCTIONS

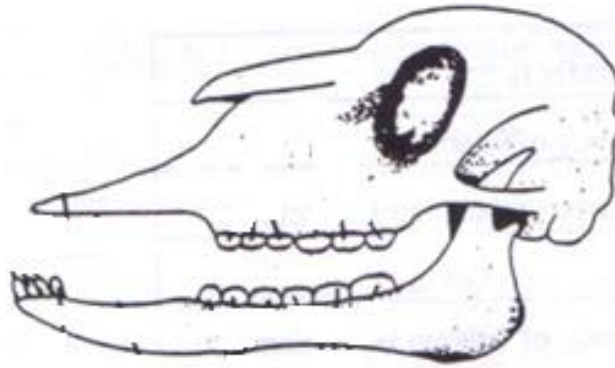
- a) Write your name, class and admission number in the space provided above.*
- b) Write the date of the examination and sign in the space provided above.*
- c) Answer **all** the questions in the spaces provided.*
- d) You may be penalized for wrong spelling especially technical terms.*

FOR EXAMINER'S USE ONLY

Question	Maximum Score	Candidate's Score
1-31	80	

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

1. The figure below is a diagram of a skull. Use the diagram to answer questions.



(a) Identify the type of food utilized by an organism with such a skull. (1 mark)

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

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2. (a) Explain why specimens are important in studying biology. (1 mark)

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(b) Identify an apparatus that is effective in capturing:

(i) A scorpion. (1 mark)

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(ii) Butterfly (1 mark)

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3. (a) Identify an organelle that is most abundant in the proximal convoluted tubule. (1 mark)

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

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4. A student enclosed a leafy shoot using a transparent polythene bag, after 45 minutes clear droplets were observed on the walls of the polythene bag. Anhydrous cobalt (II) chloride paper was used to determine the identity of the clear droplets.

(a) Identify the process under investigation. (1 mark)

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(b) State the expected colour changes of anhydrous cobalt (II) chloride paper. (1 mark)

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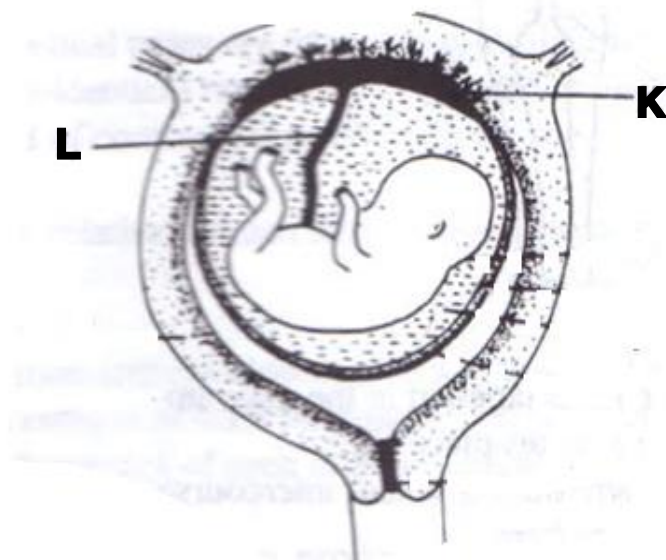
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(c) Explain why the clear droplets cannot be observed when the leafy shoot is not enclosed in a polythene paper. (1 mark)

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5. The figure below illustrates the relationship between a developing foetus and maternal tissues



(a) Give two roles of part labeled K. (2 marks)

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(b) Name a vessel in L that supplies nutrients and oxygen to the foetus. (1 mark)

.....

6. Explain why deficiency of vitamin K leads to excessive bleeding even in small cuts. (2 marks)

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7. Identify the parts of the mammalian heart that plays the following roles

(a) Prevents oxygenated blood from mixing with oxygenated blood. (1 mark)

.....

(b) Secrete pericardial fluid. (1 mark)

.....

(c) Prevents valves from turning inside out. (1 mark)

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8. A flower was observed to be scented.

(a) Identify the phylum of living organisms that transfer pollen grains within the species of plants having the flower. (1 mark)

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(b) Name a physiological process that aids the organisms in (a) above effect the transfer of pollen grains while giving a reason. (2 marks)

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9. Explain why maize stalks do not undergo secondary growth yet they increase in girth. (3 marks)

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10. A food sample was made into suspension and a few drops of iodine was added into it. A blue black colour was obtained. A Benedict's test on the sample gave a clear blue colour. Another sample of the same food was made into suspension. Some millet seeds which had been soaked for 48 hours were crushed and mixed with suspension. The mixture was incubated in warm water bath for six hours at 35⁰c. After incubation, the sample gave a negative test with iodine and positive test with Benedict's solution.

(a) Explain why the iodine test was negative after incubation. **(2 marks)**

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(b) Explain why it is necessary to incubate the mixture in warm water bath. **(1 mark)**

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11. Explain why rate of absorption of mineral salts reduce with less oxygen concentration. **(2 marks)**

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12. Name the:

(i) Material that strengthens xylem tissue **(1 mark)**

.....

(ii) Tissue that is removed when the bark of a dicotyledonous plant is ringed. **(1 mark)**

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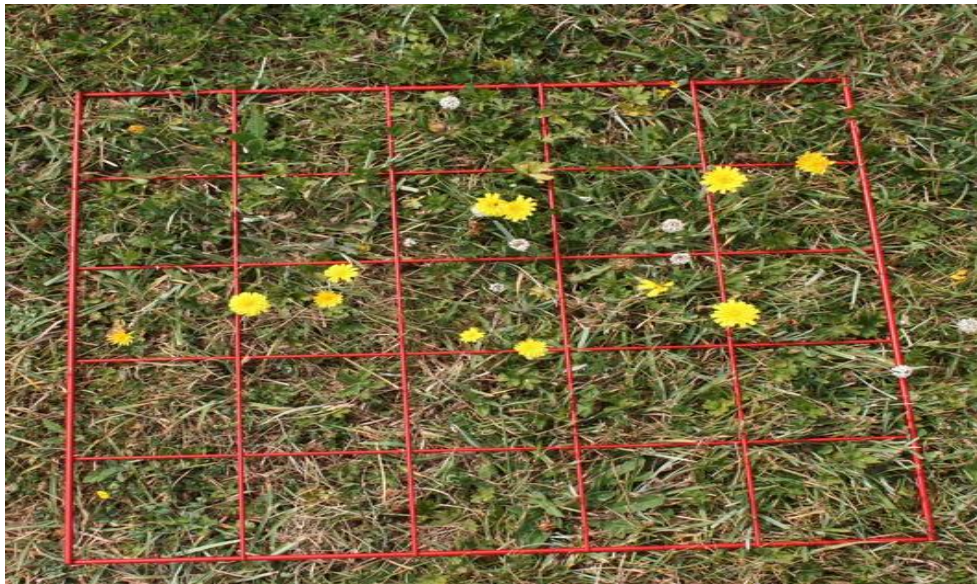
13. State two functions of a cell sap. **(2 marks)**

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14. Below is an apparatus used estimate the population of organisms especially plants



(a) What is the name of the apparatus? (1 mark)

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(b) Explain why the apparatus is not suitable for estimation of animal population. (1 mark)

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(c) State a one feature that can be used to identify the plants under enumeration above. (1 mark)

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15. Below are photographs of plant taken at different times of the day.



6:00 am



12:00 pm

(a) Give a term for used to describe the nature of cells obtained from the plant at;

(i) 6:00 am.....(1 mark)

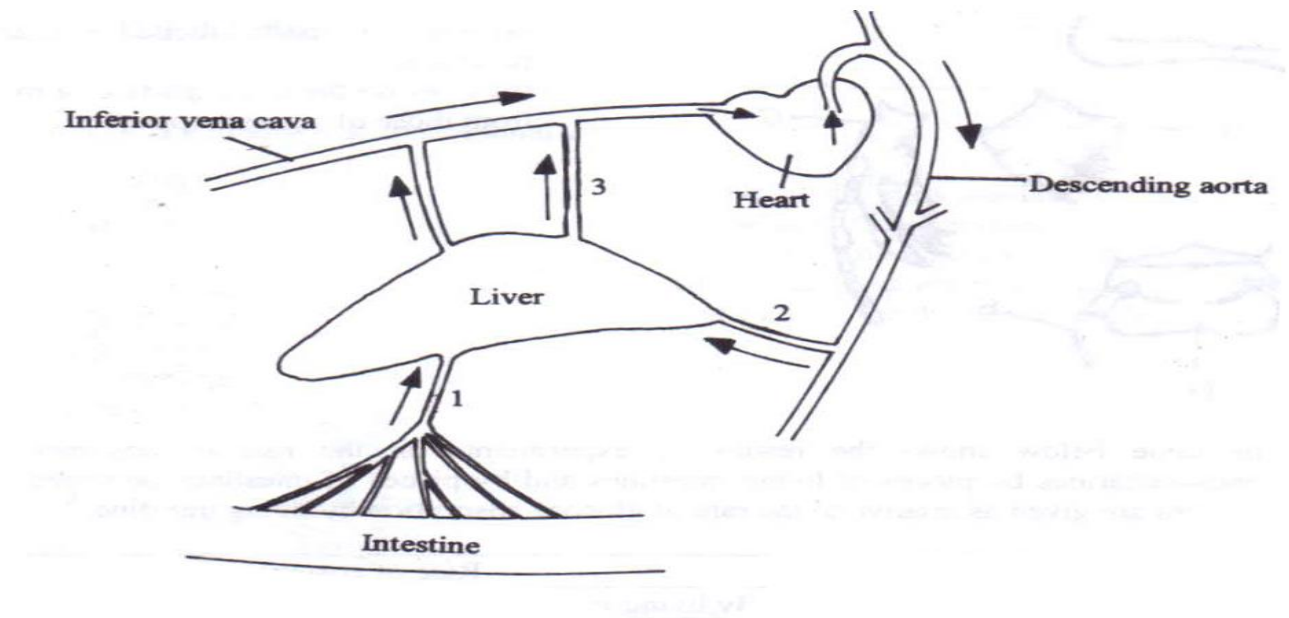
(ii) 12:00 pm.....(1 mark)

(b) What is the significance of this phenomenon to herbaceous plants? (1 mark)

.....

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16. The figure below illustrates the blood supply and drainage of the liver



(a) In which of the vessels labeled 1, 2 and 3 would you expect the highest concentration of glucose after an overnight of fast? Give a reason. (3 marks)

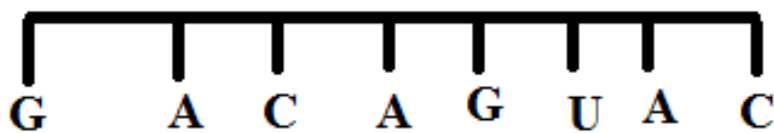
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17. The illustration below represents the base sequence of a segment of a nucleic acid.



(a) Which nucleic acid does the above segment represent? (1 mark)

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

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(c) Name the part of the cell where the segment of nucleic acid is used. (1 mark)

.....

18. Describe how the following structures lower the rate of transpiration;

(a) **Sunken** stomata. (2 marks)

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(ii) Hairy leaf. (1 mark)

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19. Explain the following observation made by Gregory Mendel in his experiments, A cross between a pure breed tall plant and a pure breed dwarf plant had all the first filial generation being tall. (2 marks)

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20. During an ecology field trip, students came across a pond with several bird species, upon closer look the students noted that the beaks of the birds were different in length, shape and size. (a) Identify the type of evolution responsible for the beaks length, shape and size. (1 mark)

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(b) What is the significance of the phenomenon to the birds? (2 marks)

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21. (a) Explain why excessive use of pesticides in the soil lowers the concentration of nitrates(2 marks)

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(b) Explain why a total of 1000 animals that include; giraffes, elephants and zebras can occupy 10 acres of land without depletion of food and yet 1000 cattle will deplete resources in the same piece of land.

(1 mark)

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22. Name two end products of anaerobic respiration in animals. **(2 marks)**

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23. Explain why the presence of air bubble in a xylem vessel would cause drying up of a plant(2 marks)

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24. (a) Identify a useful excretory plant product obtained from raw paw paw fruits. **(1 mark)**

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(b) Give the use of the plant excretory product named in (a) above. **(1 mark)**

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25. Name the method by which the following excretory products are removed from plants.

(i) Excess water. **(1 mark)**

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(ii) Carbon (IV) oxide from cellular respiration. **(1 mark)**

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26. In view of modern genetics, explain why the Lamarckian theory of evolution is not accepted.

(2 marks)

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27. Below is a photograph on cell division.

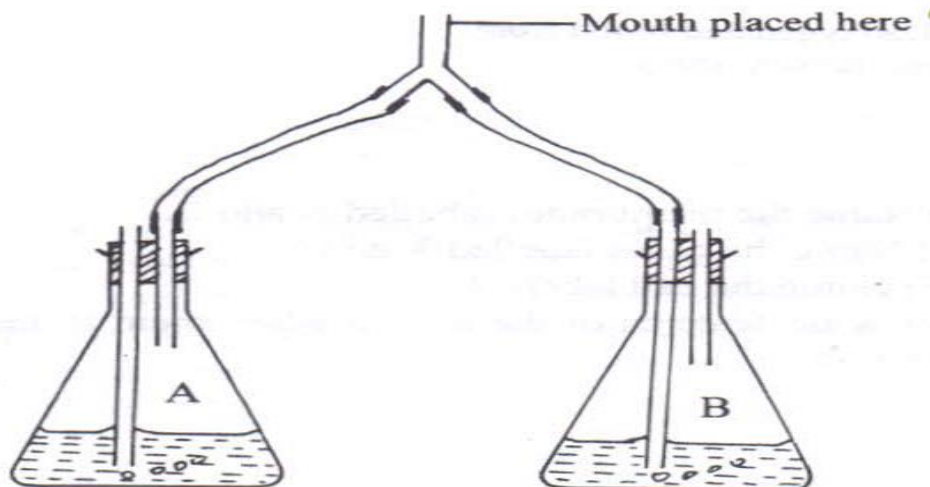


Identify the stages labeled;

(a) A..... (1 mark)

(ii) B..... (1 mark)

28. The diagram below illustrates an experiment to show that there is much more carbon (IV) oxide in exhaled air than inhaled air. Calcium hydroxide is used in both flask A and B.



(a) Explain why it is necessary to use calcium hydroxide solution and not water. (2 marks)

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(b) Identify the flask that shows higher presence of carbon (IV) oxide after five minutes. (1 mark)

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29. Explain why fertilization in flowering plants is termed double fertilization. (2 marks)

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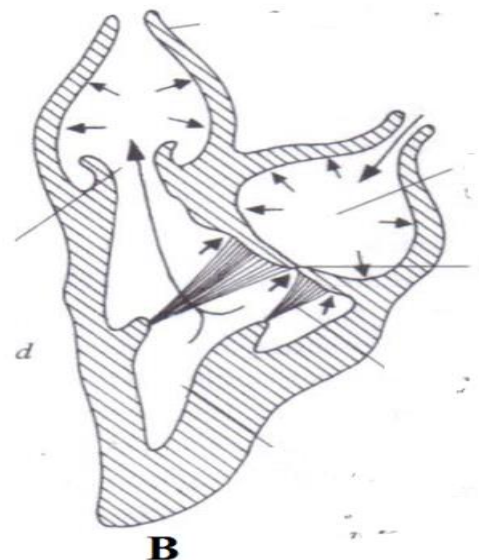
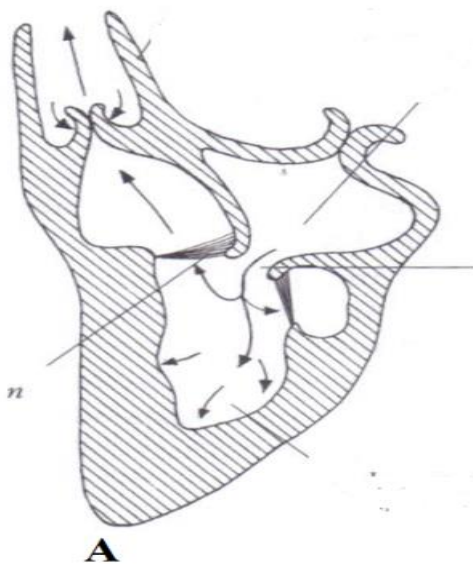
30. (a) What are the roles of testes in the mammalian reproductive system? (2 marks)

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(b) Explain why female frogs produce large number of eggs. (2 marks)

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31. The diagrams below represent a process of the heart that constitutes a heartbeat. Observe and answer questions that follow.



(a) Identify each of the process labeled;

(i) A..... (1 mark)

(ii) B..... (1 mark)

(b) Give a reason for answers in (a)(i) above **(1 mark)**

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KCSE JOINT PREMOCK

SERIES 2 EXAMS-2023

BIOLOGY

231/2

PAPER 2 (THEORY)

TIME: 2 HOURS

NAME.....

SCHOOL..... SIGN.....

INDEX NO..... ADM NO.....

INSTRUCTIONS TO CANDIDATES

- a) Write your name and Index Number in the spaces provided above.*
- b) This paper consists of two sections. Section A and section B.*
- c) Answer ALL questions in section A in the spaces provided. In section B answer question 6 (compulsory) and either question 7 or 8 in the spaces provided.*
- d) This paper consists of 9 Printed pages. Candidates should check the question paper to ensure that all the papers are printed as indicated and no questions are missing*

FOR EXAMINERS USE ONLY.

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

SECTION A (40 MARKS)

1. (a) Explain how dichogamy prevents self-fertilization in flowering plants. (2 marks)

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(b) State the changes that take place in a flower after fertilization. (3 marks)

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(c) Describe the adaptations of the male parts of a wind pollinated flower to their function? (3 Mks)

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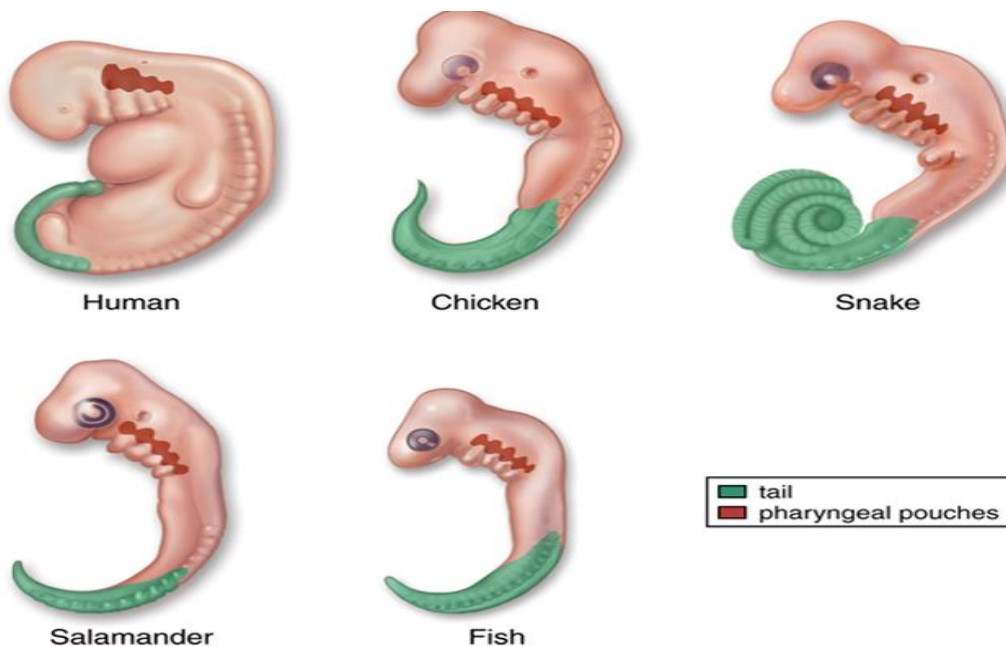
2. (a) Explain how convergent evolution may occur. (3 marks)

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(b) The diagrams below show some organism structures that have been used as evidence of the process of evolution.



Name the type of evidence and explain it provides evidence to proof that the process of evolution may be taking place. (3 marks)

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(c) Outline two evolutionary characteristics that adapt man to his environment. (2 marks)

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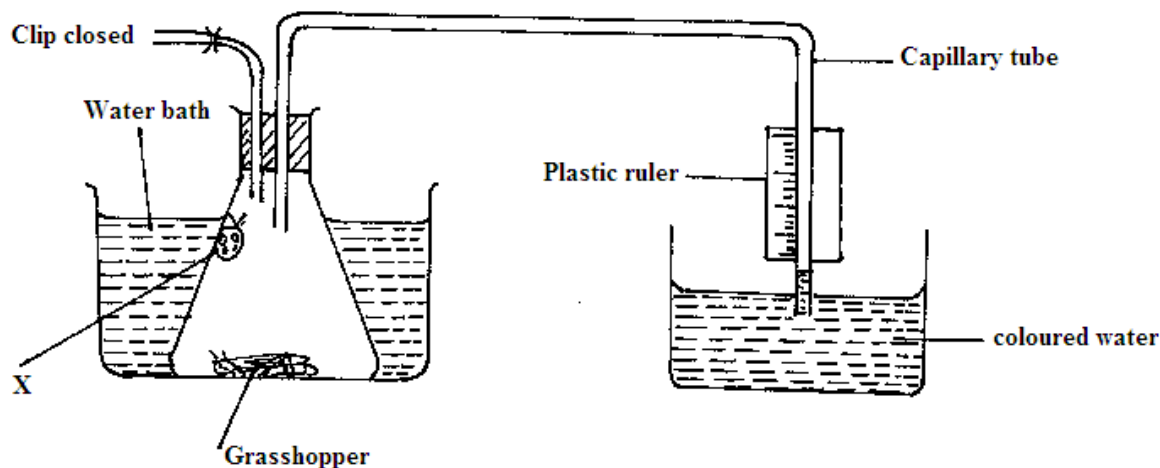
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3. (a) Name the end products of glycolysis. (1 mark)

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(b) The diagram below illustrates an experiment to determine the rate of respiration in a small insect.



(i) Name the chemical compound labelled X and state its function. (2 marks)

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(ii) What changes would you expect to observe in the level of the coloured water in the capillary tube after the experiment has run for 10 minutes? (1 mark)

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(iii) Explain the changes you have stated in (b) (ii) above. (3 marks)

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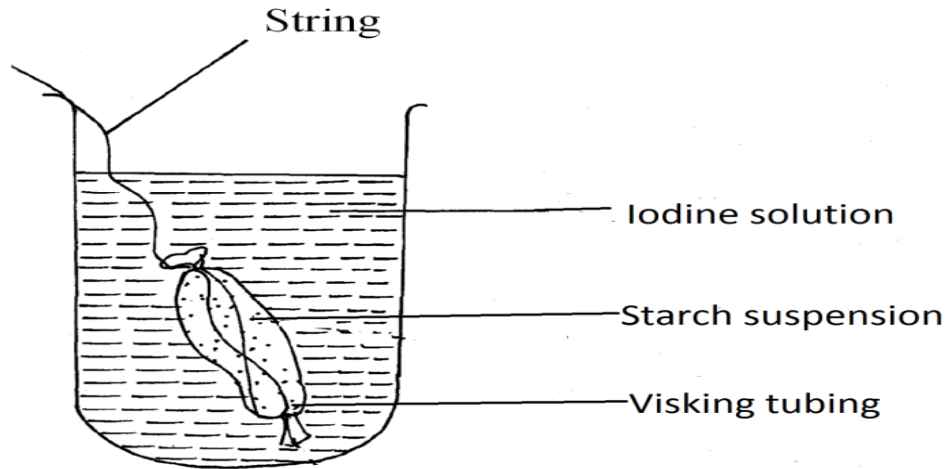
(c) **Why** was it necessary to place the flask in a water bath?

(1 mark)

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4. An investigation was performed by a group of students as shown in the set up below.



After 30 minutes, the starch suspension had turned blue-black while iodine solution retained its colour.

(a) Name the physiological process that was being investigated in the experiment.

(1 mark)

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(b) Account for the results observed after 30 minutes.

(3 marks)

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(c) **Explain** what would happen to a red blood cell when placed in distilled water and left to stand for the same duration as for the experiment above.

(3 marks)

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(d) Define cell physiology.

(1 mark)

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5. In a plant breeding research, a certain plant species was developed and found to be normally green in colour. A recessive gene for colour (g) causes these plants to be white in the homozygous state. In this state, the gene is lethal causing white plants to die at an early age soon after germination. In the heterozygous state, these plants are pale green in colour and grow to maturity.

(a) Suggest a reason for the early death of the plants with homozygous recessive genes.(1 marks)

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(b) A normal green plant was crossed with a pale green plant; work out the genotypes of the F1 generation. Show your working. (4 marks)

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(c) Seeds from the heterozygous plants were planted. The plant breeders allowed the resulting plants to self-pollinate. Work out the phenotypic ratio of the plants that would grow to become mature. (2 marks)

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(d) Give an explanation for the occurrence of the pale green colour in heterozygous plants.(1 mark)

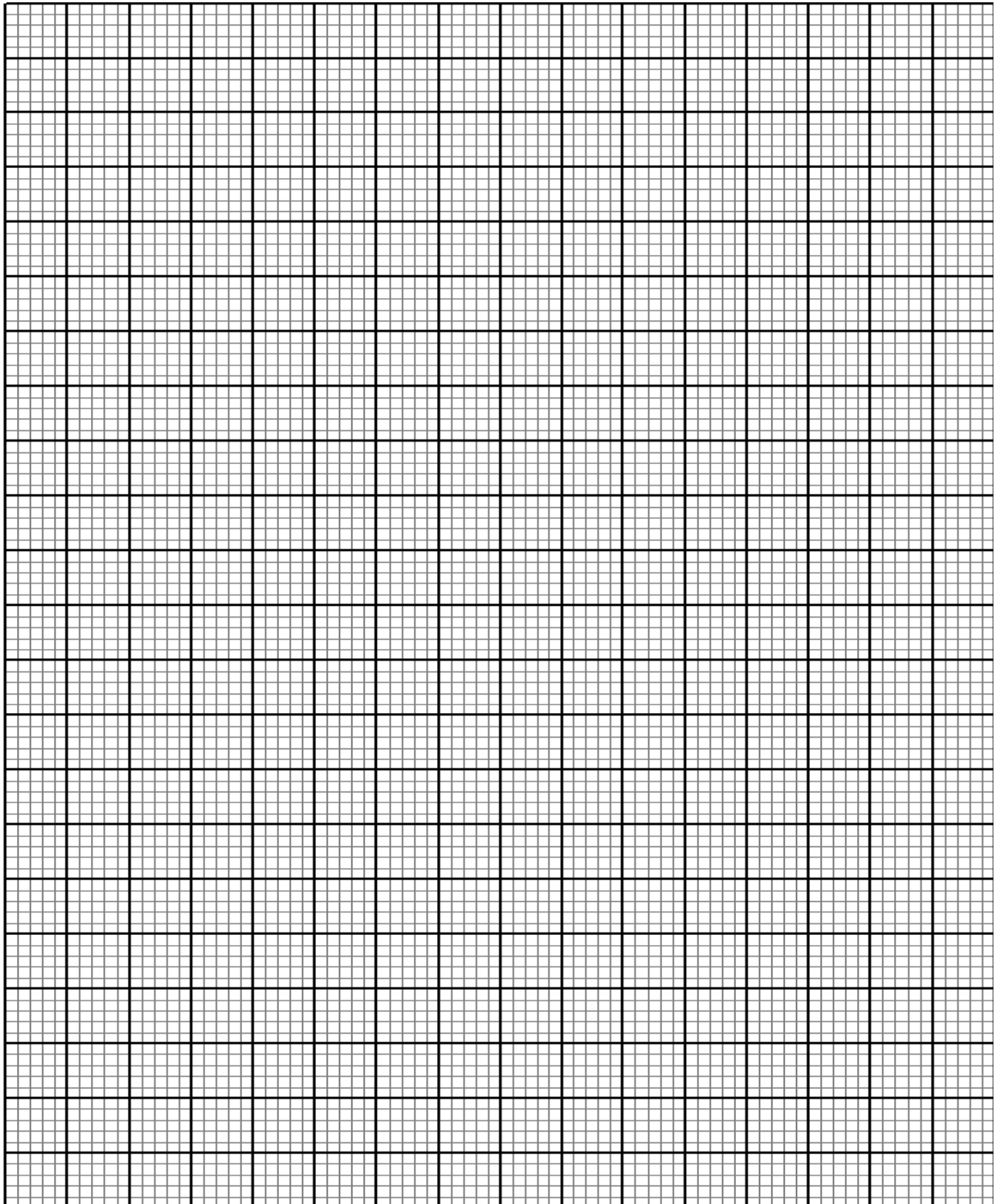
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Answer question 6 (Compulsory) and either question 7 or 8 in the spaces provided after question 8.

- 6. A group** of students carried out a study to estimate the population of grasshoppers in their school compound. The table below shows the number of grasshoppers that were collected from eight sites within the school compound.

Site	1	2	3	4	5	6	7	8
Number of grasshoppers	280	50	190	220	85	300	175	30

- (a)(i)** Construct a bar graph to represent the number of grasshoppers collected from each site. **(6 mks)**



(ii) In a related exercise, students caught 240 grasshoppers, marked them with ink and then released them. After five days, they caught 160 grasshoppers and found that 40 were marked. Work out the estimated population of grasshoppers in the school compound. **(3 marks)**

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(b) (i) Identify the method described in (a)(ii) above. **(1 mark)**

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(ii) Identify the instrument the students might have used to get the grasshoppers. **(1 mark)**

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(iii) State three factors that would influence the results in the method above. **(3 marks)**

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(c) Outline the adaptable observations the students would make on the grasshopper regarding;

(i) Locomotion. **(2 marks)**

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(ii) Protection. **(2 marks)**

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(iii) Feeding.

(2 marks)

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7. (a) Name the tissues in flowering plants responsible for secondary thickening (2 marks).

(b) **Describe** an experiment you would carry out to demonstrate the region of growth in the root of a bean seedling. (8 marks).

(c) **Explain** the role of growth hormones in metamorphosis of a housefly (10 marks).

8. **Describe** the role of the liver in;

(a) Blood sugar regulation. (10 marks)

(b) Thermoregulation. (5 marks)

KCSE JOINT PREMOCK

SERIES 2 EXAMS-2023

BIOLOGY

231/3

PAPER 3 (PRACTICAL)

TIME: 1¾ HOURS

SCHOOL.....

SIGN.....

CONFIDENTIAL

- a) Specimen K-Potato tuber-1 per student*
- b) Hydrogen peroxide.*
- c) Mortar and pestle*
- d) Stopwatch*
- e) Ruler*
- f) Dilute HCL*
- g) NaOH.*
- h) Unboiled Pepsin solution-M1*
- i) Boiled pepsin solution-M2*
- j) Albumen suspension-L*
- k) Thermometer.*
- l) Water bath maintained at 34 c-38c.*
- m) Cork and borer.*

KCSE JOINT PREMOCK

SERIES 2 EXAMS-2023

BIOLOGY

231/3

PAPER 3 (PRACTICAL)

TIME: 1¾ HOURS

NAME.....

SCHOOL..... SIGN.....

INDEX NO..... ADM NO.....

Kenya Certificate of Secondary Education

INSTRUCTIONS TO CANDIDATES

- Write your Name and Index No. in the spaces provided above
- Answer ALL the questions in the spaces provided

FOR EXAMINERS USE ONLY

QUESTION	MAXIMUM SCORE	CANDIDATES SCORE
1		
2		
3		
TOTAL		

QUESTIONS

1. You are provided with the following: suspension labeled L, dilute HCl, NaOH, unboiled solution M_1 and boiled solution M_2 .

a) Perform procedures (i) to (iii) and in each procedure maintain the mixture at a temperature of between 34°C to 38°C for 30 minutes and fill in the table that follows.

(i) Mix suspension L with 1ml of solution M_1 and add 1ml of dilute HCl to the mixture.

(ii) Mix suspension L with 1ml of solution M_1 and add 1ml of NaOH solution to the mixture.

(iii) Mix suspension L with 1ml of solution M_2 and 1ml of HCl to the mixture.

Fill in the table below:

(3marks)

Procedure	Observation
i)	
ii)	
iii)	

i. Account for the difference in observation between procedure (i) and (ii) and (i) and (iii). **(2mks)**

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b) Identify solution M and give two reasons for your answer.

i) Identity

(1mark)

ii) Reason

(1 mark)

.....
.....

c) You are provided with specimen K, hydrogen peroxide (H_2O_2) solution, stop watch, motor and pestle. Make two cylinders each measuring 2cm long. Crush one of the potato cylinders to make a paste and add 1ml of H_2O_2 solution to each of the potato paste and cylinder.

(i) Between the two which one takes a longer time to stop producing foam?

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ii) Record the time taken by the crushed potato to stop producing foam. (1mark)

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iii) Account for the above difference in time taken for foam to stop forming. (3marks)

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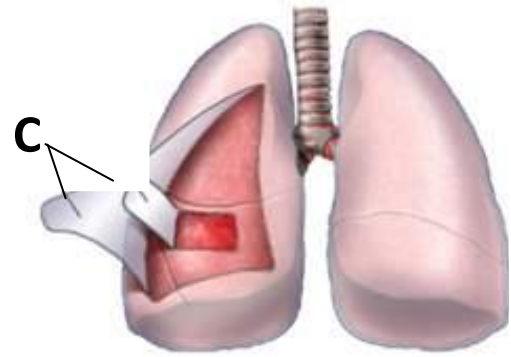
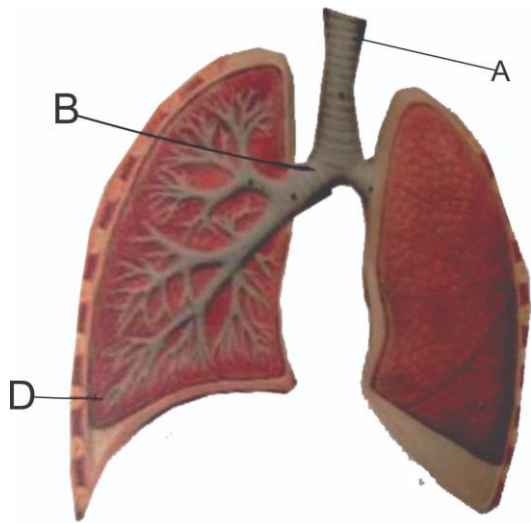
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iv) Calculate the rate of foam formation in the crushed potato cylinder. (3marks)

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



a) (i) Name the parts labeled A, B, C and D.

(4marks)

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(ii) State the adaptation of the part labeled A to its function.

(2marks)

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.....

(iii) State **one** function of the part labeled C.

(1mark)

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(iv) State **three** adaptations of the part labeled D.

(3marks)

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(v) Identify the structures that perform similar function as D, above, in:

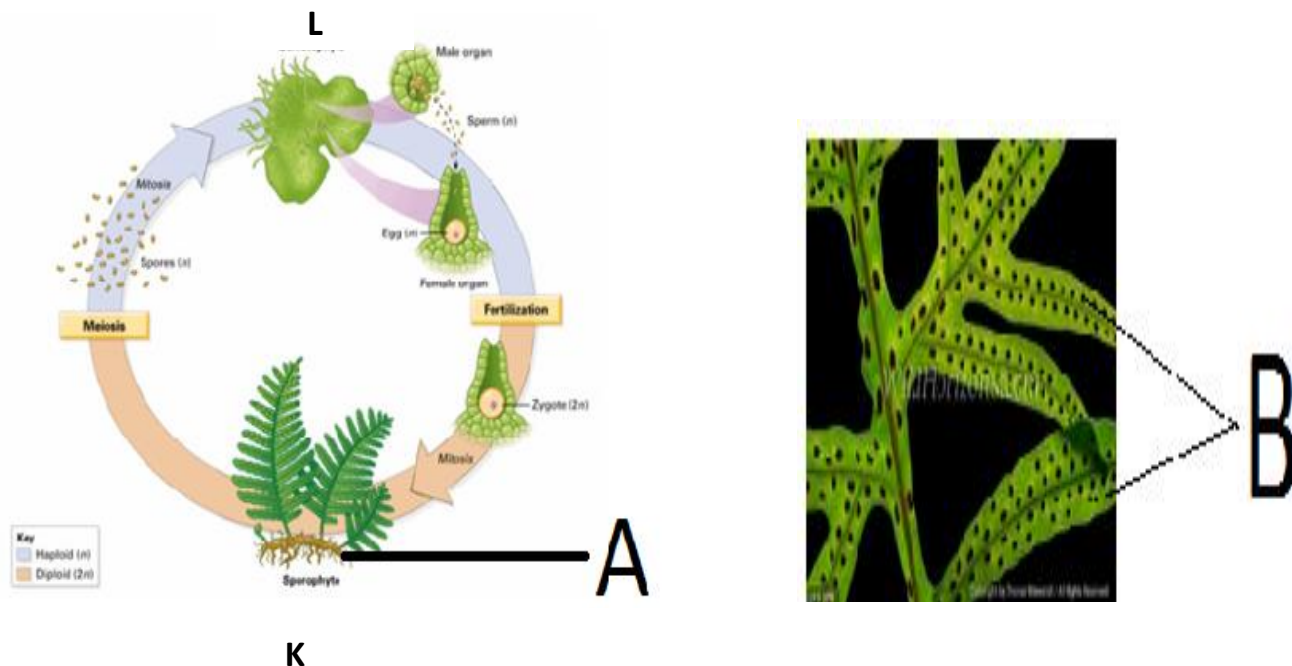
(i) Amoeba.....

(1mark)

(ii) Fish

(1mark)

3. The diagram below illustrates the life cycle of a certain organism.



a) (i) Giving reasons, name the division to which the organism belongs.

Division..... (1mark)

Reasons (2marks)

.....

(ii) Which portion of the plant's life is independent? (1mark)

.....

b) (i) Name the parts labeled A and B. (2marks)

A

B

(ii) State one function of the part labeled B.

(1mark)

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.....

(i) Define the term alternation of generation.

(1mark)

.....

.....

(ii) Identify the generations labeled K and L.

(2marks)

K

L

(iii) In what way is generation L advantageous to generation K?

(2marks)

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KCSE JOINT PREMOCK

SERIES 2 EXAMS-2023

CHEMISTRY

233/1

PAPER 1 (THEORY)

TIME: 2 HOURS

NAME.....

SCHOOL..... SIGN.....

INDEX NO..... ADM NO.....

233/1

CHEMISTRY

Paper 1

Time: 2 hours

INSTRUCTIONS TO CANDIDATES

- Write your name, admission number, date and school in the spaces provided.
- Answer all the questions in the spaces provided.
- All working must be clearly shown where necessary.
- Scientific calculators may be used.

FOR EXAMINERS' USE ONLY

Questions	Maximum Score	Candidate's Score
1 – 29	80	

1. State **two** laboratory rules that should be followed to avoid contamination and wastage of chemicals. (2 marks)

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.....

.....

2. (a) Give **one** reason some of the laboratory apparatus are made of ceramics. (1 mark)

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(b) Name **two** apparatus that can be used to measure approximately 75 cm³ of dilute sulphuric (VI) acid. (2 marks)

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3. Draw the procedural set-ups that can be used to separate a mixture of sand and calcium chloride to obtain crystals of calcium chloride. (3 marks)

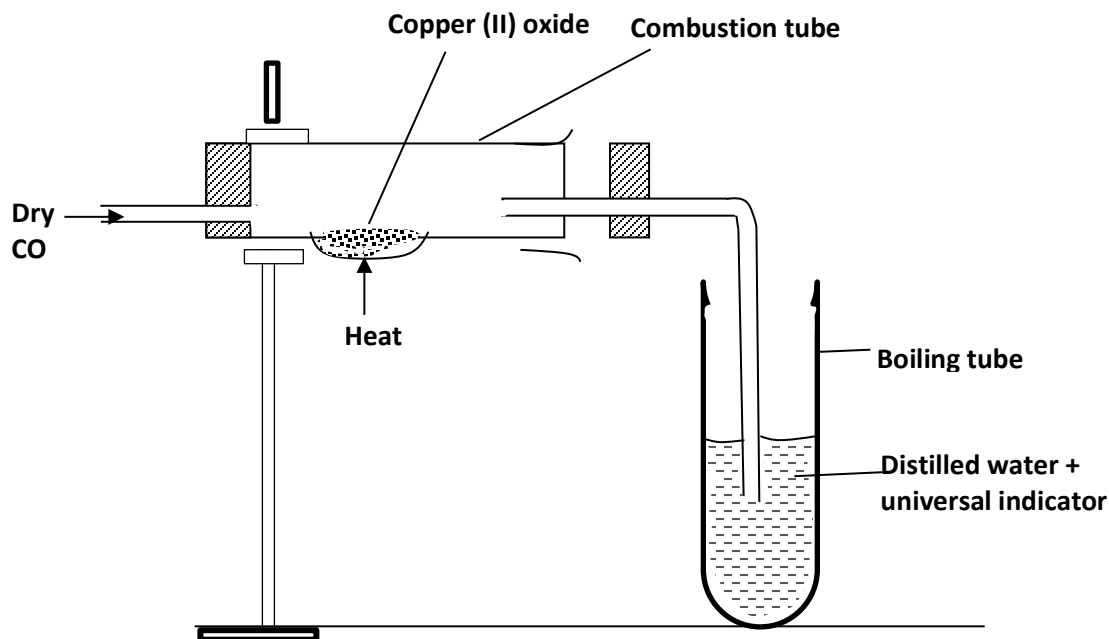
4. State **two** applications of chromatography. (2 marks)

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5.



The above set-up was used to determine the chemical properties of carbon (II) oxide.

(a) Write the chemical equation for the reaction taking place in the combustion tube. (1 mark)

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(b) State and explain the observation made in the boiling tube. (2 marks)

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6. A student placed some hydrogen peroxide in a test tube then added a small amount of manganese (IV) oxide. A glowing splint was then brought near the mouth of the tube.

(a) State the observation made on the glowing splint. (1 mark)

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(b) What is the role of the manganese (IV) oxide? (1 mark)

.....

(c) Give **one** use of the gas produced. (1 mark)

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7. An organic compound with formula C_4H_8 , has isomers. Draw and name two possible structural isomers of the compound. (3 marks)

8. Explain how the compound C_4H_8 and C_4H_{10} can be distinguished using bromine water. (2 marks)

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9. (a) Chlorine can be prepared in the laboratory by using the following reagents and chemicals. Concentrated sulphuric (VI) acid, water, manganese (IV) oxide, concentrated hydrochloric acid.

(i) State the role of concentrated sulphuric (VI) acid. (1 mark)

.....

(ii) Write the equation for formation of chlorine. (1 mark)

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.....

(iii) What is the role of manganese (IV) oxide? (1 mark)

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10.(a) State Boyle's law. (1 mark)

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(b)A gas occupies 270cm^3 at a pressure of 660mmHg at 37°C . What is the new volume if pressure is changed to 810 mmHg at 63°C ? **(2 marks)**

11.An organic compound contains 24.24% carbon, 4.04% hydrogen and the rest chlorine. If its relative molecular mass is 99 , what is its molecular formula? **(3 marks)**
(C = 12 , H = 1 , Cl = 35.5)

12.A given mass of sodium nitrate was heated completely and 320 cm^3 of the gas was produced at s.t.p. Determine the mass of the sodium nitrate heated. (Na = 23 , N = 14 , O = 16 , molar gas volume = 22.4L) **(3 marks)**

13.(a)Give **one** advantage of using methyl orange over phenolphthalein as an indicator. **(1 mark)**

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(b) Three drops of litmus solution was added to 20 cm³ of 2M hydrochloric acid in a beaker followed by 20 cm³ of 2M ammonium hydroxide. State and explain the observation made. **(2 marks)**

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14. A tea farmer suspects that her farm had turned acidic. She obtained a soil sample to analyze for pH. Give her the procedure to follow in order to verify this. **(2 marks)**

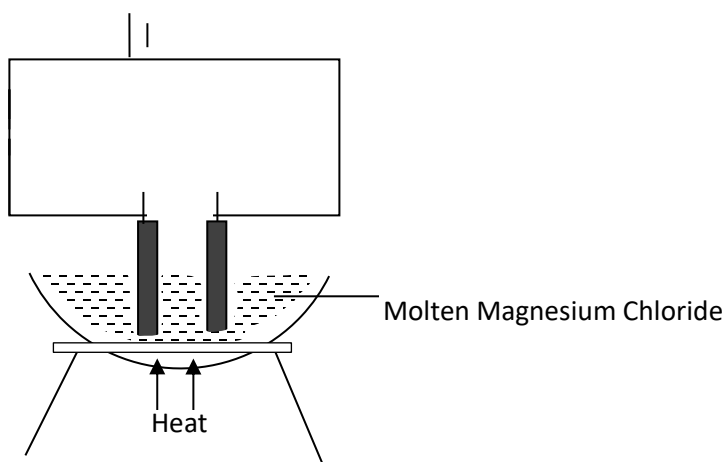
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15. Study the diagram below and answer the questions that follow.



(a) Define electrolysis. **(1 mark)**

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(b) On the diagram, label the Anode and Cathode. **(2 marks)**

(c) Write the equation at the anode. **(1 mark)**

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16. In order to find the proportion by volume of gases in air, a sample of air was passed through two wash bottles, the first containing sodium hydroxide solution and the second containing concentrated sulphuric (VI) acid. The remaining gas was then collected in a syringe.

(a) Why was the air passed through;

(i) sodium hydroxide solution? **(1 mark)**

.....

(ii) concentrated sulphuric (VI) acid? **(1 mark)**

.....

(b) Name the major gas collected in the syringe. **(1 mark)**

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17. During the manufacture of sodium carbonate in the industry.

(a) Give the name of the process to manufacture sodium carbonate. **(1 mark)**

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(b) Write the final equation for the formation of sodium carbonate during the process. **(1 mark)**

.....

.....

(c) Give **one** use of sodium carbonate. **(1 mark)**

.....

.....

18. Describe how to prepare crystal of magnesium sulphate starting with magnesium powder.

(3 marks)

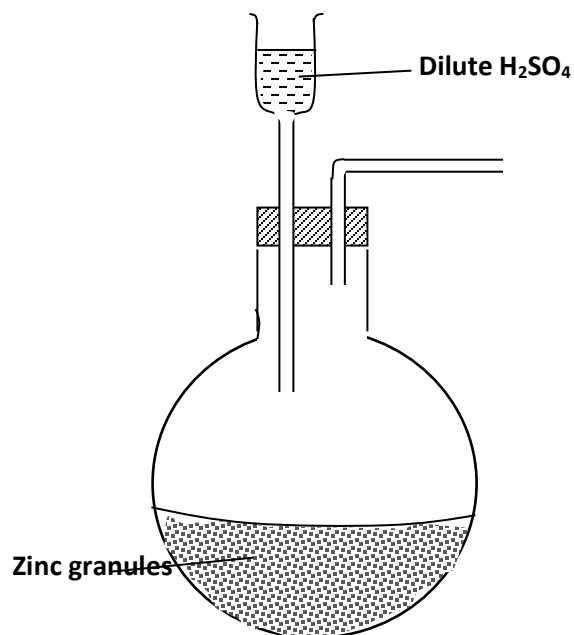
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19.(a) Complete the diagram below to show how dry sample of hydrogen gas is prepared in the laboratory. **(2 marks)**



(b) Name the catalyst which could be used to increase the reaction rate of production of hydrogen gas in the set up drawn above. **(1 mark)**

.....

20. An element consists of two isotopes with atomic masses 59 and 61 in the ratio of 3 : 2 respectively.

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

.....

.....

(b) Calculate the relative atomic mass of the element. **(2 marks)**

21. An element: ${}^{24}_{12}\text{R}$

(a) To which chemical family does it belong? (1 mark)

.....

(b) Write the electron arrangement of the atom. (1 mark)

.....

(c) Draw the structure of its ion. (1 mark)

22. Given the bond energies.

H – Cl 431 kJ/mole

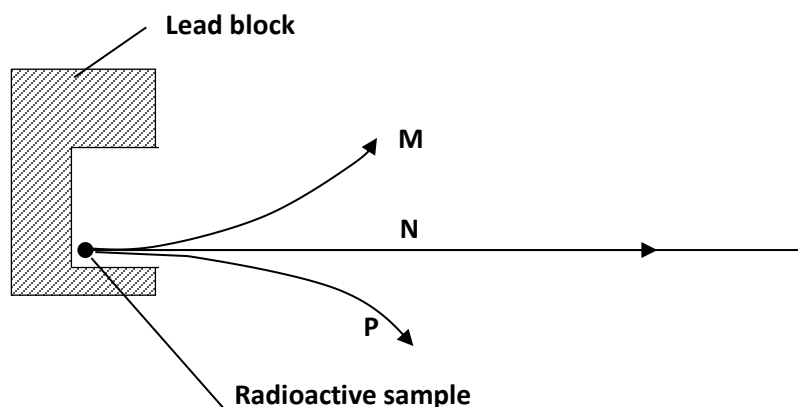
H – H 435 kJ/mole

Cl – Cl 243 kJ/mole

(a) Calculate the enthalpy change for the formation of hydrogen chloride gas when chlorine and hydrogen react. (2 marks)

(b) Sketch the energy level diagram for the reaction. (1 mark)

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



Name the radiations;

(3 marks)

- P** -
- M** -
- N** -

24. Calculate the enthalpy of formation of ethanol given the enthalpies of;

combustion of ethanol = -1369 kJ/mole

combustion of carbon = -394 kJ/mole

combustion of hydrogen = -286 kJ/mole

(3 marks)

25.(a) State what is observed when sodium hydroxide pellets are left in air overnight.

(1 mark)

.....

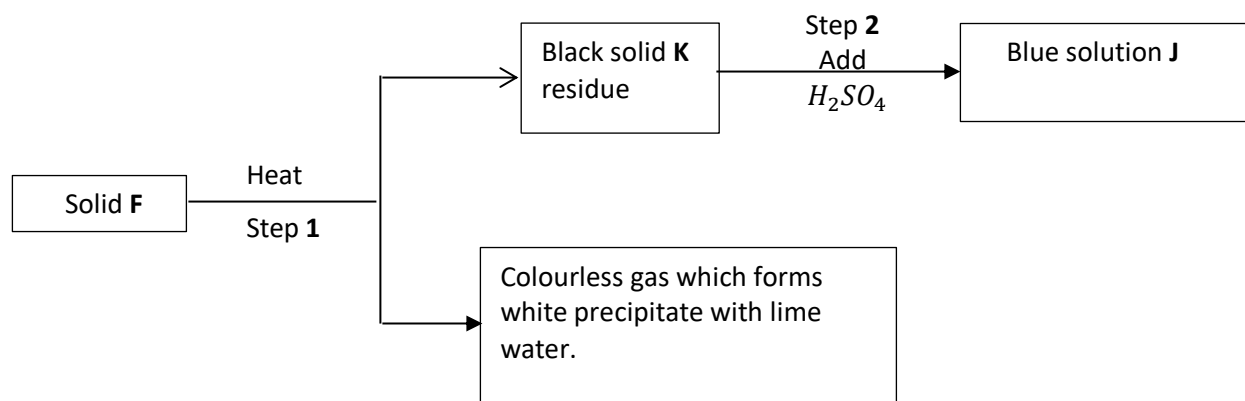
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(b) What name is given the process shown by the salt in (a) above?

(1 mark)

.....

26. Given;



(a) Identify;

Solid F - (1 mark)

Solid J - (1 mark)

(b) Write equation for step 1. (1 mark)

.....
.....

27. A saturated solution of sodium nitrate in water was made at 30°C . Use the information below to answer the questions that follow.

Mass of evaporating dish = 52.5g

Mass of evaporating dish + salt solution = 119.6g

Mass of evaporating dish + dry salt = 59.3g

(a) What is solubility? (1 mark)

.....
.....

(b) Determine the solubility of sodium nitrate at 30°C . (2 marks)

28. Use dot (•) and cross (X) to show the bonding in Lithium oxide.

(1 mark)

29. Excess magnesium ribbon was burnt in air to form a white solid mixture. Write two equations to show the formation of the white solid mixture. **(2 marks)**

.....

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KCSE JOINT PREMOCK

SERIES 2 EXAMS-2023

CHEMISTRY

233/2

PAPER 2 (THEORY)

TIME: 2 HOURS

NAME.....

SCHOOL..... SIGN.....

INDEX NO..... ADM NO.....

INSTRUCTIONS TO CANDIDATES

- a) Write your name and index number in the spaces provided.*
- b) Answer **all** questions in the spaces provided*
- c) Mathematical tables and silent electronic calculators **may** be used for calculations.*
- d) All workings **must** be clearly shown where necessary.*
- e) Candidates should check the question paper to ascertain all the pages are printed as indicated and no questions are missing.*

FOR EXAMINERS USE ONLY

Questions	Maximum Score	Score
1	12	
2	12	
3	12	
4	12	
5	08	
6	14	
7	10	
TOTAL	80	

1. The grid below represents part of the periodic table. Study it and answer the questions that follow.
- Letters are not the actual symbols of the elements.

								B
Q					R		S	
T	U			V	W	X	Y	
Z								

- (i) Select a letter that represents the most reactive non-metal. Explain (2 marks)

.....

.....

- (ii) Select a letter that represents an element that forms an ion with a charge of 2^- (1 mark)

.....

- (iii) Select an alkaline earth metal (1 mark)

.....

- (iv) Which group 1 element has highest first ionization energy? Explain (2 marks)

.....

.....

.....

- (v) What is the formula of the compound formed when V reacts with X? (1 mark)

.....

.....

- (vi) What type of chemical bond exists in a compound formed when R and S react? (1 mark)

.....

- (vii) Explain why the atomic radius of S is smaller than that of Q. (2 marks)

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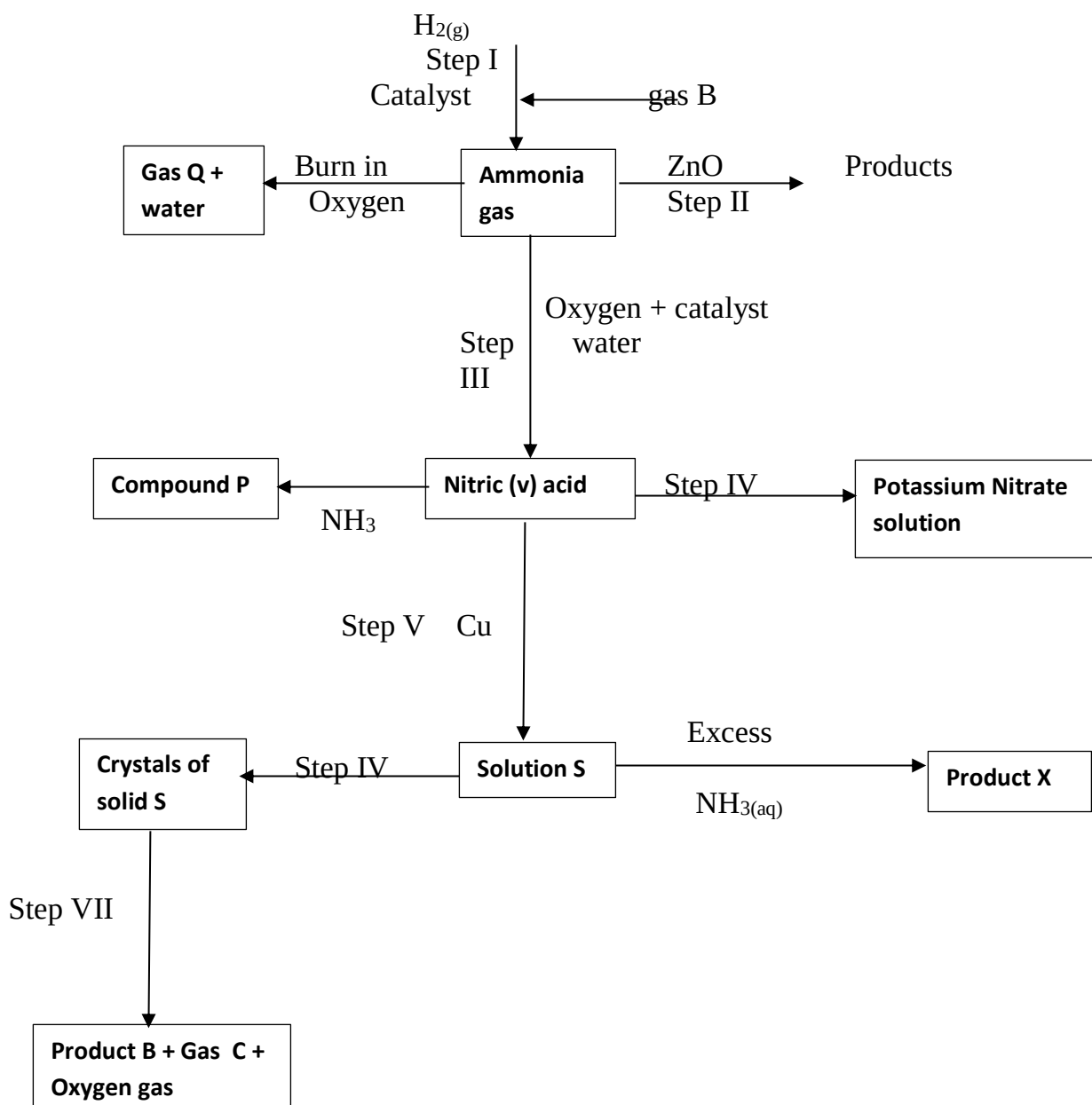
- (viii) Explain why molten calcium chloride conducts electricity while carbon tetrachloride does not conduct electricity (2 marks)

.....

.....

.....

2. Study the flow chart below and answer questions that follow:



(i) State **one** source of gas B (1 mark)

.....

(ii) Name the catalysts used in; (2 mrks)

a) Step I

.....

b) Step III

.....

(iii) Write chemical equations for reactions in; (2 marks)

a) Step II

.....
.....

b) Step VII

.....
.....

(iv) Name the process that takes place in; (2 marks)

a) Step IV

.....
.....

b) Step VI

.....
.....

(v) Name and write the chemical formula of product X

Name (1 mark)

.....

Formula (1 mark)

.....

(vi) State **one** laboratory use of compound P (1 mark)

.....
.....

(vii) Identify any other gas that can be used instead of Ammonia in step II (1 mark)

.....

(viii) State **one** use of gas Q (1 mark)

.....

3. a) Give the systematic names of the following compounds (2 marks)

(i) $\text{CH}_3\text{CH}_2\text{OK}$

.....

(ii) $\text{CH}_3\text{CH}_2\text{COOCH}_2\text{CH}_3$

.....

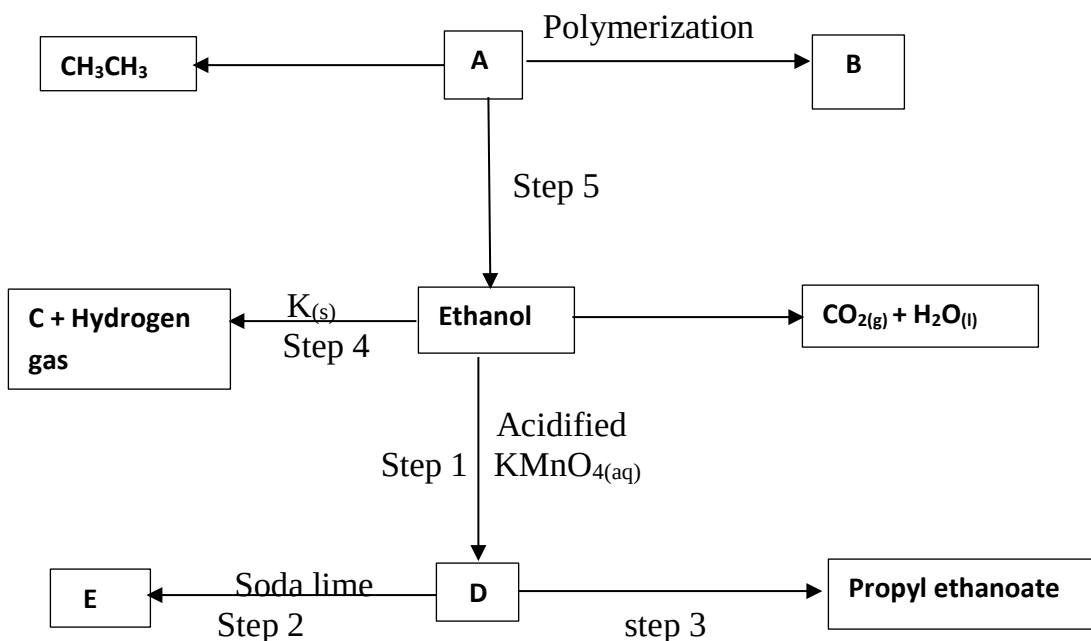
b) Describe a chemical test other than burning that can be used to distinguish between ethene and ethane (2 marks)

.....

.....

.....

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



(i) Name compounds (1 mark)

I. C

II. E

ii) Write the equation for the reaction in (2 marks)

Step I

.....

Step 3

.....

iii) Give the reagents for the reaction in step 5 to occur. **(2 marks)**

.....
.....

iv) Calculate the mass of ethanol which when burnt in air at room temperature and pressure would produce 10dm³ of carbon (IV) oxide gas
(C = 12.0, O = 16.0, Molar gas volume = 24dm³) **(3 marks)**

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

4. In an experiment to determine the molar heat of neutralization of hydrochloric acid with sodium hydroxide, students of a secondary school reacted 100cm³ of 1.0M hydrochloric acid with 50cm³ of 2M sodium hydroxide and obtained the following results.

Initial temperature of acid = 25.0°C

Initial temperature of alkali = 25.5°C

Highest tempature reached with acid and alkali mixture = 34.0°C

a) Define the term molar heat of neutralization. **(1 mark)**

.....
.....

b) Write an ionic equation of the reaction between hydrochloric acid and sodium hydroxide. **(1 mark)**

.....
.....

c) Calculate:

(i) The change in temperature. **(1 mark)**

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

- (ii)** The amount of heat of neutralization of sodium hydroxide. (Specific heat capacity=4.2 kJ/kg/K) **(1 mark)**

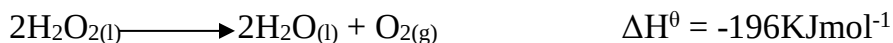
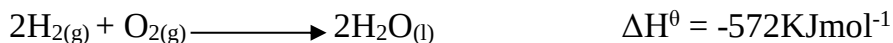
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- d)** Write the thermochemical equation for the reaction. **(1 mark)**

.....

- e)** Draw an energy level diagram for the reaction. **(2 marks)**

- f)** Use the information given below to answer the questions that follow.



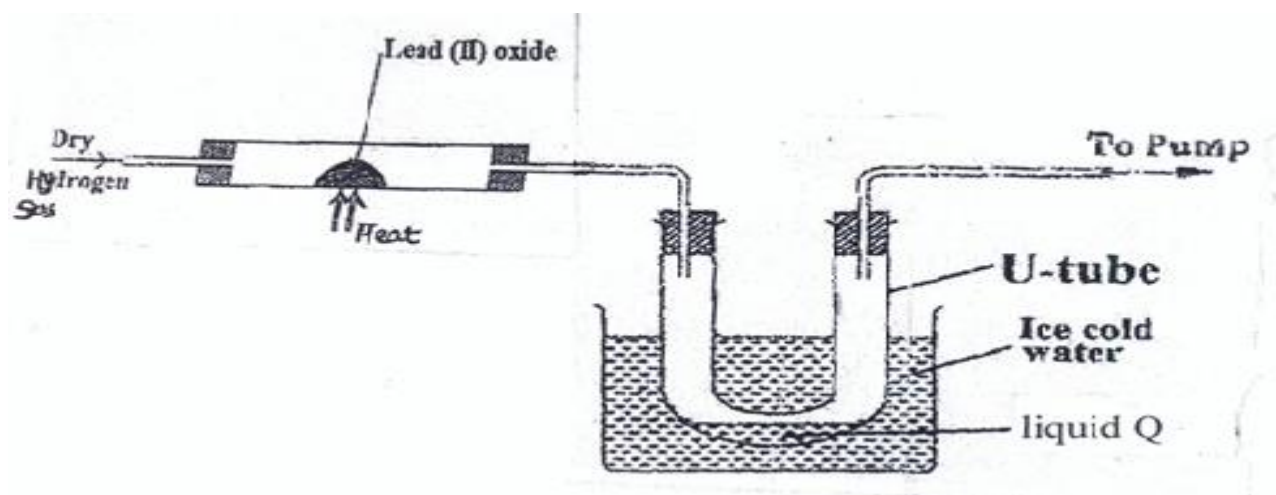
- (i)** Calculate the standard enthalpy of formation of Hydrogen peroxide **(2 marks)**

- (ii)** Draw an energy cycle diagram for the information above linking it with the enthalpy of formation of Hydrogen peroxide. **(2 marks)**

(iii) State **two** applications of enthalpy of combustion (1 mark)

.....
.....

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



a)i) State and explain the observation(s) made in the combustion at the end of the experiment

Observation (1 mark)

.....

Explanation (1 mark)

.....
.....

(ii) Identify a metal oxide that can be used in place of lead (II) oxide (½ mark)

.....

b) Write the balanced chemical equation for the reaction in the combustion tube (1 mark)

.....

c) Give **one** chemical test for liquid Q (1 mark)

.....
.....

d) Explain what would happen if magnesium oxide was used instead of lead (II) oxide in the experiment (1½ mks)

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

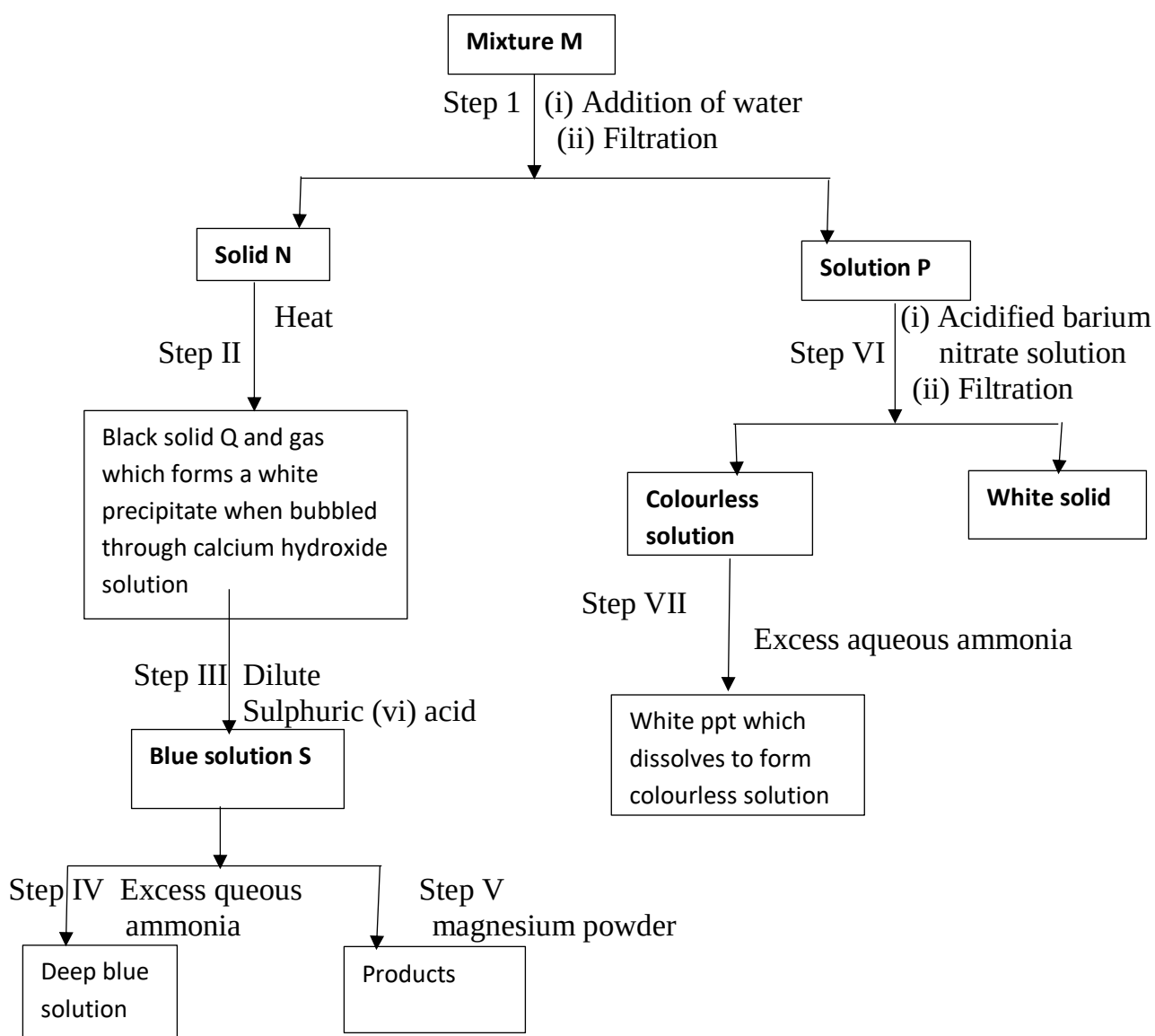
- ii) State **one** observation made when a small piece of potassium metal is dropped into a trough containing liquid Q (1 mark)

.....

- e) Name any **one** source of Hydrogen gas. (1 mark)

.....

6. The flow chart below shows a sequence of reactions involving a mixture of two salts, mixture M. Study it and answer the questions that follow.



a) Write the formula of the following;

(i) Anion in solid N

(1 mark)

.....

(ii) The two salts present in mixture M

(1 mark)

.....

b) Write the ionic equation for the reaction in step VI

(1 mark)

.....

.....

c) State the observations made in step V

(1 mark)

.....

.....

d) In an experiment to determine solubility of potassium chlorate, 5g of potassium chlorate (KClO_3) was dissolved in water and solubility of the salt was determined at various temperatures as shown in the table.

Volume of distilled water (cm^3)	Temperature at which 1 st crystal appears ($^{\circ}\text{C}$)	Solubility of solid of (g/100g of water)
4	68.0	
6	58.5	
8	53.0	
10	47.5	
12	35.0	

a) Define the term solubility

(1 mark)

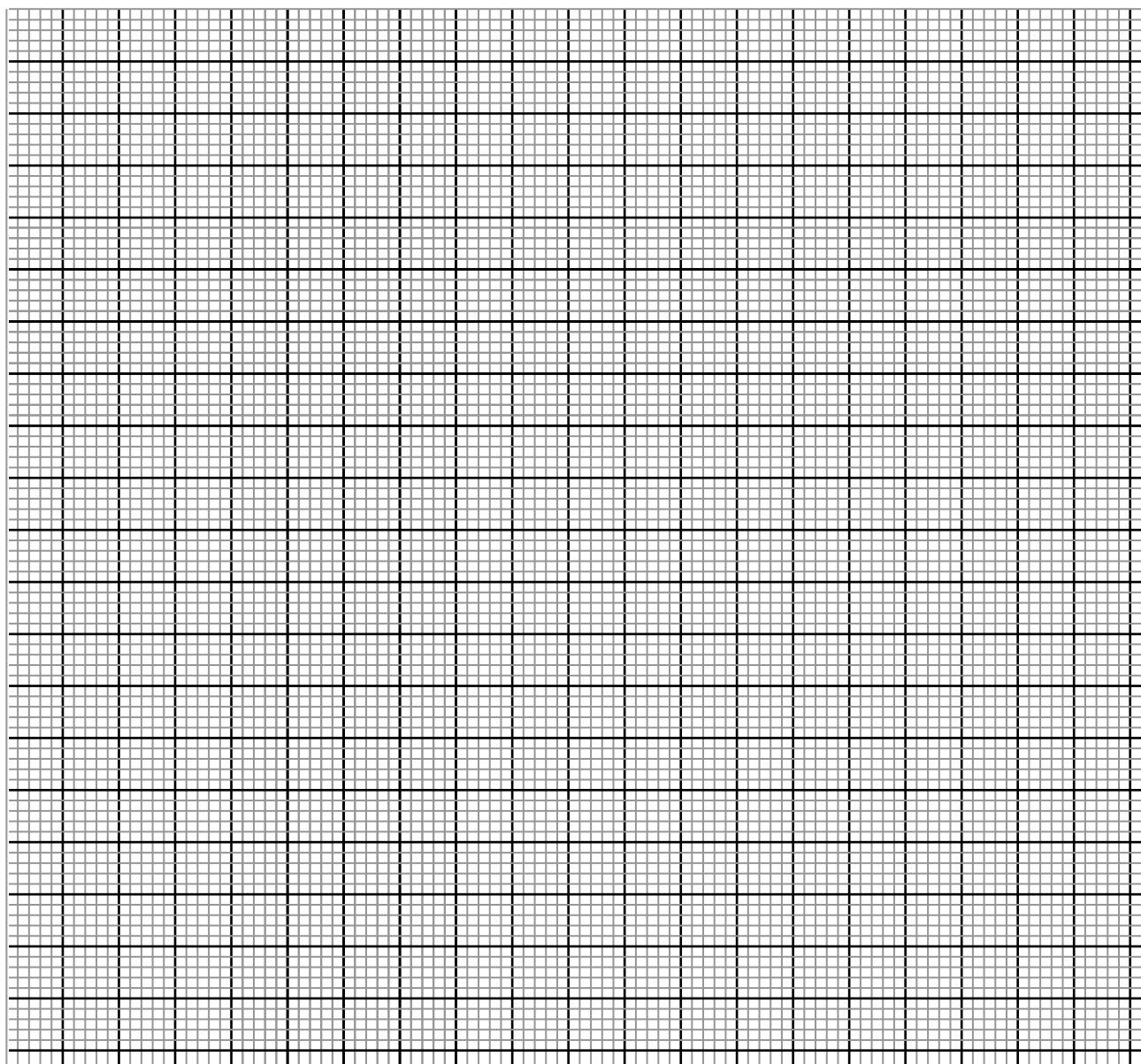
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b) Complete the table by calculating the solubility of potassium **chlorate**

(2½ marks)

- c) On the grid provided, plot a graph of solubility of potassium chlorate (g/100g of water) against temperature ($^{\circ}\text{C}$) **(3 marks)**



- d) State the relationship between solubility of potassium chlorate and temperature **(1 mark)**

.....
.....

- e) Use the graph to determine:

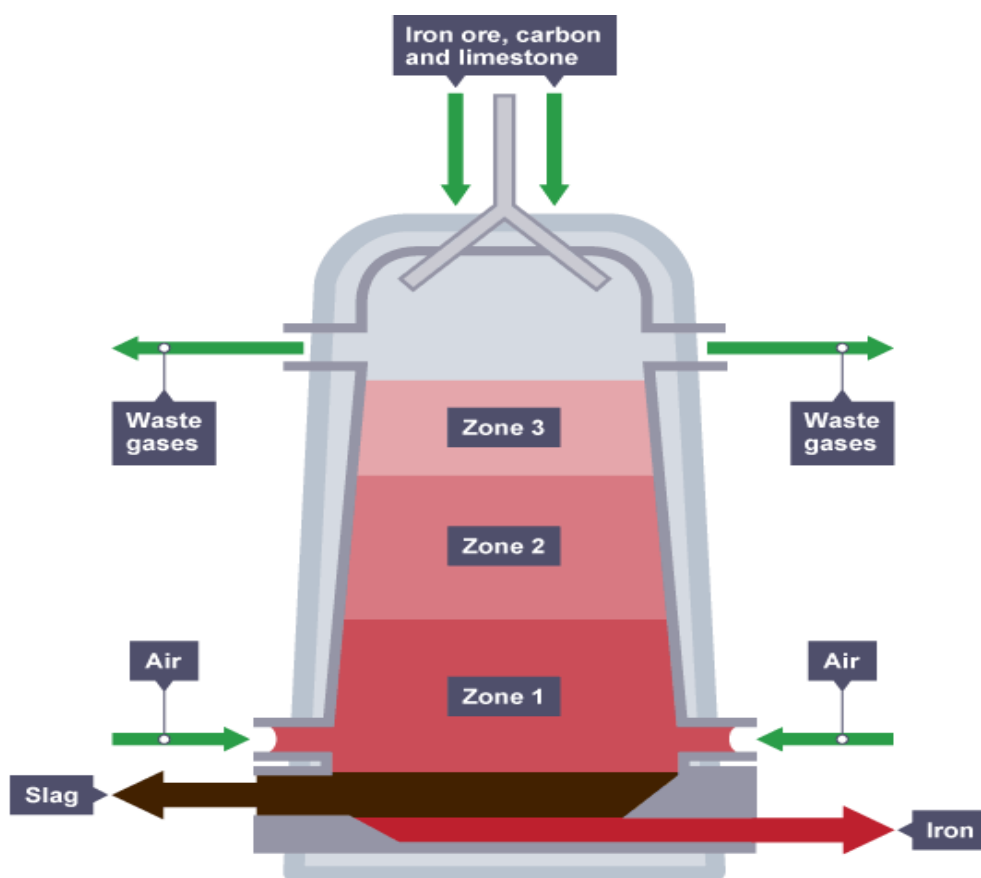
- (i) The solubility of potassium chlorate at 50°C **($\frac{1}{2}$ mark)**

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

(ii) The molarity of the solution at temperature stated in e(i) above (2 marks)
(K = 39, Cl = 35.5, O = 16)

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

7. The diagram below represent the blast furnace for extraction of iron metal. Study it and answer the questions that follow.



a) The chief ore is Haematite. Name one other ore used in extraction of iron (1 mark)

.....

b) In the blast furnace carbon (II) oxide is used as a reducing agent. Write an equation for the reaction between carbon (II) oxide and oxide of iron (1 mark)

.....
.....

c) Silica impurities react with calcium oxide from the kiln.

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

.....

(ii) Explain why it is possible for the reaction to occur. (1 mark)

.....

.....

d) Explain why iron is a good conductor of electricity. (1 mark)

.....

.....

e) Iron is malleable and ductile. Give the difference between malleability and ductility

Malleability (2 marks)

.....

.....

Ductility

.....

.....

f) Extraction of iron is cheaper than extraction of aluminium. Explain (2 marks)

.....

.....

.....

g) Identify **one** waste gas from the furnace and state its effect on the environment (2 marks)

.....

.....

h) State **one** use of steel in construction industry (1 mark)

.....

KCSE JOINT PREMOCK

SERIES 2 EXAMS-2023

CHEMISTRY

233/3

PAPER 3 (PRACTICAL)

TIME: 2¼ HOURS

SCHOOL..... SIGN.....

CONFIDENTIAL

- In addition to the fittings in the laboratory each candidate should have the following.

1. Solid A
2. Solution B (about 50cm³)
3. Solution D (about 80cm³)
4. Pipette and a pipette filler
5. Burette
6. White tile
7. Retort stand
8. Two clean conical flasks
9. Empty 100ml plastic beaker
10. 250ml volumetric flask
11. Thermometer
12. Stop watch/wall clock
13. A label
14. Distilled water in wash bottle
15. Solid E (About 0.5g)
16. Solid F (About 0.5g)
17. A spatula
18. 6 clean dry test tubes in a test tube rack

19. Source of heat
20. About 0.5g of sodium hydrogen carbonate solid

ACCESS TO

1. Phenolphthalein indicator
2. 2M nitric (v) acid
3. 2M aqueous sodium hydroxide
4. 2M aqueous ammonia
5. Acidified potassium manganate(vii)

NOTES

1. Solid A (0.2g of magnesium ribbon cut into pieces and accurately weighed)
2. Solution B is 2M hydrochloric acid
3. Solution D is 0.1 M Sodium hydroxide solution
4. Solid E (lead carbonate)
5. Solid F (maleic acid)

KCSE JOINT PREMOCK

SERIES 2 EXAMS-2023

CHEMISTRY

233/3

PAPER 3 (PRACTICAL)

TIME: 2¼ HOURS

NAME.....

SCHOOL..... SIGN.....

INDEX NO..... ADM NO.....

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

INSTRUCTIONS TO THE CANDIDATES:

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

FOR EXAMINER'S USE ONLY

Question	Maximum score	Candidate's score
1	20	
2	12	
3	8	

1. You are provided with.

- Solid A
- 2M hydrochloric acid solution B
- 0.1M sodium hydroxide solution D

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

PROCEDURE A

Using a burette, place 20 cm³ of 2M Hydrochloric acid, solution B in 100ml beaker. Measure the temperature of the solution after every one minute and record the values in the table. At exactly 2 ½ minutes add all solid A to the acid. Stir the mixture gently with the thermometer. Measure the temperature of the mixture after every half a minute and record the values in the table. **RETAIN THE MIXTURE TO BE USED IN PROCEDURE 2**

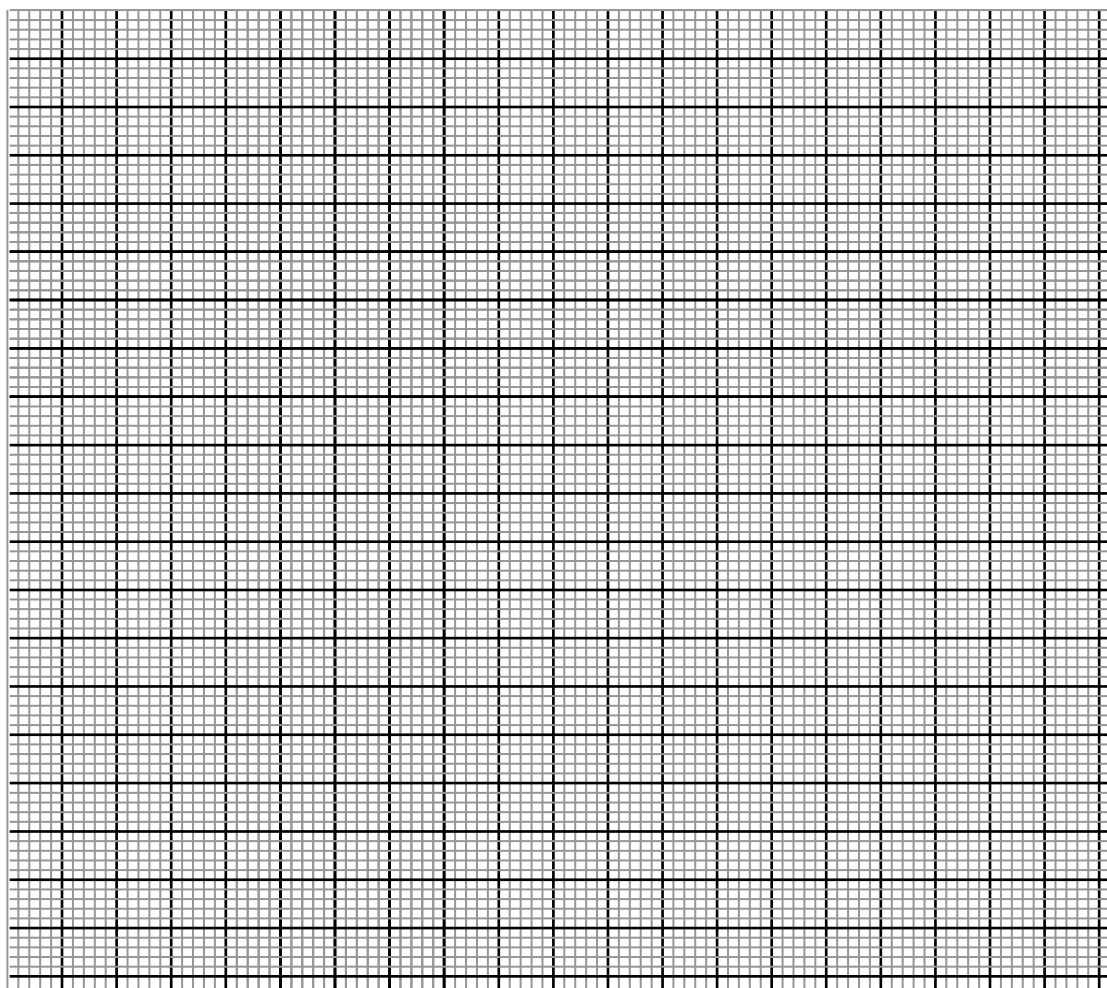
TABLE 1

Time(min)	0	½	1	1 ½	2	2 ½	3	3 ½	4	4 ½	5
Temperature (°c)					X						

(5mks)

a. Plot the graph of temperature against time

(3mks)



b. Using the graph determine the temperature **change** (1mk)

c. Calculate the heat change for the reaction. (Assume the specific heat capacity of the mixture is 4.2J/kg/K and density of the mixture is 1g/cm^3 .) (1mk)

PROCEDURE B

Rinse the burette thoroughly and fill it with sodium hydroxide (D). Transfer all the contents of 100ml beaker used in procedure A into 250ml volumetric flask. Add distilled water up to the mark. Label the solution C. using pipette and pipette filler place 25cm^3 of solution C into 250ml conical flask. Add 2 to 3 drops of phenolphthalein indicator and titrate against sodium hydroxide. Record the results in the **table 2**. Repeat **titration two more times** and complete the table 2 (4mks)

TITRATIONS	1	2	3
Final burette reading (cm^3)			
Initial burette reading (cm^3)			
Volume of solution C used (cm^3)			

i. Calculate the average volume used (1mk)

ii. Calculate the number of moles of sodium hydroxide **used** (1mk)

iii. Calculate the number of moles of hydrochloric acid in 25cm^3 of **solution C** (1mk)

iv. Calculate the number of mole of hydrochloric acid in 250cm³ of **solution C** (1mk)

v. Calculate the number of moles of hydrochloric acid in 20cm³ of **solution B** (1mk)

vi. Calculate the number of moles of hydrochloric acid that reacted with **solid A** (1mk)

2. (a) You are provided with solid E which is suspected to be zinc carbonate. Using reagents below describe how you can confirm its presence

- Solid E
- Dilute nitric (v) acid
- Aqueous sodium hydroxide
- Aqueous ammonia solution
- Wooden splint

Test 1	Expected observations
(1mk)	(1mk)

Test 2	Expected observations
(1mk)	(1mk)

Test 2	Expected observations
(1mk)	(1mk)

(b) Carry out the actual tests described above.

Test 1

Observations	inferences
(1mk)	(1mk)

Test 2

Observations	inferences
(1mk)	(1mk)

Test 3

Observations	inferences
(1mk)	(1mk)

3. You are provided with solid F. Carry out the tests below and record your observations and inferences in the spaces provided.

i. Put half spatula full of **solid F** and burn on non-luminous flame of the Bunsen burner.

Observations	inferences
(1mk)	(1mk)

ii) To the remaining portion of solid F, add about 10cm³ of distilled water in a boiling tube and divide into two portions

Observations	inferences
(1mk)	(1mk)

iii) To the first portion add acidified potassium manganate (VII) and shake

Observations	inferences
(1mk)	(1mk)

iv) To the second portion add all the solid sodium hydrogen carbonate provided.

Observations	inferences
(1mk)	(1mk)

KCSE JOINT PREMOCK

SERIES 2 EXAMS-2023

PHYSICS

232/1

PAPER 1 (THEORY)

TIME: 2 HOURS

NAME.....

SCHOOL..... SIGN.....

INDEX NO..... ADM NO.....

INSTRUCTIONS TO CANDIDATES

- a) Write your name, admission number, class and signature in the spaces provided at the top of the page. This paper consists of two sections; **A** and **B**.
- b) Answer **ALL** the questions in the spaces provided.
- c) Mathematical tables and electronic calculator may be used.
- d) You may use the following constants where necessary:-
- e) Candidates should answer the questions in English.

$$g = 10 \text{ N/kg, or m/s}^2$$

FOR EXAMINER'S USE ONLY

SECTION	QUESTIONS	MAXIMUM SCORE	CANDIDATE'S SCORE
A	1 – 11	25	
B	12	10	
	13	13	
	14	10	
	15	13	
	16	9	
TOTAL SCORE			

SECTION A (25 MARKS)

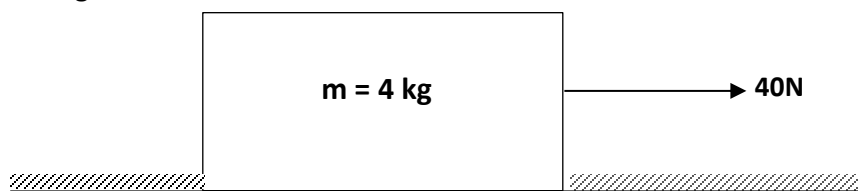
Attempt all the questions in the spaces provided.

1. Define a free fall. (1 mark)

.....
.....

2. The figure 1 below shows a force of 40N acting on a body of mass 4kg. The coefficient of friction between the surfaces is 0.05.

Fig. 1



- Determine the acceleration of the body. (3 marks)

3. A uniform bar is pivoted at a point 30cm from one end. A force of 12N at the end of the shorter side keeps the bar in equilibrium. If the length of the bar is 1 metre, determine the weight w , of the bar. (2 marks)

4. A student observed some pollen grains on the surface of water in a beaker with the help of hand lens as shown figure below.

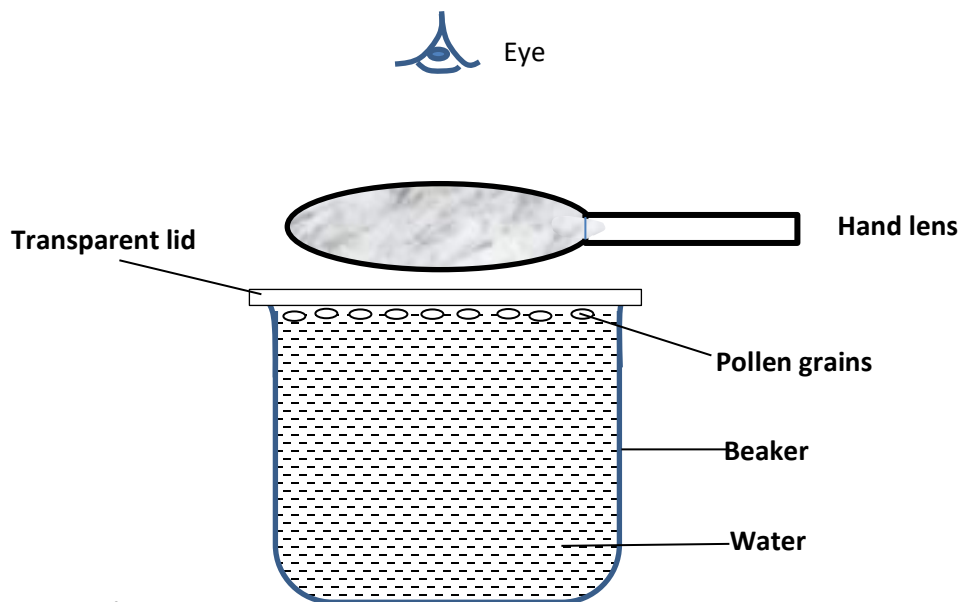


Fig. 2

- (a) State the observation made. (1 mark)

.....
.....

- (b) Explain the observation in (a) above. (1 mark)

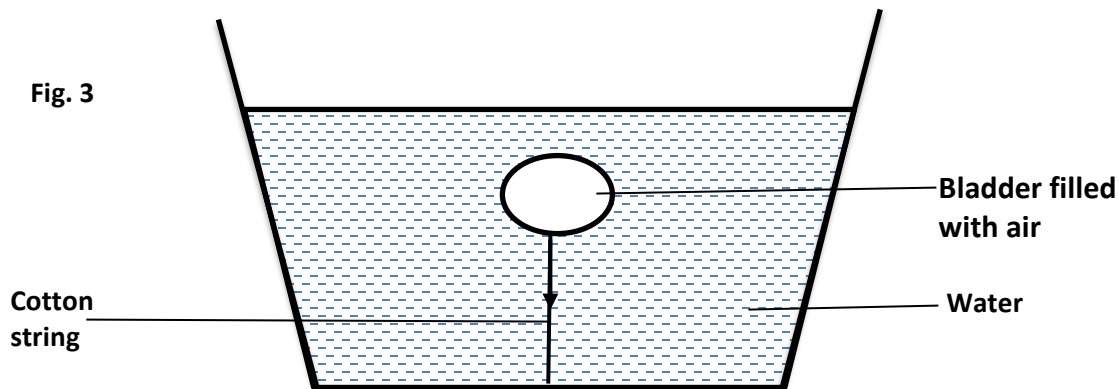
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.....

- (c) What conclusion can be drawn from the above experiment? (1 mark)

.....

5. An immersion heater consumes a voltage of 240V and a current of 10A. If it is used to heat 5kg of water at 20°C, find the final temperature of water after 7 minutes. (Take the specific heat capacity of water = 4200 J/kgk) (3 marks)

6. The figure 3 below shows a rubber bladder filled with air and fixed at the bottom of a water container and held with a cotton string.



State and explain the observation made when water is heated gently for a few minutes. **(2 marks)**

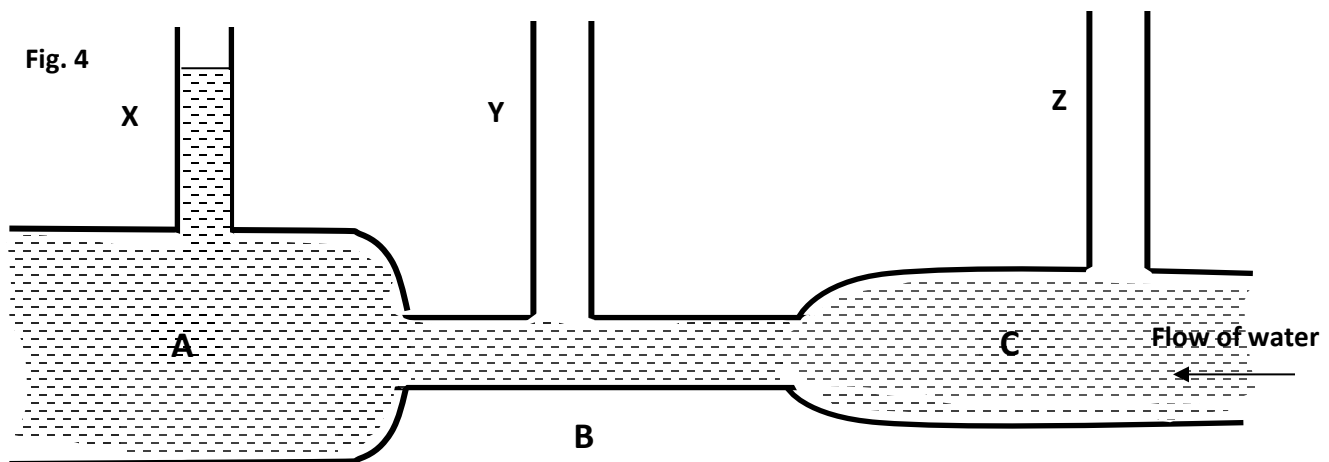
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7. The figure 4 below shows a pipe of varying cross-section. Three vertical tubes X, Y and Z of same diameter are fixed to the section A, B and C of the pipe respectively as shown below.



Given that the water flows in the direction shown by the arrow, indicate on the diagram the relative levels of water in Y and Z. **(1 mark)**

8. A smooth wooden plane is inclined at an angle of 30° to the horizontal as shown in Figure 5 below. An object of mass 10kg is pulled steadily up the plane by a force of 60N. Determine;

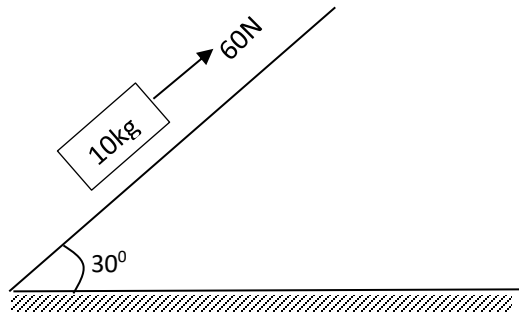


Fig. 5

- (a) the velocity ratio of the inclined plane. (2 marks)
- (b) efficiency of the system. (2 marks)

9. The Figure 6 below shows a spiral spring when not compressed and when compressed by a mass of 4.0kg.

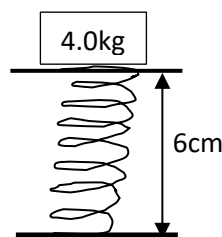
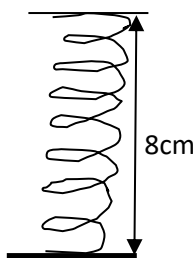
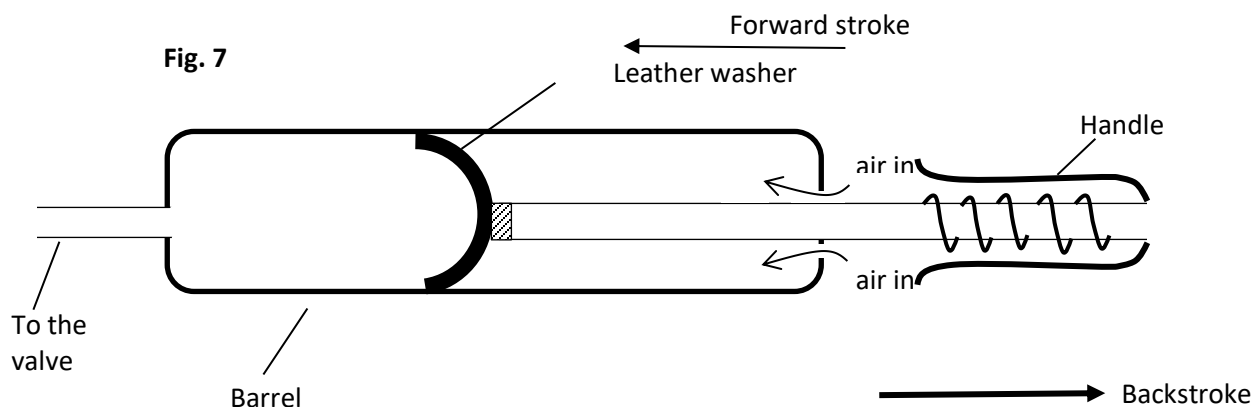


Fig. 6

- (a) uncompressed spring (b) Compressed spring
- Determine the elastic potential energy stored by the compressed spring in (b). (3 marks)

10. The bicycle pump shown in Figure 7 below is one of the applications of pressure in gases.



Explain how the leather washer functions during;

(2 marks)

(a) backstroke

.....

.....

.....

(b) forward stroke

.....

.....

.....

11. Explain how greenhouse effect increases the average temperature of the earth. **(2 marks)**

.....

.....

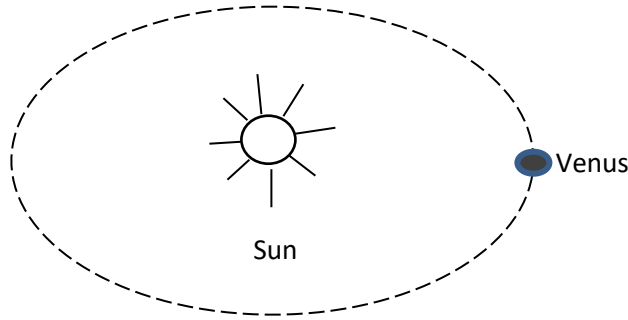
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SECTION B (55 MARKS)

12.(a) The Figure 8 below shows a planet Venus orbiting the sun in a circular orbit at constant speed.

Fig. 8



(i) State what provides the centripetal force. **(1 mark)**

.....
(ii) Indicate the direction of centripetal force on the planet. **(1 mark)**

(b) A stone is thrown with a horizontal velocity u from the top of a building of height 125m so as to hit a target on the ground 75m from the base of the building as shown in Figure 9 below.

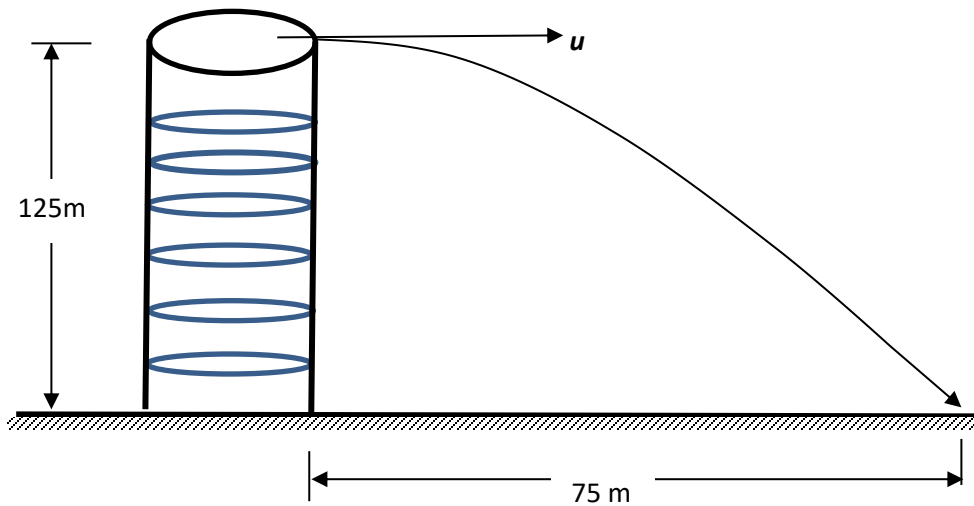


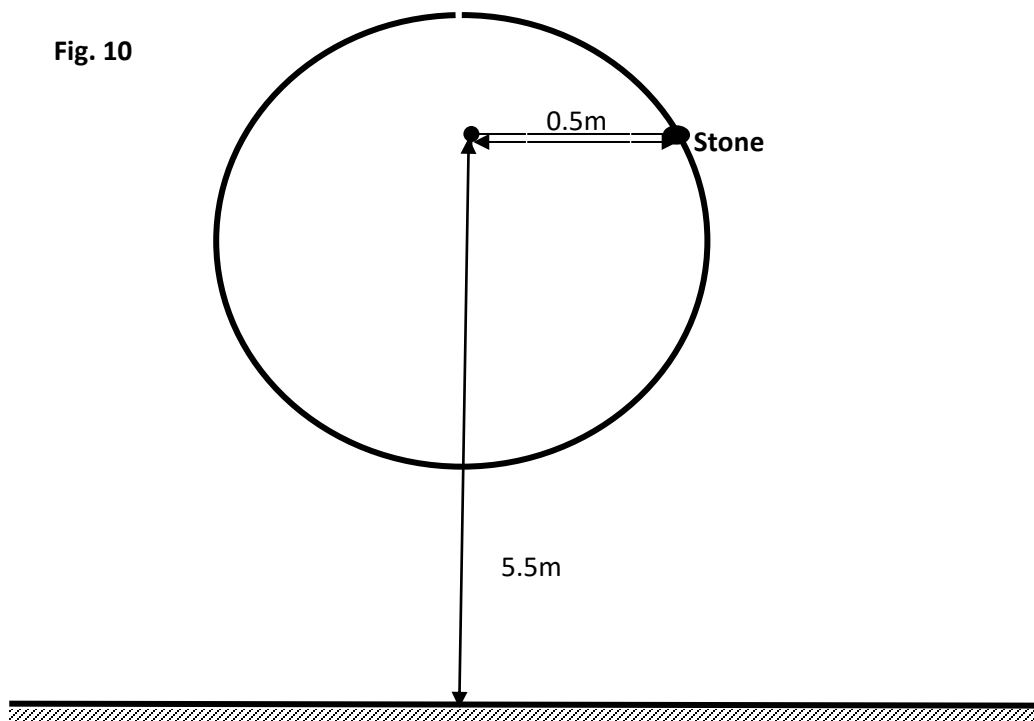
Fig. 9

Calculate: **(i)** the time taken for the stone to hit the target. **(2 marks)**

(ii) the horizontal velocity, u , of the stone. **(2 marks)**

- (c) A stone of mass 0.5kg is attached to a string of length 0.5m which will break if the tension exceeds 20N . The stone is whirled in a vertical plane, the axis of rotation being above the ground, as shown in the Figure 10 below.

Fig. 10



The angular velocity is gradually increased until the string breaks.

- (a) In what position is the string most likely to break? (1 mark)

.....

- (b) At what angular velocity, ω , will the string break? (3 marks)

- 13(a) Define the term atmospheric pressure. (1 marks)

.....

- (b) The Figure 11 below shows a hydraulic lift supporting a load of 150kg . Its cross-sectional areas A_1 and A_2 are 0.02m^2 and 0.4m^2 respectively. The length of the effort arm is 1m and the length of the plunger from the pivot is 0.4m .

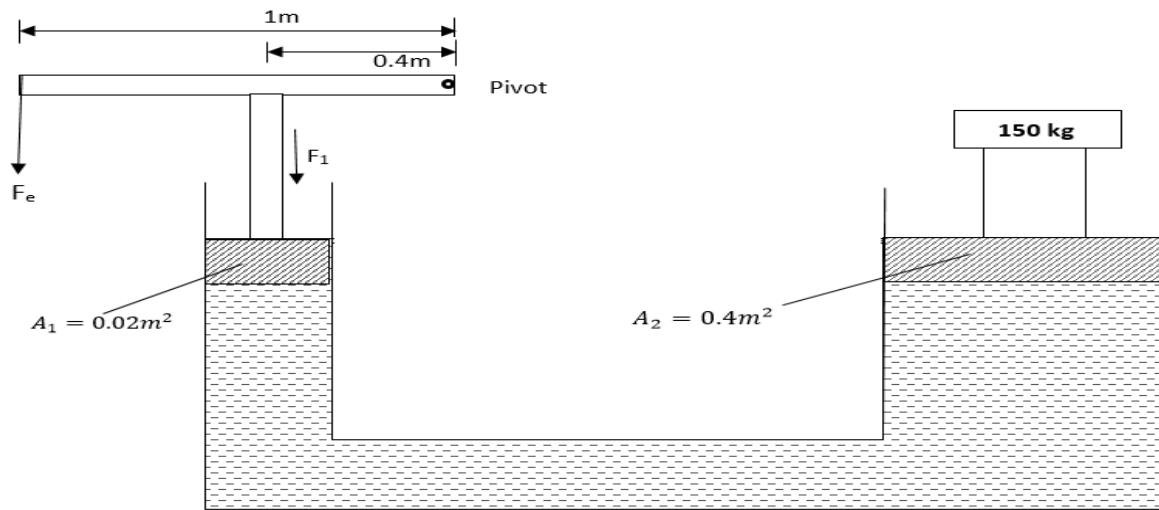


Fig. 11

Determine:

- (i) the pressure exerted by 150kg mass. (1 mark)

- (ii) the pressure exerted by F_1 on the smaller piston. (1 mark)

- (iii) the force F_1 . (2 marks)

- (iv) the applied force, F_e . (2 marks)

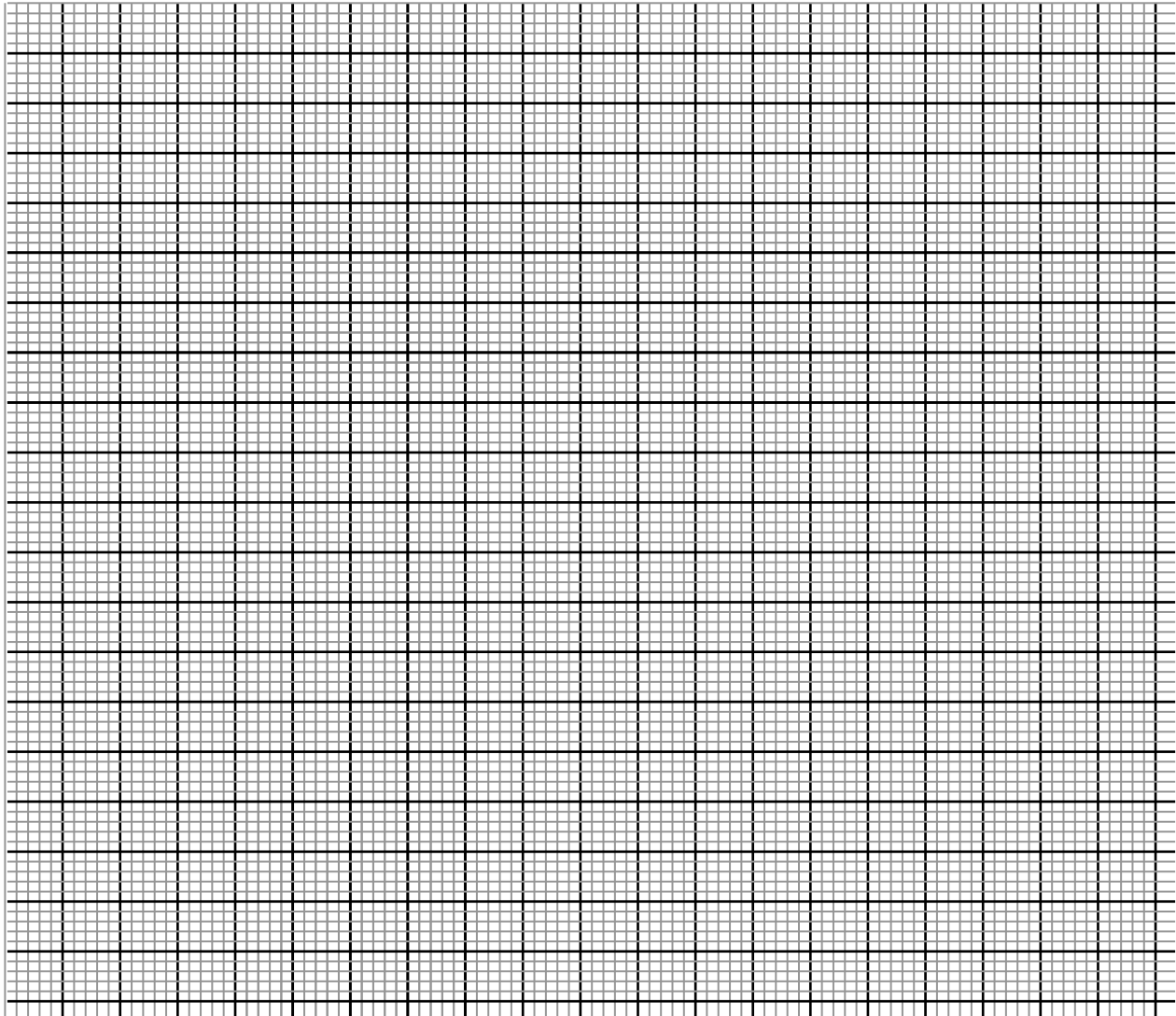
- (v) the mechanical advantage. (2 marks)

- (vi) the velocity ratio of the system. (2 marks)

(v) the efficiency of the system.

(2 marks)

14.(a) An unknown amount of kerosene was heated using a heater rated 240V, 100W. The temperature of kerosene was recorded at 2 minutes intervals. The graph OMN in the Figure 12 below was plotted.



(iv) Determine the mass of kerosene that was used in the experiment. (Assume heat gained by the beaker and the surrounding is negligible)

(3 marks)

Take specific heat capacity of kerosene to be $2200 \text{ JKg}^{-1}\text{K}^{-1}$.

(b) The Figure 13 below shows a velocity-time graph for a steel ball falling through a viscous fluid.

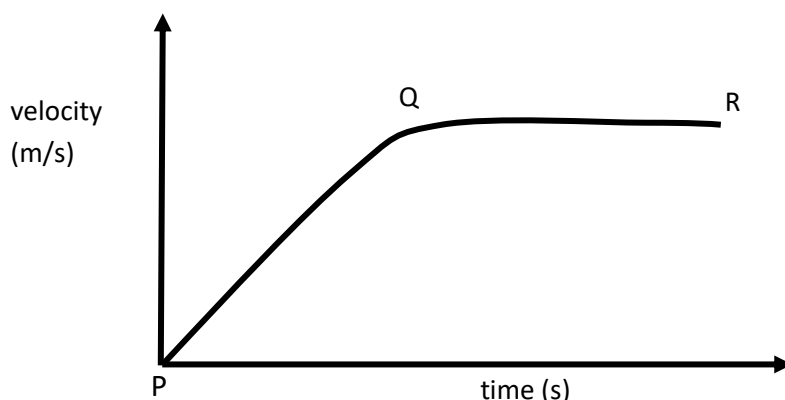


Fig. 13

Explain the nature of the curve in;

(i) section PQ. (1 mark)

.....

(ii) section QR. (1 mark)

.....

(iii) If the graph shown above is of a ball falling through water, sketch on the same axis a graph for the ball falling through glycerine. (1 mark)

15.(a) A student constructed the simple thermometer shown in the figure 14 below.

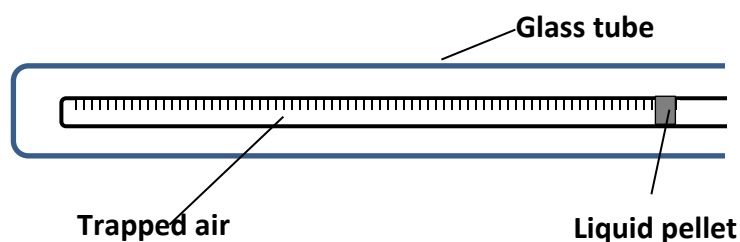


Fig. 14

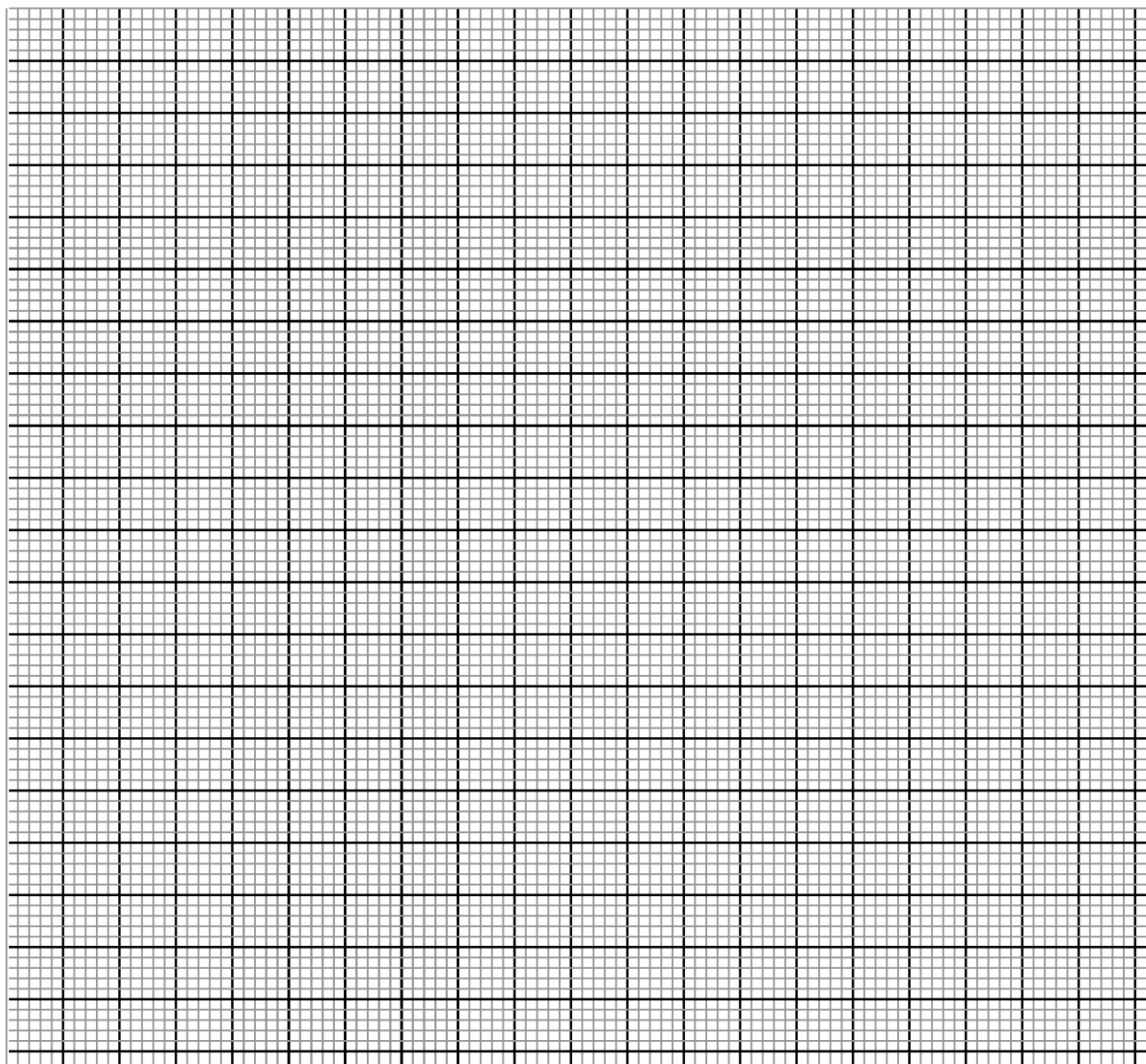
(i) why must the tube be made of thin glass? (1 mark)

.....

(ii) Assuming that the weight of the pellet is negligible, what will the pressure of the trapped air be when the tube is vertical? Explain. (2 marks)

.....

(b) She placed the thermometer in water which was at various temperatures and obtained the graph shown in Figure 15 below.



(i) Which of the gas laws does this set-up apply? Verify. **(1 mark)**

.....

(c)(i) State the SI unit of momentum as used in Physics. **(1 mark)**

.....

(ii) A bullet of mass 2g is fired horizontally into a block of wood of mass 498g. The block is suspended by a light inextensible string so that it is able to move in a vertical plane. The block and the bullet move together through a vertical distance of 8.6cm as shown in figure 16 below.

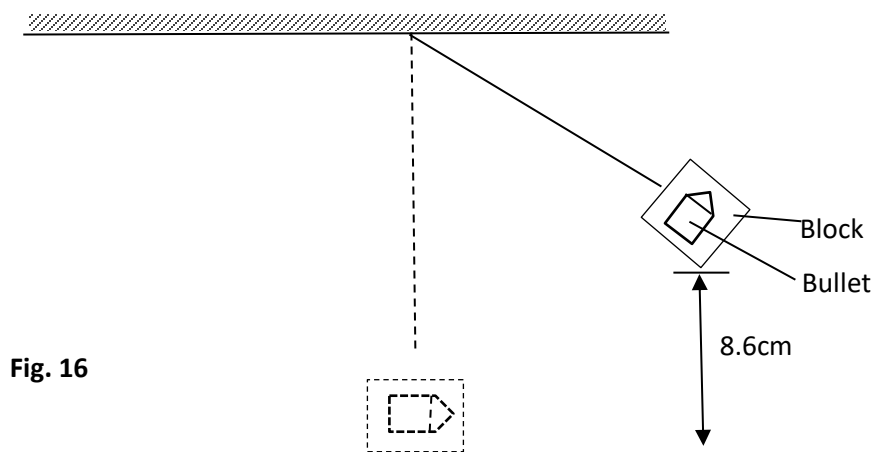


Fig. 16

I. Calculate the change in gravitational potential energy of the block and bullet. (2 marks)

II. Calculate the initial velocity of the block and bullet after they start moving together. (2 marks)

III. Determine the speed of the bullet before the impact with the block. (2 marks)

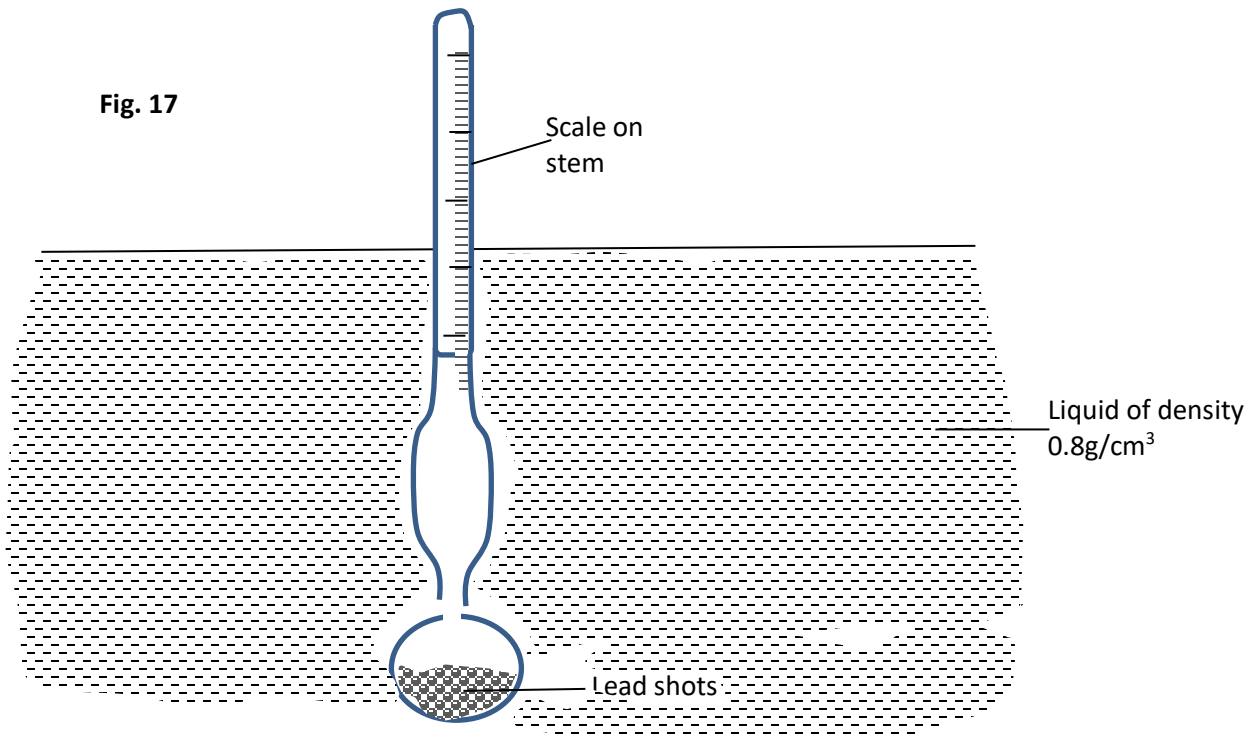
16.(a) State the law of floatation. (1 mark)

.....

.....

(b) The densities of liquids may be measured using hydrometers. The hydrometer in the Figure 17 consists of a weighted bulb with a thin stem, and is floating to the depth shown when it is immersed in a liquid whose density is 0.8g/cm^3 .

Fig. 17



The hydrometer is then floated in two liquids whose densities are 1.0g/cm^3 and 1.25g/cm^3 .

(i) On the diagram, mark with letters M and N the positions on the scale of the 1.25 g/cm^3 and 1.0g/cm^3 respectively. **(1 mark)**

(ii) The hydrometer has a mass of 165g and the stem has a uniform cross-sectional area of 0.75 cm^2 . Calculate;

I. the change in the submerged volume of the hydrometer when it is first placed in a liquid of density 1.00 g/cm^3 and then in the liquid of density 1.25 g/cm^3 . **(3 marks)**

II. the distance on the stem between the 1.0 g/cm^3 and 1.25 g/cm^3 graduations. **(2 marks)**

(iii) State **two** ways of improving the sensitivity of the above hydrometer. **(2 marks)**

.....
.....

KCSE JOINT PREMOCK

SERIES 2 EXAMS-2023

PHYSICS

232/2

PAPER 2 (THEORY)

TIME: 2 HOURS

NAME.....

SCHOOL..... SIGN.....

INDEX NO..... ADM NO.....

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 **two** sections: **A** and **B**.
- (d) Answer **ALL** the questions in sections A and B in the spaces provided.
- (e) **ALL** working **MUST** be shown clearly
- (f) Mathematical tables and silent electronic calculators may be used..

FOR EXAMINER'S USE ONLY

SECTION	QUESTION	MAXIMUM SCORE	CANDIDATE'S SCORE
A	1 – 13	25	
B	14	11	
	15	12	
	16	0 9	
	17	10	
	18	12	
TOTAL SCORE		80	

SECTION A (25 MARKS)

Answer ALL the questions in this section in the spaces provided

1. (a) Distinguish between real and virtual Image

(1mark)

.....
.....

b) A pinhole camera forms an image of size 10cm. The object is 5m tall and 20m away from the pinhole. Find the length of the pinhole camera.

(2marks)

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

2. Why is it safer to carry explosive fuels in metal cans instead of plastic can?

(1mark)

.....
.....

3. The **figure 1** below shows a cross section of a dry cell.

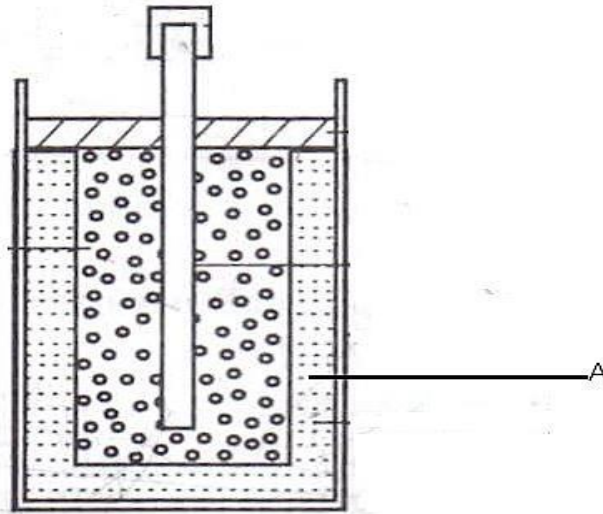


Figure 1

(i) Name the part labeled A

(1 mark)

.....

(ii) State the use of manganese (iv) oxide in the cell

(1 mark)

.....
.....

4.a) The figure 2 below shows a soft iron bar that's placed in a coil near a free suspended magnet.

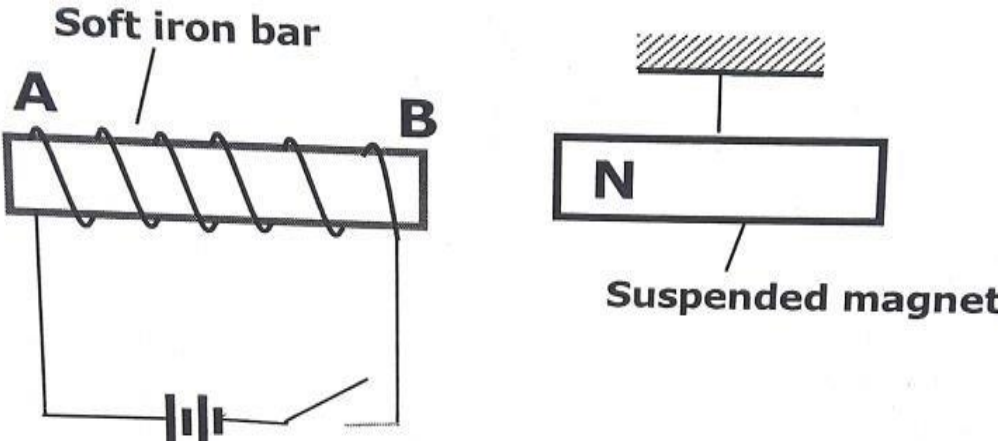


figure 2

State and explain the observation made when the switch is closed. (2marks)

.....

.....

.....

b.) Give a reason why attraction in magnetism is not regarded as a reliable method of testing for polarity. (1mark)

.....

.....

5.Explain the termwavelength in terms longitudinal wave (1mark)

.....

.....

6.(a) State the effect of pressure on the speed of sound in air. (1mark)

.....

.....

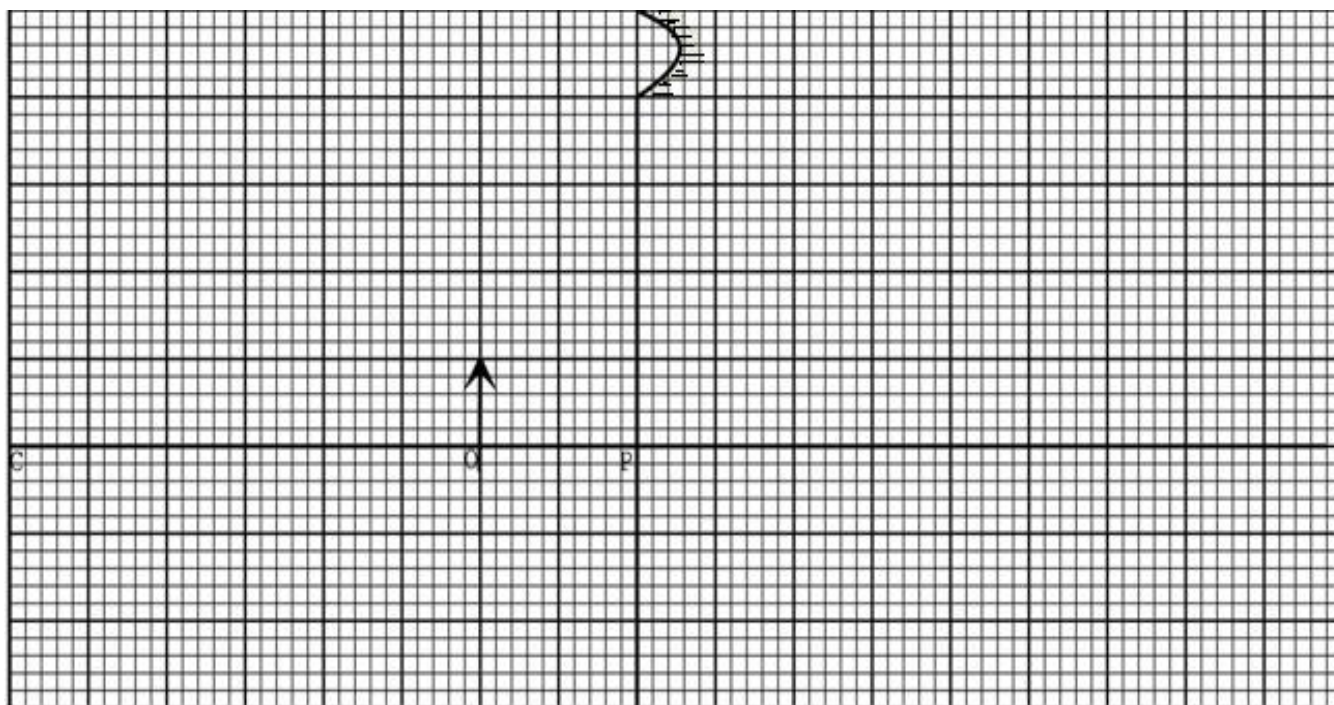
(b)A boy stands 190m from a high wall and claps his hands. If he hears an echo1.3 Seconds later, calculate the speed of sound in air. (2marks)

.....

.....

.....

7. **Figure 3** below shows an object, O placed 10 cm in front of a concave mirror whose radius, C is 40 cm.



On the same figure, draw a ray diagram to show the position of the image formed. (3 marks)

8. **State** any factor that determine the heating effect by an electric current. (1mark)

.....

9. **Figure 4** shows the table of electromagnetic. Spectrum in the increasing order of wavelengths.

P	x-rays		Q	Infra-red		

a). Identify the radiation marked **P** (1mark)

Q. –

b) State the application of radiation marked **P** (1mark)

.....

10. **Light** travels from glass to air as shown in **figure 5**. The refractive index of glass 1.5

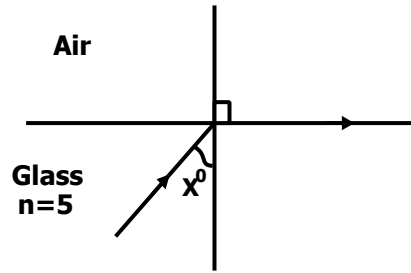


figure 5.

(a) Determine angle x

(2marks)

.....

.....

.....

11. **Figure 6** shows air molecules in front of a hollow, wooden box B set vibrating by a tuning fork.



figure 6

i) State the reason of mounting the tuning fork on the box which is open at one end.

(1mark)

.....

.....

What is the name given to this kind of wave?

(1 mark)

.....

12. The **figure 7** below shows an isolated negative charge placed closer to a negatively charged plate.

Draw the electric field patterns.

(1mark)

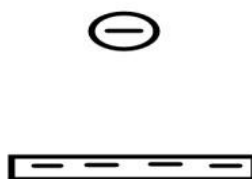


figure 7

13. Kenya launched the use of optical fibres in communication recently. State why optical fibres are preferred to ordinary cables (1mark)

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.....

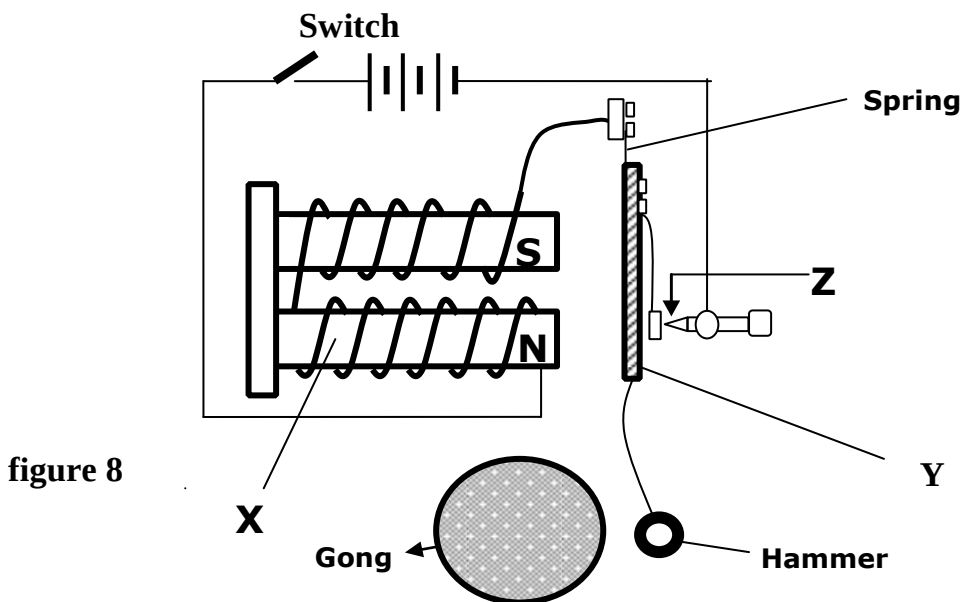
SECTION B(55MARKS)

14.(a) State **two** ways in which the speed of rotation of a motor can be increased (2marks)

.....

.....

b) The **figure 8** below shows a simple electric bell circuit



i) Name the parts labeled. (2marks)

I) X.....

II) Y

ii) When the switch is closed, the hammer hits the gong repeatedly. Explain why:

I) The hammer hits the gong. (2marks)

.....

.....

.....

II)The hammer hits the gong repeatedly

(2marks)

.....

.....

.....

iii) If the armature is made of steel metal, it is observed that the bell will take longer to ring. Explain this observation .

(1 mark)

.....

.....

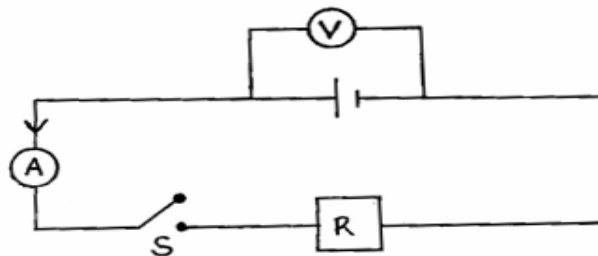
iv) Name two adjustment should be done to the system to make it operate effectively with a lower voltage battery?

(2mark)

.....

.....

15.(a)In an experiment to determine the internal resistance of a cell, the following circuit was used.



It was noted that when S is open, the voltmeter reads 1.5V and when S is closed the voltmeter reads 1.3V and ammeter reads 0.2A.

(i)Define the term e.m.f of the cell.

(1mark)

.....

.....

(ii)Determine the lost voltage.

(1mark)

.....

.....

(iii)Determine the value of R.

(2marks)

.....

.....

.....

(iv) Determine the internal resistance of the cell. (3marks)

.....

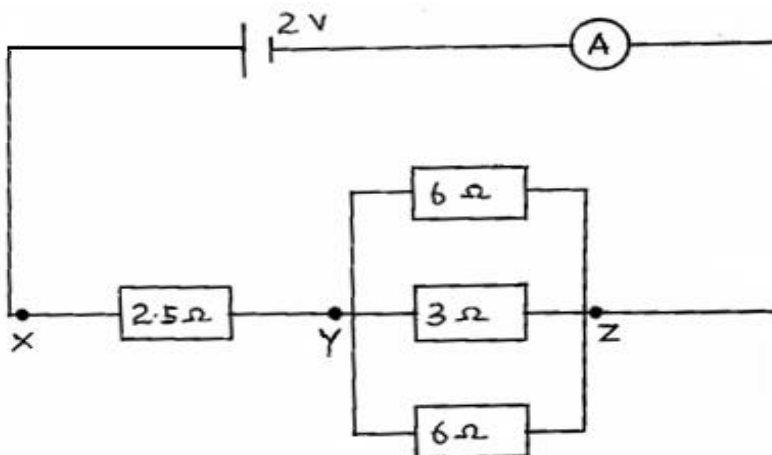
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(b) Study the circuit **below** and answer the questions that follow.



(i) Determine the effective resistance of the circuit. (3marks)

.....

.....

.....

.....

.....

(ii) Determine the p.d between X and Y. (2marks)

.....

.....

.....

.....

16.(a) (i) Define capacitance of capacitor (1mark)

.....

.....

(ii) A positively charged rod with a pointed end is brought near a candle flame as shown **fig. 9**.

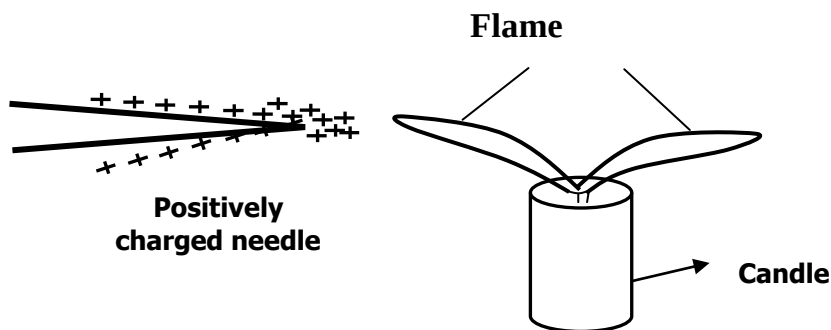


fig.9

Explain why the flame burns in the direction shown

(1mark)

.....

.....

b). One of the factors which affect the capacitance of a parallel plate capacitor is the area of overlap of the plates. Name **two** other factors. **(2marks)**

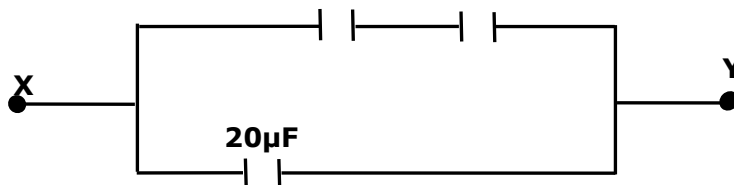
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c). Calculate the effective capacitance of the capacitors shown across points X and Y. **(3marks)**

60 μ F

30 μ F



.....

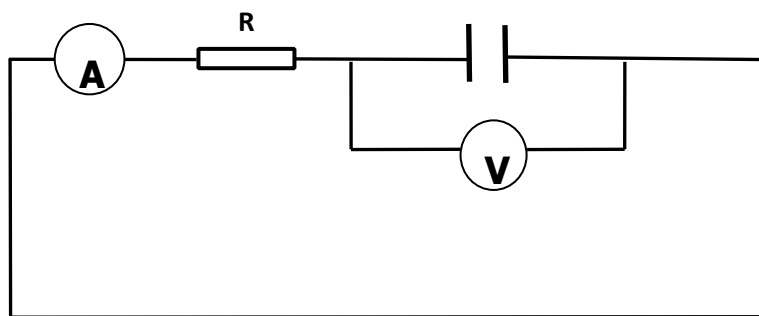
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d). A capacitor was full charged to a potential of 40v. The capacitor is connected as shown in the figure below to discharge at load resistor R. Sketch a graph to show how the capacitor discharges with time



(2 marks)

17.(a) Water waves from a given source move from a deeper a shallow to end. What effect would this have on the;

(i) Frequency (1mark)

.....

(ii) Wavelength (1mark)

.....

(iii) Velocity of the wave (1mark)

.....

(b).The **figure 10** shows wave fronts approaching a wide opening

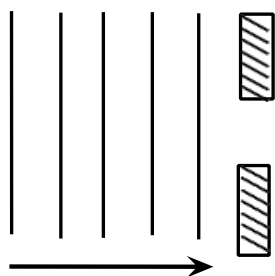


figure 10

i) Complete the diagram to show the appearance of the wave fronts after crossing the opening (2mark)

(ii) State what would be observed on the pattern if the gap was made smaller (1mark)

.....

.....

c.) **Figure 11** below shows light rays from two coherent sources S_1 and S_2 falling on screen. Dark and bright fringes are observed between A and B

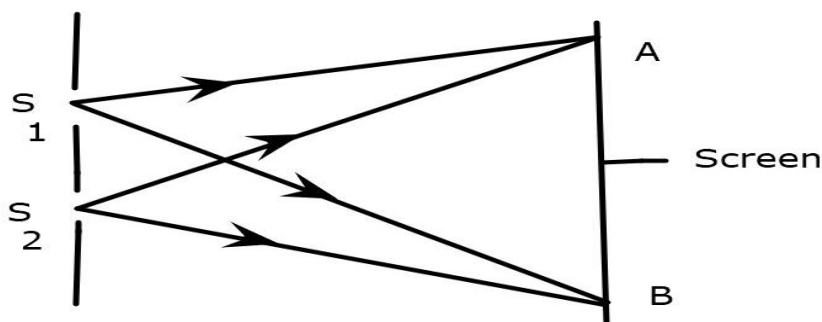


figure 11

i) State the function of S_1 and S_2 (1mark)

.....

.....

ii) State how

I. Bright fringes are formed (1mk)

.....

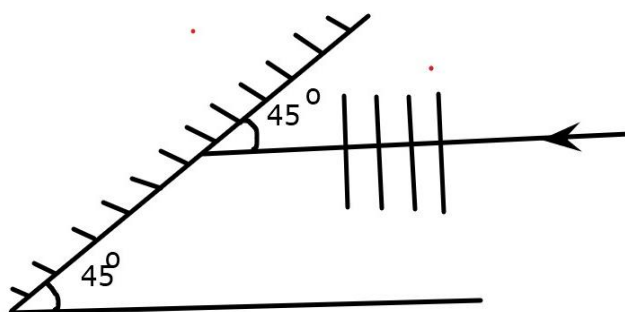
.....

II. Dark fringes are formed (1mark)

.....

.....

c). **Figure 12** below shows plane water waves incident on a plane reflector placed at an angle to the path of the waves.



Complete the diagram to show the reflected waves

(2marks)

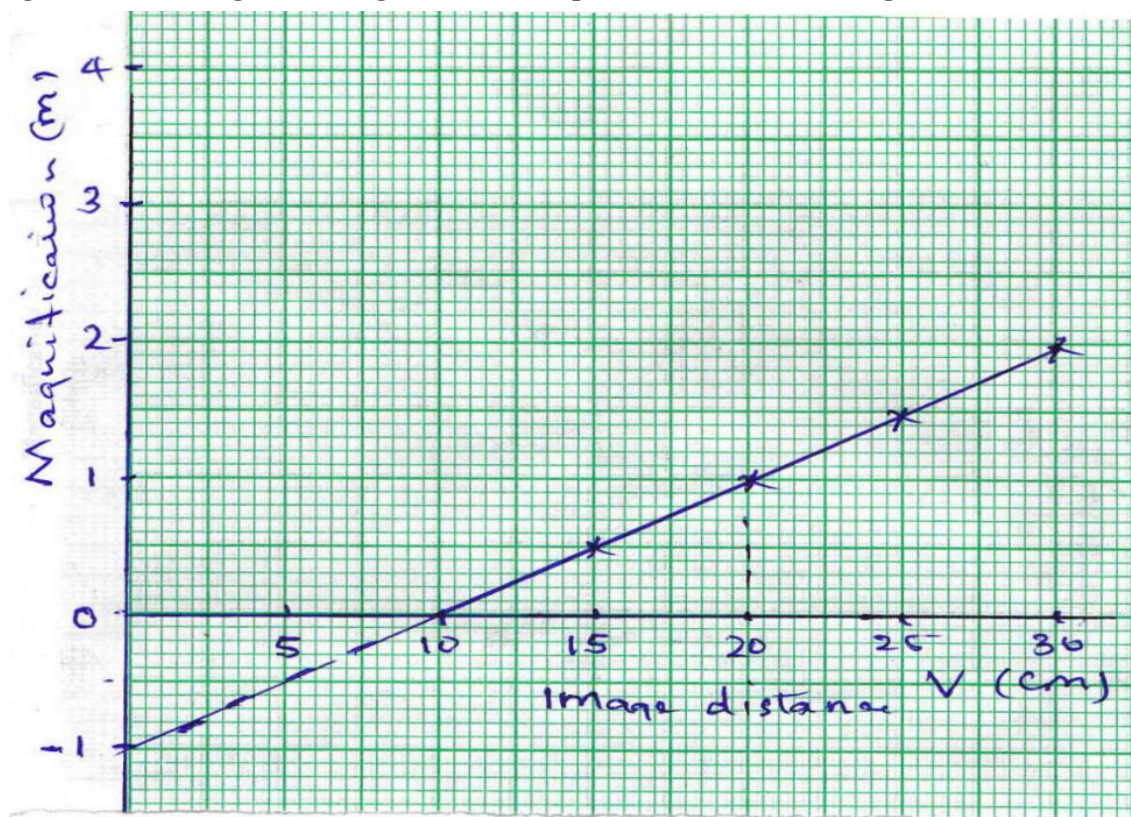
18. (a) Define the term principal focus for in converging lens

(1mark)

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

b) Sketch on a diagram to illustrate how a convex lens is used as a magnifying glass. **(3 marks)**

(c) In an experiment to determine the focal length of a converging lens using lens formula, several values of image distance corresponding to value of object distance u were determined and a graph of magnification m against image distance v , plotted as shown in **Figure 13**



The equation of the graph can be represented by the equation $m = \frac{v}{f} - 1$

(i) State the significance of the gradient of the graph **(1mark)**

.....

.....

(ii) From the graph, determine the focal length of the lens. **(3marks)**

.....

.....

.....

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.....

(iii) Determine the value of object distance for which the image is not magnified. **(1mark)**

.....

.....

.....

(iv) An object of height 10.5cm stands before a diverging lens of focal length 20cm and a distance of 10cm from the lens. Determine the image distance. **(3 marks)**

.....

.....

.....

.....

KCSE JOINT PREMOCK

SERIES 2 EXAMS-2023

PHYSICS

232/3

PAPER 3 (PRACTICAL)

TIME: 2½ HOURS

SCHOOL..... SIGN.....

PHYSICS CONFIDENTIAL

A nichrome wire 1m long mounted on a scale

- A dry cell
 - 1 ammeter (0 – 1A)
 - A switch
 - A bulb
 - A voltmeter (0-5v or 0 – 3v)
 - A one cell holder
 - At least 6 connecting wires, one with a jockey
 - At least 6 connecting wires, one with a jockey
 -
 - A glass block (10 cm x 6 cm)
 - A Plane mirror (7cm x 6 cm)
 - 4 optical pins
 - A soft board
 - Cellotape (about 15 cm long)
 - 2 white – plain sheets of paper
 - a ruler or half – metre rule
 - A protractor
 - 4 office pins
- 2.
- A metre rule
 - Two stands
 - A pendulum bob
 - Some plasticine
 - Stop watch
 - Two pieces of strings (long and short one)

KCSE JOINT PREMOCK

SERIES 2 EXAMS-2023

PHYSICS

232/3

PAPER 3 (PRACTICAL)

TIME: 2½ HOURS

NAME.....

SCHOOL..... SIGN.....

INDEX NO..... ADM NO.....

INSTRUCTIONS;

- a Answer all the questions in the spaces provided*
- b Write your name and index number in the spaces provided above*
- c Sign and write the date of the examination in the spaces provided above*
- d You are supposed to spend 15minutes if 2½ hours allowed for this paper reading the whole paper carefully before commencing your work*
- e Marks will be given for clear record of observations actually made,their suitability, accuracy and the use made of them.*
- f Candidates are advised to record their observations as soon as they are made*
- g Non- Programmable silent electronic calculators and KNEC mathematical tables may be used except where stated otherwise.*

FOR EXAMINER'S USE ONLY

For Examiner's Use Only.

Question I

PART A	A(iii)	A(iv)	A(v)	B(viii)	B(ix)	B(x)	B(xi)	TOTAL
Maximum Score	6	4	2	4	1	1	2	
Candidates Score								

Question II

PART B	e(i)	e(iii)	f	g	h	TOTAL
Maximum Score	1	8	5	3	3	
Candidates Score						

GRAND TOTAL

--

1. PART A

You are provided with the following

A nichrome wire 1m long mounted on a scale

- A dry cell
- 1 ammeter (0 – 1A)
- A switch
- A bulb
- A voltmeter (0-5v or 0 – 3v)
- A one cell holder
- At least 6 connecting wires, one with a jockey

Proceed as follows

a) (i) Set up the circuit as shown in fig 1 below

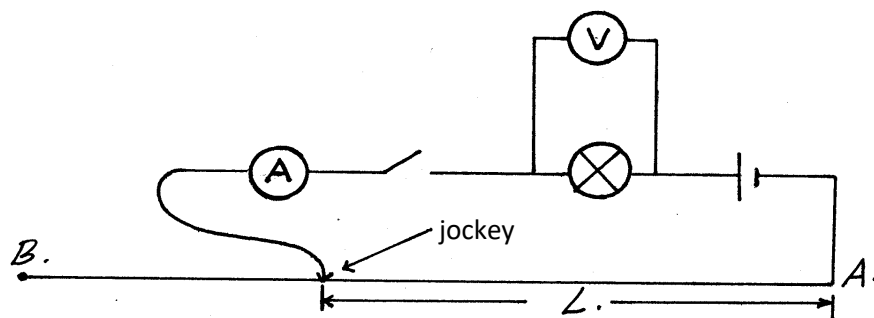


Fig 1

(ii) With the jockey / crocodile clip at B ($L=100\text{cm}$) note the voltmeter reading V and ammeter reading, I and record on the table I below.

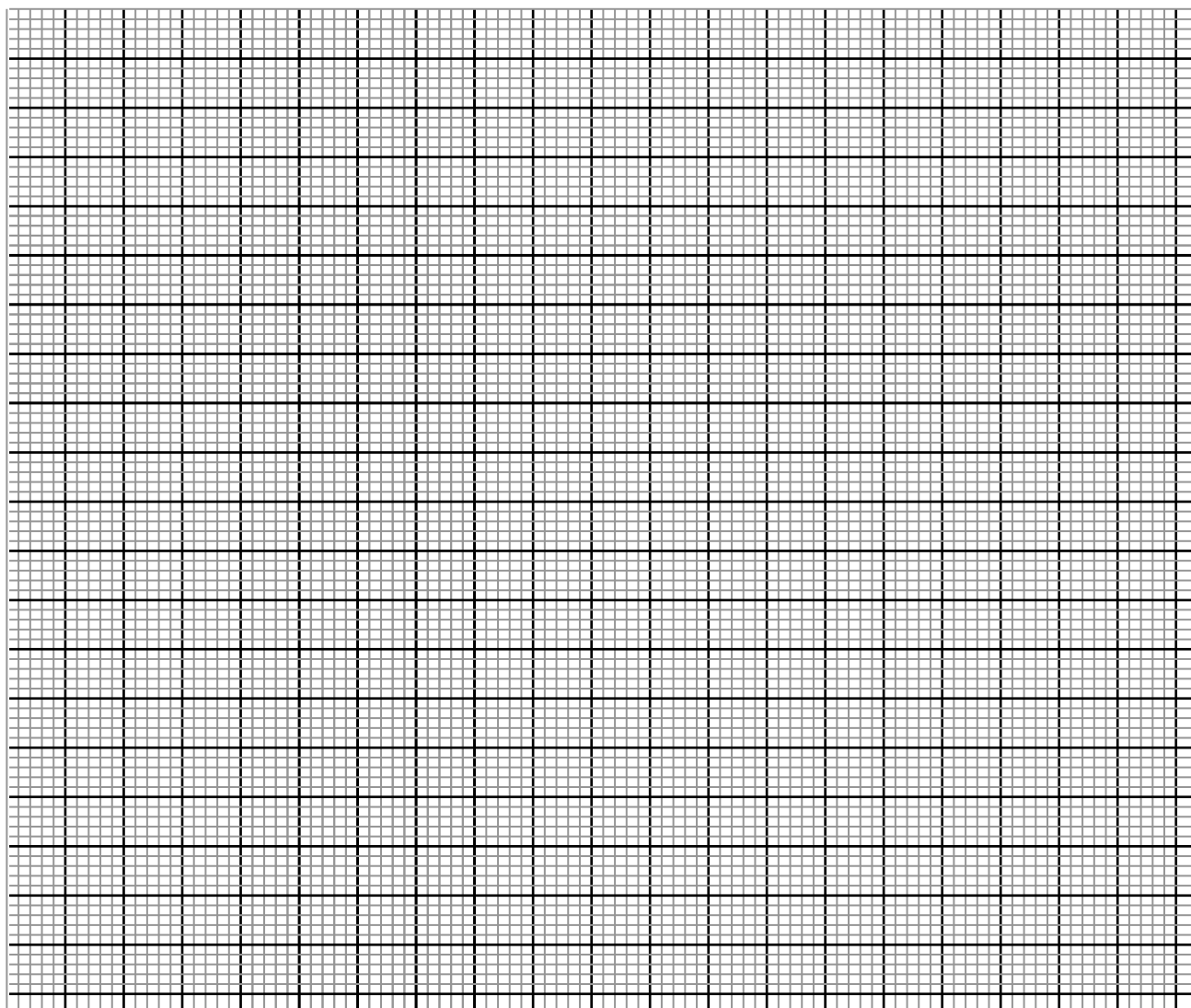
(iii) Repeat the procedure in (ii) above for $L=80\text{cm}$, 60cm , 40cm , 20cm and 0cm and record in the table below (6 marks)

Table I

L(cm)	100	80	60	40	20	0
V(volts)						
I (A)						

(iv) Plot the graph of V (y-axis) against I on the grid provided.

(4 marks)



v) Calculate the slope of your graph when current is 0.15A.

(2marks)

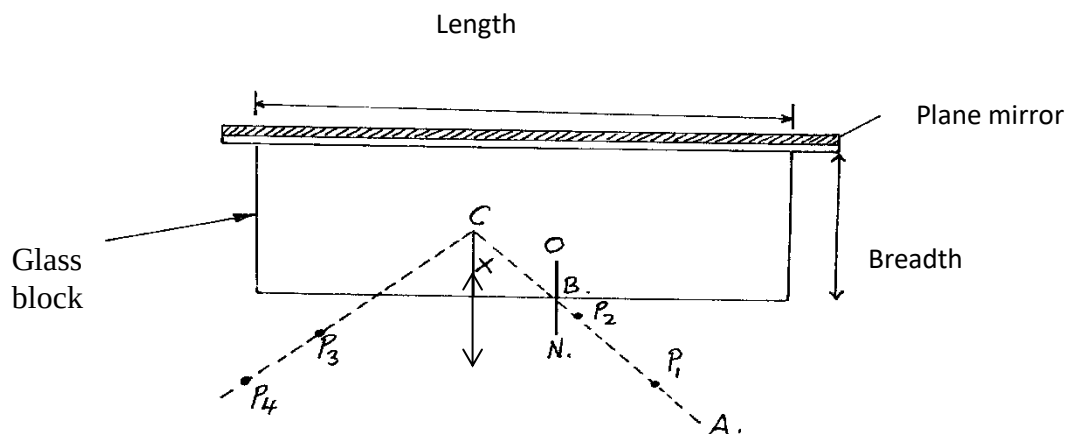
PART B

(b) You are provided with the following apparatus

- a glass block
- a plane mirror
- 4 optical pins
- a soft board
- A cellotape (about 15cm long)
- 2 white – plain sheets of paper
- a ruler or half metre rule
- a protractor
- 4 office pins

Proceed as follows:-

- (i) Using the cello tape provided fix the plane mirror to the glass block along side as shown in the figure below. The reflecting surface to face the glass block.



- (ii) With the use of the office pins, secure firmly a white plain paper on the board and place the block together with attached mirror.
- (iii) Draw the outline of the glass block together with the mirror
- (iv) Remove the block and the mirror and draw a normal at B somewhere a quarter- way the length of the outline you drew in (iii) above.
- (v) Draw four(4) different rays AB incident at B and extended to C. The incident rays should make angles 10° , 20° , 30° , and 40° .
- (vi) Replace the glass block together with the attached mirror so as exactly fit the outline in(iii)
- (vii) Place two object pins P_1 and P_2 along the 10° line. Locate the images of pins P_1 and P_2 as they appear by non-parallax (the images of the pins appear to be in a straight line when viewed through the glass block).

Place pins P_3 and P_4 so that the images of pins P_1 and P_2 are not seen.

- (viii) Remove the glass block together with the attached mirror from the outline and produce the lines joining P_1 to P_2 and P_3 to P_4 so that they intersect at C. Measure and record the distance x in the table 2 below. **(4 marks)**

NB. It may be necessary for you to draw another outline so as to avoid congestion of (construction) lines.

Angle i°	10	20	30	40
Distance x(cm)				

Table 2

- (ix) Now measure the breadth b of the glass block.

b= _____ **(1mark)**

- (x) Calculate the average A_x of the values of x in table 3 above

A_x _____ **(1mark)**

(xi) Determine the refractive index of the glass block using the formula.

Refractive index n of glass $n = \frac{b}{A_x}$

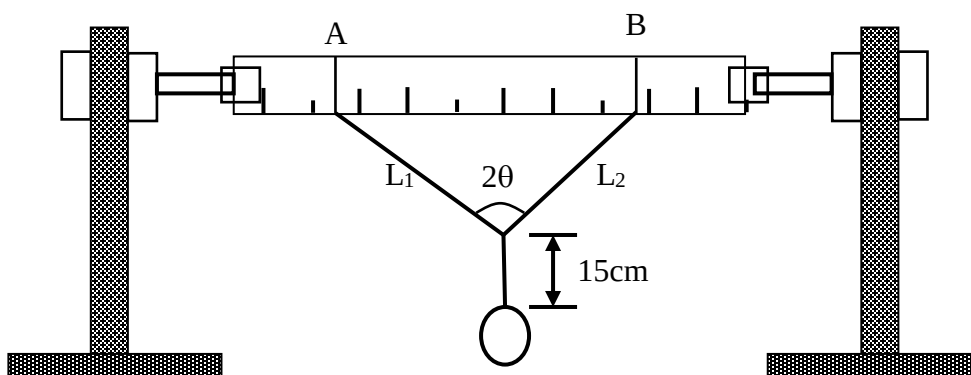
(2 marks)

2. You are provided with the following apparatus

- A metre rule
- Two stands
- A pendulum bob
- Some plasticine
- Stop watch
- Two pieces of strings (long and short one)

Proceed as follows:

- Attach one end of the length of string to the metre rule at 10cm mark. Mark by use of a sliding loop of string round the meter rule.
- Fix the string at this point with the small bob of plasticine.
- Tie the string in a second loop at 90cm mark so that the string is stretched tight between the two marks.
- Fix this loop with a small plasticine. Attach the pendulum bob to the centre of the string so that the centre of gravity is 15cm below the point of suspension.
- If the attachments of the pendulum bob to the pieces does not produce a V-shape. Squeeze the string at the knot between the thumb and the fore finger.



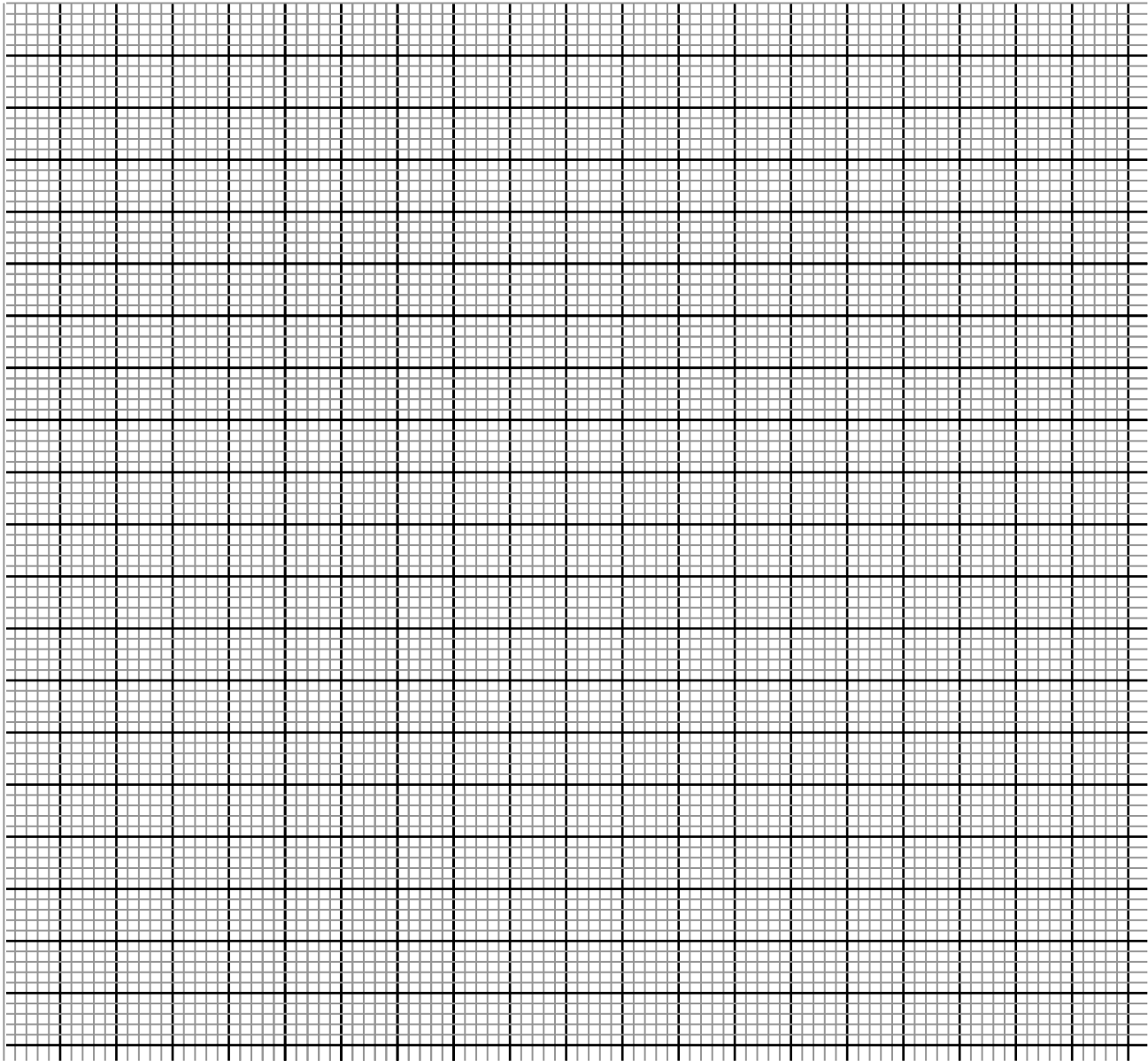
i) Measure the angle 2θ

(1mark)

- ii)** Pull the pendulum bob towards you through a small distance, release it; measure the time (t) of the motion by timing 10 oscillations.
- iii)** Remove the plasticine at B and slide the loop towards A by 4cm and repeat (ii) above for other distances AB as shown in the table below. **Table (3) (8marks)**

Length from A to B (cm)	80	76	72	68	64	60
Time for 10 oscillations (s)						
Period time T (s)						
T ² (s ²)						
2θ						
θ						
Cosθ						

- (f)**Plot a graph of T² against Cosθ **(5 marks)**



(g) Find the slope “s” of the graph. **(3 marks)**

(h) Given that $k = \frac{1.6\pi^2}{s}$ find k. **(3 marks)**

KCSE JOINT PREMOCK

SERIES 2 EXAMS-2023

AGRICULTURE

443/1

PAPER 1

TIME: 2 HOURS

NAME.....

SCHOOL..... SIGN.....

INDEX NO..... ADM NO.....

INSTRUCTIONS TO STUDENTS

- (a) Write your name and index number in the spaces provided at the top of this page.
- (b) Sign and write the date of the examination in the spaces provided.
- (c) This paper consists of three sections: A, B and C.
- (d) Answer all questions in sections A and B.
- (e) Answer any two questions in section C.
- (f) The photographs must be coloured.

FOR EXAMINER'S USE ONLY

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

SECTION A- (30 MARKS)

Answer all questions in the spaces provided

- 1)** State the **three** forms in which horticulture is practiced in Kenya **(1½ marks)**

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.....

- 2)** Identify **two** ways in which agriculture support agro based industries **(1 mark)**

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- 3)** List down **three** biotic factors that influence agriculture negatively **(1½marks)**

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- 4)** Name any **three** crops that can be propagated by use of suckers **(1½marks)**

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- 5)** Outline **four** roles of trees in soil conservation **(2 marks)**

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- 6)** Identify **two** examples of intensive farming systems practiced in crop production **(1 mark)**

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7) Outline **four** ways in which living organisms contribute to soil formation (2 marks)

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8) Give **four** reasons that may necessitate sub soiling to be carried out on a piece of land (2 mrks)

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9) Name any **four** physical methods of water treatment (2 marks)

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10) Give **three** reasons why green manure is not commonly used (1½marks)

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11) Name **two** types of labour records that can be kept by a large scale plantation farmer. (1 mark)

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12) Outline **four** areas that should be avoided when collecting a soil sample for testing (2 marks)

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13) Differentiate between a seed bed and a seedling bed

(1 mark)

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14) Name **three** field practices that are used to support weak stemmed crops

(1½marks)

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15) Give **four** reasons that would make a farmer chose a jembe during land preparation over a disc plough

(2 marks)

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16) Give a reason why use of organic manure is discouraged in carrot production

(1 mark)

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17) Outline **four** advantages of zero grazing as a system of grazing

(2marks)

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18) Identify **four** sources of credit facilities where one can get capital to carry out crop production

(2 marks)

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19) Name any **three** fertilizer elements

(1½ marks)

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SECTION B (20 MARKS)

Answer all questions in this section.

20) The following are photographs of weeds obtained from the farm



i) Identify the weeds

(2 marks)

A.....

B.....

C.....

D.....

ii) State **one** major disadvantage of weed labeled A **(1 mark)**

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iii) Give **two** reasons why weed C is difficult to control. **(1 mark)**

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iv) State **one** economic importance of the weed labeled (B) to human beings **(1 mark)**

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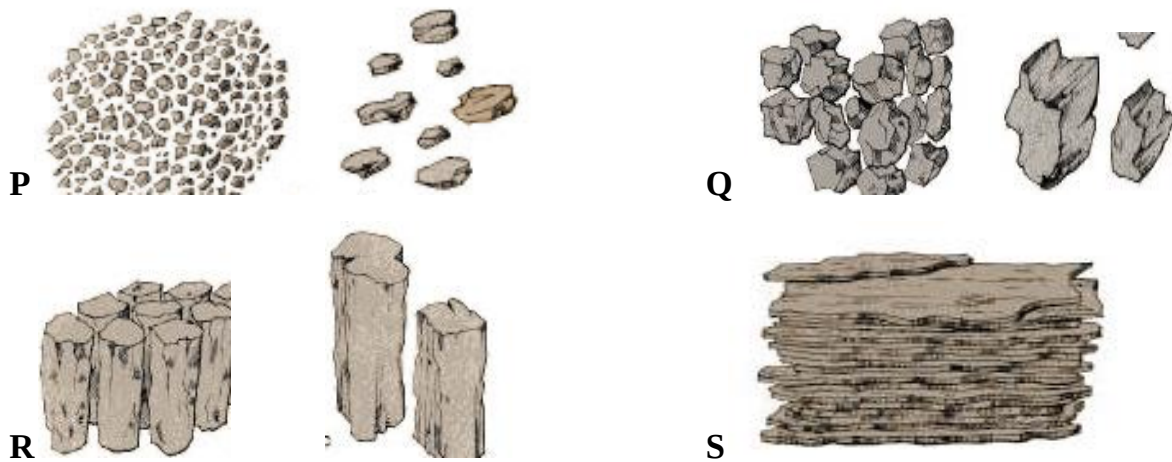
21) The table below shows weekly demand for rice in am market

Price (ksh)	Quantity demanded (kgs)
10	250
9	350
8	550
7	600
6	700
5	1000
4	1500

a) Calculate the elasticity of demand (Ed) for rice when the price falls from Kshs. 10 to Kshs. 9 per Kg. (show your working) **(3 marks)**

b) Other than price state any other factor that may factor that may increase the demand for rice in the market **(2 marks)**

22) The following diagrams shows various samples of soil aggregates



a) Identify the type of soils structures (2marks)

R

Q

R

S

b) Briefly explain how soil structures P can be improved (1mark)

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c) Name two places where soil structure labeled S can be found (2 marks)

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23) Study the following photographs and use them to answer the question that follows



- a) Identify the type of irrigation shown in the photograph (1 mark)

 b) State any **two** advantages of the above method of irrigation (2 marks)

 c) Other than the one shown above identify any other **two** methods that a farmer can use to irrigate his crops (2 marks)

SECTION C – 40 MARKS)

Answer any two questions and answer them in the spaces provided after question 26

- 24) a) A farmer has 30 hectares of arable land, 20 hectares of which is planted with maize and 10 hectares with grass hay. He wishes to replace 10 hectares of maize with Irish potatoes next year. The fertilizer rate will have to be increased from 2 bags per hectare for maize to 4 bags per hectare for potatoes. As a result of the change extra 40 men days of casual labour per hectare will be necessary at the rate of Kshs.100 per man a day. The average yield per hectare of maize is 35 bags and for potatoes 120 bags. The price paid is Kshs.1,000 per bag of maize and Kshs.600 per bag of potatoes. Maize seeds cost Kshs.750 per hectare and potatoes cost Kshs.800 per hectare. Fertilizer costs are Kshs. 650 per hectare.
- i) Draw up a partial budget and advise the farmer accordingly. (9 marks)
 ii) Name the other type of budget that can be prepared by a farm manager (1 mk)
- b) Discuss the various problems associated with land fragmentation (6 mks)
 c) Explain **four** environmental factors that affect the effectiveness of herbicides (4 mks)
25. a) Discuss the various cultural practices carried by farmers to control pests (10 marks)
 b) Discuss the production of dry beans under the following headings
 (i) Varieties (2 marks)
 (ii) Selection of planting materials (3 marks)
 (iii) Postharvest practices of dry beans (5 marks)
- 26 a) Describe harvesting of pyrethrum under the following subheadings
 i) Method and procedure (3 marks)
 ii) Precautions (3 marks)
 b) State **five** characteristics of nitrogenous fertilizers (4 marks)
 c) Explain **five** factors to consider when designing a crop rotation programme (10 mks)

KCSE JOINT PREMOCK

SERIES 2 EXAMS-2023

AGRICULTURE

443/2

PAPER 2

TIME: 2 HOURS

NAME.....

SCHOOL.....

SIGN.....

INDEX NO.....

ADM NO.....

INSTRUCTIONS TO CANDIDATES

- a) This paper consists of three sections, A,B and C.*
- b) Answer all questions in sections A and B and any two questions in section C.*
- c) All answers be written in the spaces provided after every question.*
- d) Candidates should write their names and index numbers in the spaces provided above.*

FOR EXAMINER'S USE ONLY

Section	Question	Maximum Score	Candidates Score
A	1 -16	30	
B	17 -20	20	
C		20	
		20	
		90	

SECTION A (30 Marks)

Answer all questions in this section in the spaces provided.

1. Name four meat breeds of rabbits.

(2mks)

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2. The following is a list of livestock diseases.

Brucellosis

Trypanosomiasis

Newcastle

Anthrax

African swine fever

Black guater

Which of the two diseases

(a) Are both bacterial and zoonotic.

(1mk)

(b) Highly infectious

(1mk)

3. State four qualities of marketable eggs.

(2mks)

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4. Mention four reasons for treating timber before using on farm structures.

(2mks)

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5. List four sources of power in the farm. (2mks)

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6. State four advantages of embryo transplant in cattle. (2mks)

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7. Give four circumstances under which a farmer would use an ox-drawn cart instead of a tractor drawn trailer on the farm. (2mks)

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8. State four factors that would contribute to the depression of farm equipment. (2mks)

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9. List two tools used for each of the following farm operations.

(i) Tightening barbed wires during fencing. (½ mk)

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(ii) Smoothing concrete floors during plastering (½ mk)

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10. State four advantages of deep litter system in poultry rearing. (2mks)

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11. State **four** ways of preventing mastitis in lactating cattle. (2mks)

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12. State **four** factors to be considered when selecting heifers for milk production. (2mks)

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13. State **four** features of a good maize store. (2mks)

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14. State four methods that a farmer can employ to ensure maximum power output from animal power. (2mks)

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15. State four advantages of artificial incubation in poultry rearing. (2mks)

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16. Give two reasons for flushing in sheep management. (1mk)

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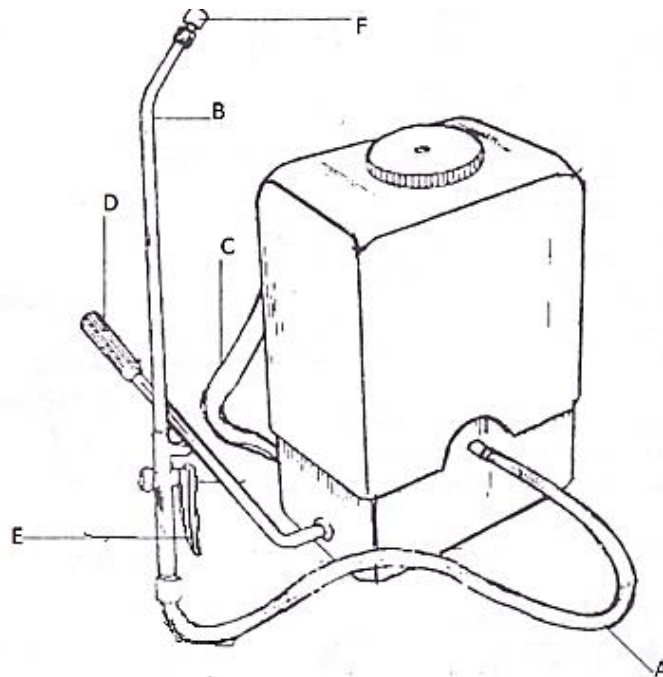
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SECTION B (20 Marks)

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

17. The following diagrams illustrate farm equipment. Study it and answer the questions that follow



(a) Name the parts labeled A, B, C and D.

A..... (½ mk)

B..... (½ mk)

C..... (½ mk)

D..... (½ mk)

(b) Give the function of each of the parts labeled **E and F**.

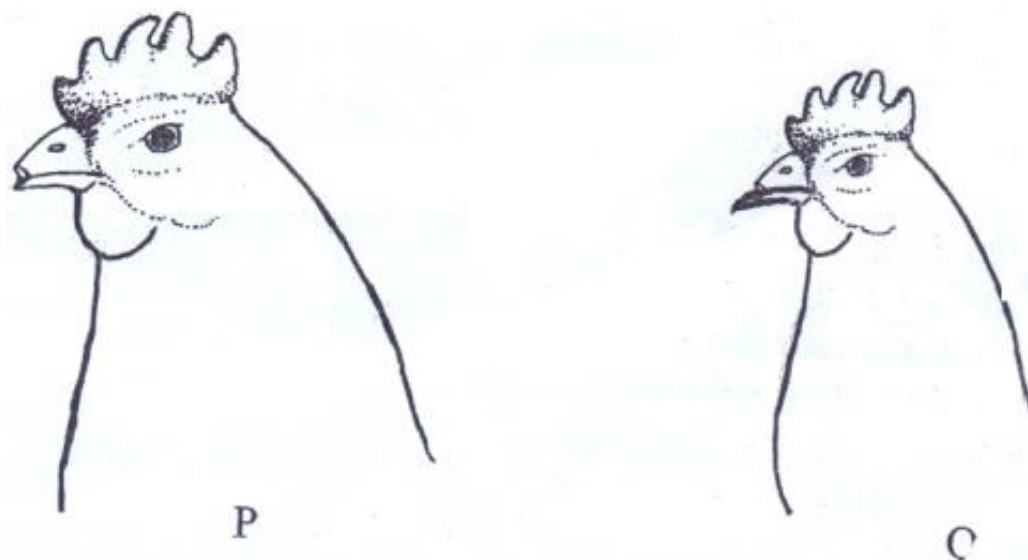
E..... (1mk)

F..... (1mk)

(c) Give one use of the above equipment. (1mk)

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18. The illustration below shows a practice in layer birds. Use them to answer the questions that follow.



(a) What practice is represented above? (1mk)

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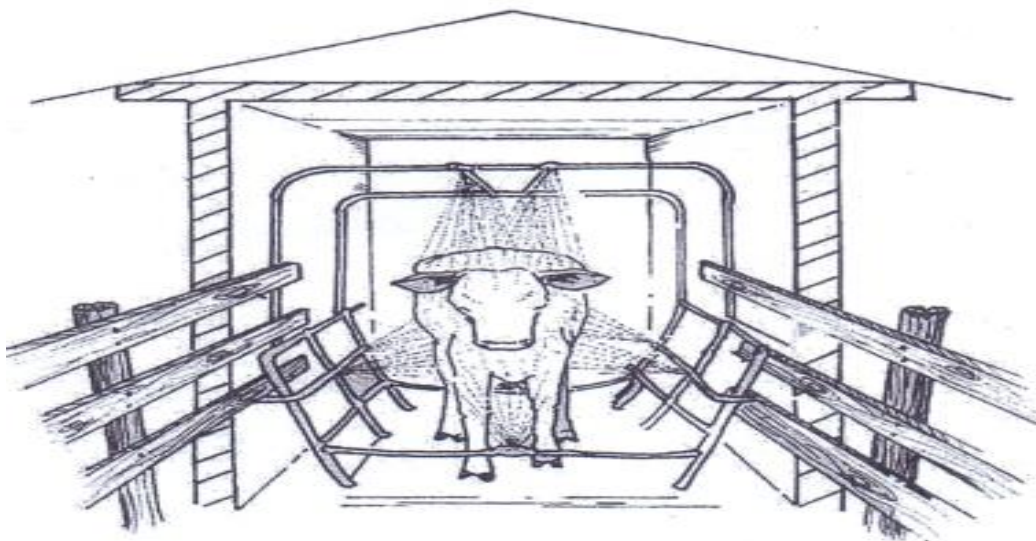
(b) Which illustrated shows the right way of carrying out the practice. (1mk)

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(c) State three reasons for carrying out the practice in poultry. (3mks)

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19. The diagram below shows a routine practice being carried out on an animal. Study it and answer questions that follow.



(a) Identify the practice. (1mk)

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(b) Name the structure in which the practice is being carried out. (1mk)

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(c) Give three advantages of using the above structure instead of a plunge dip. (3mks)

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20. Fill the table below for the following diseases.

Disease	Cause	Characteristic/Symptom	Preventive measures
Coccidiosis			
Blackquater			vaccination
Rinderpest	virus		
Milk fever			

(5mks)

SECTION C (40 Marks)

Answer any two questions from this section in the spaces after every question.

- 21 (a)** Explain eight factors that influence the composition of milk in a dairy cow. **(8mks)**
- b)** Outline six causes of cannibalism in poultry. **(6mks)**
- c)** Explain six uses of fences in the farm. **(6mks)**
-
- 22 (a)** Describe New castle disease under the following sub-headings.
- (i)** Causal organism **(1mk)**
- (ii)** Animal affected **(1mk)**
- (iii)** Symptoms **(5mks)**
- (iv)** Control measures. **(3mks)**
- b)** Describe the principle operation of four-stroke cycle engine. **(10mks)**
-
- 23 (a)** Outline five signs of parturition in cattle. **(5mks)**
- b)** State five reasons for carrying out inbreeding in livestock production. **(5mks)**
- c)** Give five effects of parasites on livestock. **(5mks)**
- d)** Describe the difference between ruminants and non-ruminants digestive system. **(5mks)**

KCSE JOINT PREMOCK

SERIES 2 EXAMS-2023

BUSINESS STUDIES

565/1

PAPER 1

TIME: 2 HOURS

NAME.....

SCHOOL..... SIGN.....

INDEX NO..... ADM NO.....

INSTRUCTIONS TO CANDIDATES

- (a) Write your name and index number in the spaces provided above.
- (b) Sign and write the date of the examination in the spaces provided above.
- (c) Answer all questions.
- (d) All answers should be written in the spaces provided in this booklet.
- (e) Candidates should answer the questions in English.

For Teacher's Use Only

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

Question	14	15	16	17	18	19	20	21	22	23	24	25
Marks												

TOTAL
MARKS

Answer all questions

1. Highlight **four** difficulties faced by a consumer in the satisfaction of human wants. **(4 marks)**

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2. State **four** contents of a business plan. **(4 marks)**

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3. Outline **four** attributes of a good office worker. **(4 marks)**

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4. Highlight **four** circumstances under which a debit note may be issued by the seller. **(4 marks)**

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5. The cost of consumer goods in a basket of an average family is given below.

Year	2016	2017
	Ksh	Ksh
Maize flour	90	110
Sugar	100	115
Rice	80	90

Determine the consumer price index using 2016 as the base year. **(4 marks)**

6. Highlight **four** factors that determine the fertility rate in a given economy. (4 marks)

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7. With an aid of a well labeled diagram, illustrate the circular flow of income in a two sector economy. (4 marks)

8. The following information relates to four businesses A, B, C and D. Fill in the missing figures.

(4 marks)

Business	Assets Shs	Capital Shs	Liabilities Shs
A	4,010,000	3,210,000	a).
B	b).	9,312,000	211,100
C	1,301,111	c).	412,113
D	13, 917,331	11,716,000	d).

9. State **four** reasons that may lead to dissolution of a parastatal.

(4 marks)

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10. Give **four** importance of a warehouse to a trader.

(4 marks)

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11. Outline **four** benefits of the standard gauge railway (SGR) to the Kenyan economy. (4 marks)

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12. Outline the steps that are followed in the personal selling process.

(4 marks)

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13. Highlight **four** channels that a fish farmer may use to distribute her produce in a local Market. (4 marks)

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14.State **four** characteristics of a market. (4 marks)

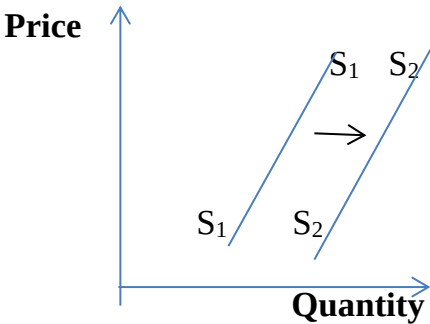
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15. Highlight **four** factors which may have led to a shift in the supply curve as illustrated below. (4 marks)



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16. State **four** items of information one can obtain from an insurance policy. (4 marks)

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17. Outline **four** advantages of using written communication in an organization. (4 marks)

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18. Record the following transactions that took place in Otiende traders from 21st august to 24th August 2018 in the general journal. (4 marks)

2018

- 21st Aug: Bought furniture from Lowoi furniture mart at Sh 60,000 on credit
- 22nd Aug: Sold an old machinery on credit to Muchina at Sh. 90,000
- 23rd Aug: Bought a lawn mower from Farm Machines on credit Sh. 80,000
- 24th Aug: Purchased a water tank worth Sh. 140,000 on credit from Kentank ltd

19. Munyao an entrepreneur intends to start a business. Give **four** factors that he needs to consider when deciding on which goods to produce. (4 marks)

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20. For each of the transactions given below indicate the accounts to be debited and the account to be credited. (4 marks)

Transactions	A/c to Debit	A/c to Credit
a). Started business with Shs. 400,000 in cash		
b). Returned goods worth Shs. 21,000 to Nyayo traders		
c). Banked Shs. 80,000 from cash till		
d). Proprietor took goods from the business for family use		

21. The following information was extracted from the books of Kisima wholesalers on 31st December, 2018.

- (i) Opening stock sh. 300,000
- (ii) Purchases sh. 1,550,000
- (iii) Closing stock sh. 220,000
- (iv) Margin 1/6

Required : Draw Kisima wholesalers trading account. (4 marks)

22. Outline four sources of non-tax revenue to a County Government. (4 marks)

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23. State the business environment described in the statements given below. (4 marks)

Description	Business Environment
a). Formal arrangement of activities that are carried out at various levels of the organization so that its objectives can be Achieved.	
b). Factors that affect buyers ability to buy the goods and Services offered by a business.	
c). Norms that regulate behaviors of people in a society.	
d). a combination of employees' expectations, beliefs and Values within the business.	

24. State the ledgers in which each of the following accounts are kept. (4 marks)

Ledgers

- a). Rent Account
- b). Discount received Account
- c). Cash Account
- d). Creditors Account

25. Highlight **four** features of a fixed deposit account offered by commercial banks. (4 marks)

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KCSE JOINT PREMOCK

SERIES 2 EXAMS-2023

BUSINESS STUDIES

565/2

PAPER 2

TIME: 2½ HOURS

NAME.....

SCHOOL..... SIGN.....

INDEX NO..... ADM NO.....

INSTRUCTIONS FOR CANDIDATES:

- a) This paper consists of **six** questions*
- b) Answer any **five** questions.*
- c) Write your answers in the answer booklet provided.*
- d) All questions carry equal marks.*

FOR EXAMINERS USE ONLY

	1	2	3	4	5	6
a)						
b)						

TOTAL SCORE

QUESTIONS

1. a) Explain **five** ways in which division of labour is useful to a firm. (10 marks)
b) Explain **five** negative effects of a youthful population in a country (10 marks)

2. a) Explain **four** insurance policies you would advise a hospital chief executive officer to insure against. (8 marks)

- b) The following balances were extracted from the books of Isaboke Traders for the year ended 31/12/2022.

Item	Kshs.
Discount received	9,500
General expenses	97,000
Rent	48,000
Lighting	6,300
Motor vehicle	2,100,000
Gross profit	326,000
Salaries	75,000
Commission received	12,470
Cash	50,000
Debtors	278,000
Discount allowed	4,600
Water	9,200
Stock	95,000
Furniture and Equipment	600,000
Bank	200,000
Capital	3,200,000
Creditors	14,330

Required; Prepare

- (i) Profit and loss account for the year ended 31/12/2022 (6 marks)
(ii) Balance sheet as at 31/12/2022 (4 marks)
(iii) Calculate (a) Working capital (1 mark)
(b) Capital employed (1 mark)

3. a) Explain **five** reasons why consumers need protection against traders malpractices (10 marks)
b) Explain **five** banking services offered by the Central Bank to the Government (10 mks)

- 4.a) Give **five** differences between perfect competition and monopoly market structures.(10 marks)
b) Explain **five** guidelines county governments need to follow before spending public funds. (10 marks)

5.a) Explain **five** circumstances under which a customer may prefer to buy goods on credit terms rather than on hire purchase **(10 marks)**

b) The following transactions took place in the business of Mokaya enterprise in the month of July 2022

July 1: Started business with sh. 150,000 in bank and ksh, 30,000 in cash

July 3: Purchased goods valued at sh. 34,000 from Kioko on credit

July 8: Paid rent sh. 13,000 by cheque

July 10: Purchased office equipment valued at Ksh. 45,000 from Daima stores and paid by cheque.

July 12: Sold goods in cash Ksh. 15,000

July 15: Paid Chemtai Ksh. 24,000 by cheque

Required: Use the above information to;

(i) Prepare the relevant ledger accounts and balance them off as at 15th July 2022 **(6 marks)**

(ii) Extract a trial balance **(4 marks)**

6.a) Explain **five** benefits that may be realized by a country as a result of government policy to relocate industries to rural areas. **(10 marks)**

b) On 1st of April 2022, Machofi Traders had the following balances:

• Bank 15,000(Cr)

• Cash 25,000(Dr)

The following transactions took place during the month of April 2022.

April:

3rd: Paid wages in cash sh. 15,000

5th: Bought goods worth sh. 750

6th: Received cheques from the following debtors after allowing a 2% discount in each case. Rioki sh. 980, Kombo sh. 1,960

8th: Chebe paid a cheque for sh. 1,000

11th: Bought machinery by cheque for sh. 5,000

13th: Cash sales paid directly to the Bank sh. 4,000

15th: Withdrew cash sh. 1,000 for private use

20th: Cash sales sh. 20,000

21st: Banked cash amount sh. 1,000

24th: A cheque recorded from Chebe on 8th of April was dishonoured

27th: Received sh. 3,000 from Kiko a debtor

30th: Bank all the available cash except sh. 1,000

Prepare Machofi Traders Three column cash book for the month of April, 2022 **(10 marks)**

KCSE JOINT PREMOCK

SERIES 2 EXAMS-2023

CHRISTIAN RELIGIOUS EDUCATION

313/1

PAPER 1

TIME: 2½ HOURS

NAME.....

SCHOOL..... SIGN.....

INDEX NO..... ADM NO.....

INSTRUCTIONS:

- a) There are **six** questions in this paper.*
- b) This paper has got **two** pages.*
- c) Answer any **five** questions.*
- d) Each student must verify that all pages and questions are present in the paper.*
- e) All answers must be in the answer sheets provided.*
- f) All answers must be in English.*

FOR EXAMINERS' USE ONLY

Question	1	2	3	4	5	6	TOTAL
Score							

QUESTIONS

- 1.a) Give **eight** moral values gained by studying Christian Religious Education. (8mks)
- b) State **five** books of Apocrypha in the Bible. (5mks)
- c) How does the church help to bring back members who have fallen from the faith? (7mks)
- 2.a) Describe the incident in which Abraham's faith was tested by God. (8mks)
- b) Identify **seven** roles of Moses as the leader of the Exodus. (7mks)
- c) How do Christians express their faith in God? (5mks)
- 3.a) Outline **eight** failures of King Solomon. (8mks)
- b) Explain how the marriage between Ahab and Jezebel contributed to the spread of idolatry in Israel. (6mks)
- c) Show how Christians today are taking part in idolatry. (6mks)
- 4.a) Mention **seven** roles of prophets in Israel. (7mks)
- b) Describe the vision of locusts shown to Prophet Amos by God in Amos 7:1-3. (6mks)
- c) Identify **seven** ways in which Christians play their prophetic role in the society today. (7mks)
- 5.a) With reference to Jeremiah's teachings, explain **four** symbolic acts related to hope and restoration. (8mks)
- b) Give **seven** vows made by the Israelites during the time of the renewal of the covenant, under Nehemiah (Nehemiah 10: 28- 39). (7mks)
- c) Give **five** problems that Christian leaders face in their work today. (5mks)
- 6.a) Explain **seven** roles performed by ancestors in traditional African communities. (7mks)
- b) State **seven** importance of kinship ties in traditional African societies. (7mks)
- c) Give **six** changes that have taken place in the traditional African understanding of property. (6mks)

KCSE JOINT PREMOCK

SERIES 2 EXAMS-2023

CHRISTIAN RELIGIOUS EDUCATION

313/2

PAPER 2

TIME: 2½ HOURS

NAME.....

SCHOOL..... SIGN.....

INDEX NO..... ADM NO.....

INSTRUCTION TO CANDIDATES

- a) This paper consists of six questions.*
- b) Answer any **five** questions.*
- c) Write your answers in the answer booklet provided.*
- d) All questions carry equal marks.*
- e) Candidates should check the question paper to ascertain that all pages are printed as indicated and that no questions are missing.*
- f) Candidate should answer the questions in English.*

For Examiners use only

Question	1	2	3	4	5	6
Candidate's						
Score						

TOTAL SCORE

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QUESTIONS

1. a) State **six** prophecies about Jesus according to Prophet Nathan (2 Samuel 7: 3- 17) (6mks)
b) Give **seven** revelations about the child as given by Angel Gabriel to **Mary** (7mks)
c) What lessons do Christians learn from the visit of Mary to **Elizabeth**. (Luke 1: 39-56).
(7mks)

2. a) Describe the incident when Jesus was rejected at Nazareth (Luke 4:14 – 30) (8mks)
b) Identify **six** reasons why Jesus faced opposition from the Jewish religious leaders in Galilee.
(6mks)
c) Give **seven** ways in which the church leaders are preparing the society for the second coming of Jesus.
(7mks)

3. a) Identify **five** teachings that Jesus made to the guests at the Pharisees’ house (Lk 14: 1– 14)
(5mks)
b) Describe the Triumphant entry of Jesus into Jerusalem as recorded in **Luke 19: 28- 40** (7 mks)
c) Give **six** reasons why should Christians are discouraged from taking part in **mob justice**?(6 marks)

4. a) List **seven** gifts of the Holy Spirit as taught by St. Paul (1 Corinthians 12,13,14) (7mks)
b) Outline teachings of the unity of believers as expressed in the concept of the Bride and the Groom (2 Corinthians 11:2, Rev 21:1-12) (8mks)
c) State how kindness as a fruit of the Holy Spirit is abused in the Church in Kenya today. (5marks)

- 5.a) Explain **seven** effects of prostitution in a Christian family. (7mks)
b) State **seven** factors that one should consider when choosing a career. (7mks)
c) Identify **six** ways in which a Christian youth can avoid being influenced into drug abuse (6mks)

- 6.a) Outline **seven** causes of poverty in Kenya today. (7mks)
b) Explain **seven** reasons why crime rate has greatly increased in society today. (7mks)
c) Show how science and technology can help reduce the level of poverty in Kenya today. (6mks)

KCSE JOINT PREMOCK

SERIES 2 EXAMS-2023

GEOGRAPHY

312/1

PAPER 1

TIME: 2¾ HOURS

NAME.....

SCHOOL.....

SIGN.....

INDEX NO.....

ADM NO.....

INSTRUCTIONS TO CANDIDATES

- ✓ Answer all questions in section A.
- ✓ In section B, Answer question 6 and any other two questions from the remaining questions.
- ✓ Answer all questions using the answer booklet provided.
- ✓ Candidate should check that all pages are printed and no questions are missing.

FOR EXAMINATION USE ONLY.

	Maximum Score	Candidate Score
Section A.	25	
Question 6	25	
Question 7	25	
Question 8	25	
Question 9	25	
Question 10	25	
TOTAL	100%	

SECTION A

Answer all the questions in this section.

- 1 (a) Name two theories of the origin of the earth. (2marks)
(b) State three effects of the rotation of the earth on its own axis. (3 marks)
- 2(a) State two ways in which underground water may reach the earth's surface (2marks).
(b) Draw a well labelled diagram of the hydrological (5marks)
3. Give three reasons why the recording of data at a school weather may be inaccurate(3marks)
- 4 (a) What is natural vegetation? (2marks)
(b) State **three** characteristics of the Mediterranean type of vegetation (3marks)
- 5(a) Name two major earthquake zones of the world (2marks)
(b) Give **three** factors that influence the rate of weathering (3marks)

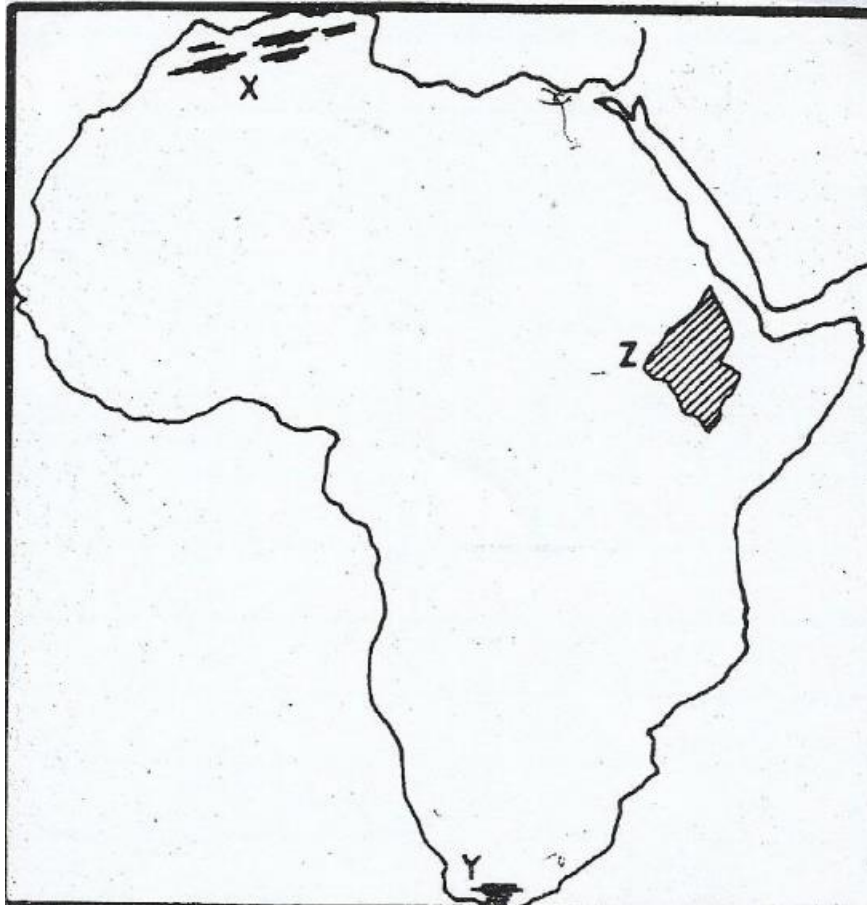
SECTION B

Answer question 6 and any other two questions from this section

- 6) Study the map of Nyeri 1:50,000 (sheet 120/4) provided and answer the following questions.
- a) i) What is the longitudinal extent of the map extract? (2marks)
ii) Give the **Four** figure grid reference of the labour camp near Mweiga estate (2marks)
iii) Identify **two** districts in the area covered by the map. (2marks)
- b) i) **Give** two methods used to represent relief on the map (2marks)
ii) **State** three problems that maybe encountered during the construction of roads in the area covered by the map (3marks)
- c) **Citing** evidence from the map, give three reasons why cattle rearing is widespread in Nyeri area. (6marks)
- d) i) Apart from administration, give three other services provided in the area covered by Nyeri map
ii) Describe the distribution of settlement in the area covered by the map (4marks).
iii) Give two factors that favour coffee growing in Nyeri Map (2marks)

7) (i) Apart from fold mountains, name three other features resulting from folding (3marks)

ii) On the outline map of Africa provided, name the feature marked x, y and z. (3marks)



iii) Describe the formation of Fold Mountains (5marks)

c) (i) Name four major orogeny (4marks)

ii) Using a well labelled diagram describe the formation of an Asymmetrical fold (6marks)

(d) Explain two ways in which Fold Mountains influence climate (4marks)

8) a) (i) What is a river divide (2marks)

ii) Describe three ways by which a river transports its load. (6marks)

(b) Describe the characteristics of river in its old stage (4marks)

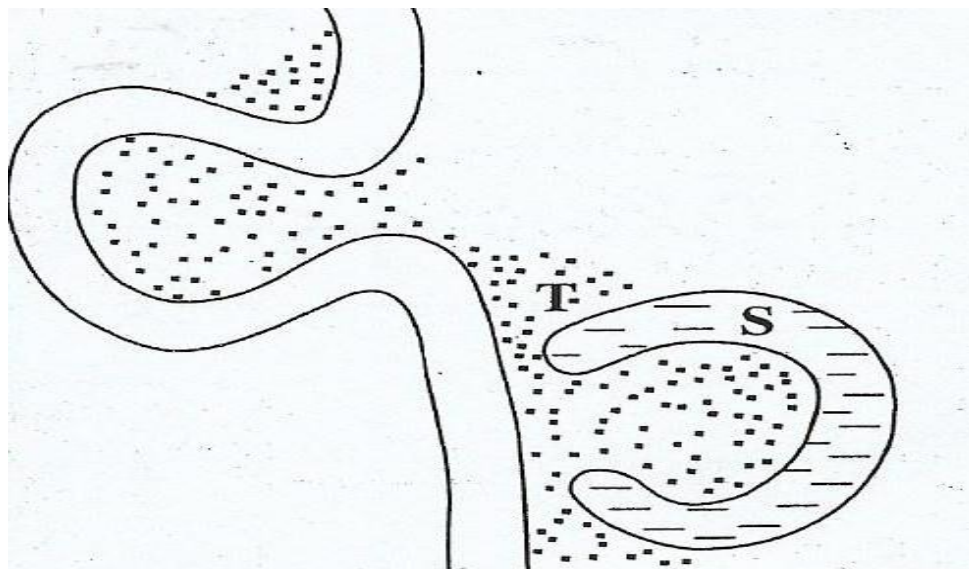
(c) Describe each of the following drainage patterns

i) Superimposed drainage pattern (3marks)

ii) Centripetal drainage pattern (2marks)

d) (i) What is a delta (2marks)

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



Name the features marked S and T (2marks)

iii) State four conditions that are necessary for the formation of the feature marked S. (4marks)

9 (a) Describe the following characteristics of minerals

i) Colour (2 marks)

ii) Cleavage (2marks)

iii) Hardness (2 marks)

b) (i) Give two types of igneous rocks (2marks)

iv) Explain three conditions necessary for the growth of coral polyps (3marks)

c) Describe three ways in sedimentary rocks are formed (9marks)

d) (i) What is rock metamorphism? (2marks)

(ii) State three causes of heat and pressure during metamorphism. (3marks)

10 a (i) What is soil catena (2marks)

(ii) Draw a labelled diagram to show a well develop soil profile. (5marks)

(iii) State three characteristics of soils found in the arid regions of Kenya (3marks)

(b) Give three factors that determine the colour of soils (3mks)

c) Describe how lateralization occurs (6marks)

d) Describe how the following types of erosion occur.

i) Sheet erosion (2marks)

ii) Gulley erosion (2marks)

d) Give two factors that influence the thickness of a soil (2marks)

THIS IS THE LAST PRINTED PAGE

KCSE JOINT PREMOCK

SERIES 2 EXAMS-2023

GEOGRAPHY

312/2

PAPER 2

TIME: 2¾ HOURS

NAME.....

SCHOOL.....

SIGN.....

INDEX NO.....

ADM NO.....

INSTRUCTIONS TO CANDIDATES

- ✓ Answer all questions in section A.
- ✓ In section B, Answer question 6 and any other two questions from the remaining questions.
- ✓ Answer all questions using the answer booklet provided.
- ✓ Candidate should check that all pages are printed and no questions are missing.

FOR EXAMINATION USE ONLY.

	MAXIMUM SCORE	CANDIDATE SCORE
Section A.	25	
Question 6	25	
Question 7	25	
Question 8	25	
Question 9	25	
Question 10	25	
TOTAL	100%	

SECTION A

*Answer **all** the questions in this section.*

1. (a) What is the relationship between Geography and History? (2 marks)
(b) Identify **three** sub-branches of Geography in human and social sciences. (3 marks)
2. (a) What is a mineral ore? (2 marks)
(b) State **three** ways in which mineral ores occur in the crust. (3 marks)
3. (a) Distinguish between a forest and forestry. (2 marks)
(b) State four factors that influence the distribution of forests in Kenya. (3 marks)
4. (a) What is nomadic pastoralism? (2 marks)
(b) Give **three** reasons why nomadic pastoralists keep large herds of animals. (3 marks)
5. (a) Name **two** types of environments. (2 marks)
(b) State **three** consequences of environmental degradation. (3 marks)

SECTION B

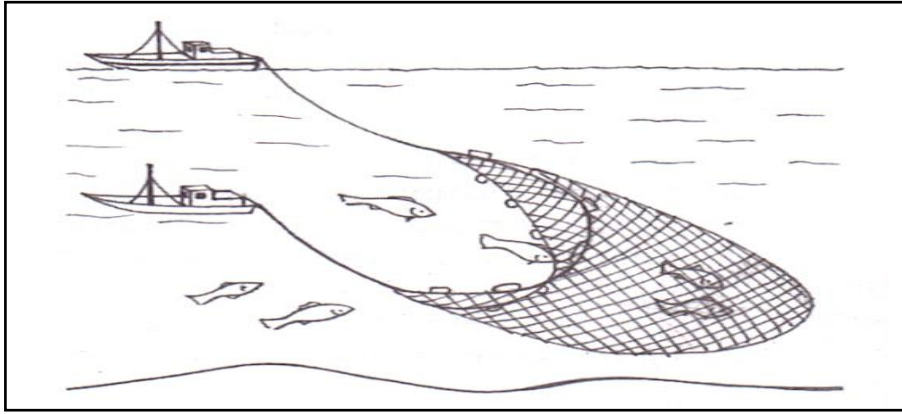
*Answer question 6 and any other **TWO** questions from this section.*

6. Study the photograph below and use it to answer the questions that follow



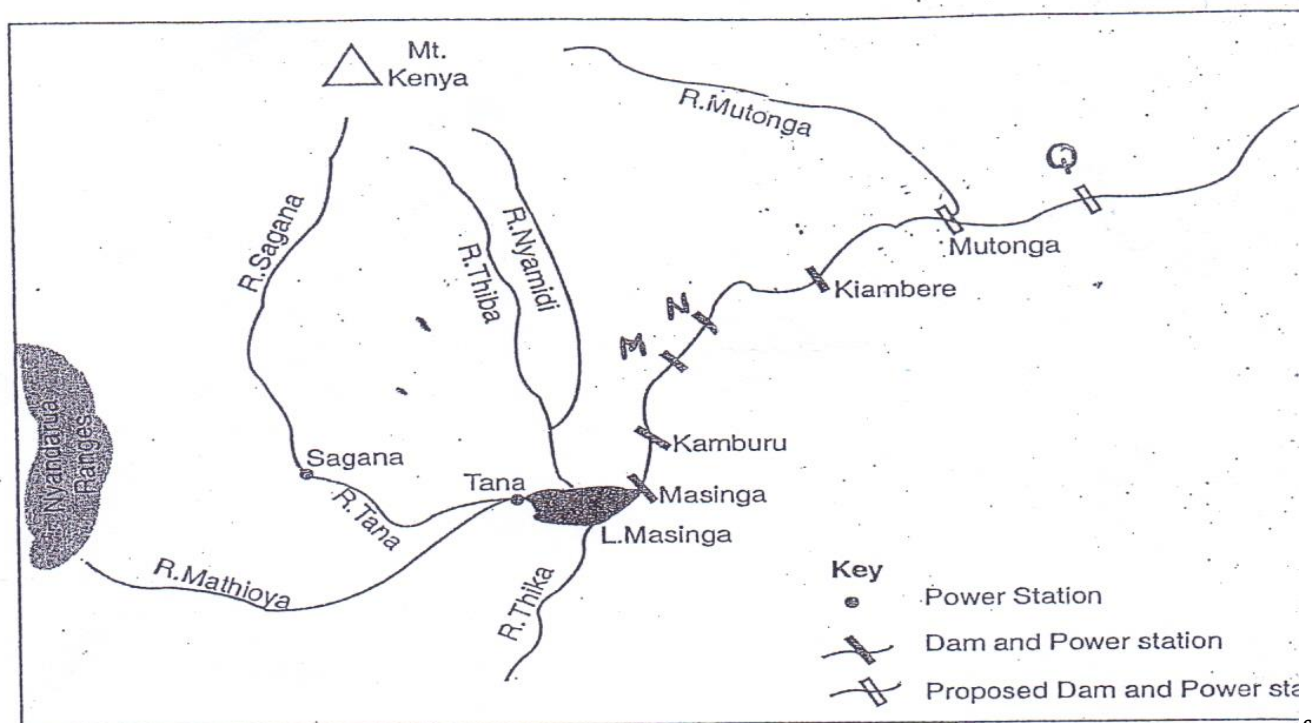
- (a) (i) Identify the type of photograph shown above. (1 mark)
(ii) Identify **two** counties to the East of the Rift valley where the crop is grown. (2 marks)
 - (b) Draw a rectangle measuring 8cm by 5cm. On it, sketch and label the main features. (7 marks)
 - (c) State the physical conditions that favour coffee farming in Kenya. (5 marks)
 - (d) Explain **five** differences between coffee farming in Kenya and Brazil. (10 marks)
7. (a) (i) What is fish farming? (2 marks)
(ii) State **four** significance of fish farming. (4 marks)

(b) Use the diagram below to answer the following questions.



- (i) Identify the fishing method. (1 mark)
- (ii) Describe how the method above is used to catch fish. (6 marks)
- (c) State **three** problems encountered by fishermen while fishing in Lake Victoria. (3 marks)
- (d) Explain **four** reasons why marine fishing is less developed in East Africa. (8 marks)
8. (a)(i) Define the term wildlife. (2 marks)
- (ii) Explain how the following factors has influenced distribution of wildlife in East Africa.
- Vegetation cover (2 marks)
 - Rainfall variations (2 marks)
 - Human factors (2 marks)
- (b) (i) Identify **four** tourist attractions along the coast. (4 marks)
- (ii) State **five** ways in which tourism in Kenya and Switzerland are similar. (5 marks)
- (c) Explain the significance of tourism to Kenya's economy. (8 marks)
9. (a) (i) Name **three** non-renewable sources of energy. (3 marks)
- (ii) Give **three** disadvantages of using wood as a source of fuel. (3 marks)

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

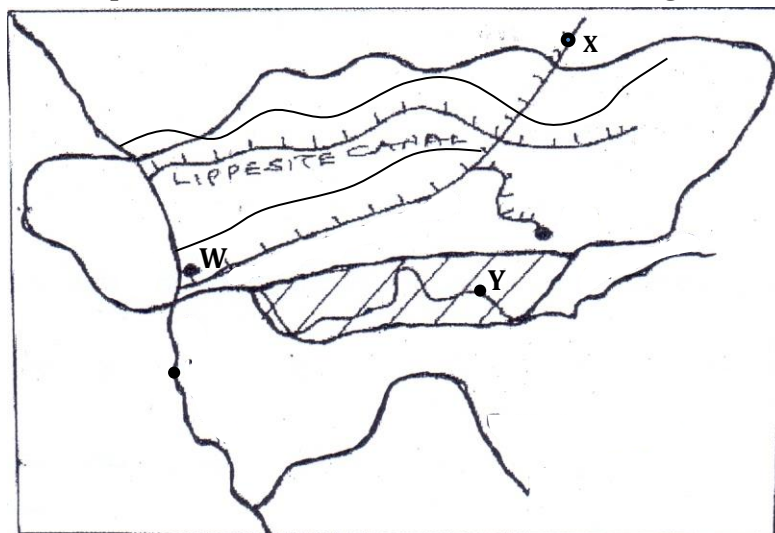


- (i) Name the H.E.P stations marked **M** and **N**. (2 marks)
- (ii) Name waterfall marked **Q**. (1 mark)
- (iii) Apart from natural waterfalls, state **three** other physical factors that led to the establishment of seven forks hydroelectric power project along river Tana. (3 marks)
- (c)(i) Identify **two** areas in Kenya where wind energy is harnessed. (2 marks)
- (ii) Give **three** advantages of wind energy. (3 marks)
- (d)(i) Define energy crisis. (2 marks)
- (ii) Explain the effect of energy crisis under the following sub-heading.
 - Agriculture (2 marks)
 - Tourism (2 marks)
 - Industries (2 marks)

10.(a)(i) What is a cottage industry? (2 marks)

(ii) Give **four** reasons why the government of Kenya encourages the establishment of Jua kali industries. (4 marks)

(b) Study the sketch map shown below of the Ruhr industrial region. Use it to answer question (i).



- (i) Name the canal marked **X**. (1 mark)
- (ii) Name the river marked **Y**. (1 mark)
- (iii) Name the town marked **W**. (1 mark)

(c)(i) Show how the government may solve the following problems facing industries in Kenya.

- Competition from cheap imports. (1 mark)
- High cost of energy/electricity (1 mark)
- Limited market. (1 mark)

(ii) Explain **three** factors that favoured car manufacturing industry in Japan. (6 marks)

(d) Form four Geography students carried out a field study at a paper mill.

(i) State **three** ways in which they prepared for the field study. (3 marks)

(ii) Give **four** reasons why the industry was located near a source of water the student could have established. (4 marks)

KCSE JOINT PREMOCK

SERIES 2 EXAMS-2023

HISTORY AND GOVERNMENT

311/1

PAPER 1

TIME: 2½ HOURS

NAME.....

SCHOOL..... SIGN.....

INDEX NO..... ADM NO.....

FOR EXAMINERS USE

SECTION	QN	MAX	SCORE
A (25 Marks)	1-17	25	
B (45 Marks)	18	15	
	19	15	
	20	15	
	21	15	
C (30 Marks)	22	15	
	23	15	
	24	15	
GRAND TOTAL		100%	

INSTRUCTIONS TO CANDIDATES

- (a) This paper consists of **three** sections **A**, **B** and **C**.
- (b) Answer **all** questions in section **A**, **three** from Section **B** and **two** from Section **C**.
- (c) Answers to all the questions must be written legibly in the answer booklet provided.

Section A (25 marks)

Answer all questions in this section

1. Give the **main** source of information on unwritten history (2 marks)
2. Give **two** functions of council of elders among the Akamba. (2 marks)
3. Give **two** ways of interaction between Kenya societies in the 19th century. (2 marks)
4. Identify the name of the council of elders among Mijikenda community. (1 mark)
5. Give **one** written source that shows contacts between the Kenyan coast and the outside world up to 1200 AD. (1 mark)
6. Give **two** contributions of the early missionaries in the field of education (2 marks)
7. Give **two** characteristics of a good constitution. (2 marks)
8. Identify **two** special groups whose rights are protected by Kenyan constitution. (2 marks)
9. State **two** reasons why colonial government encouraged settler farming in Kenya (2 marks)
10. Identify **two** political challenges that Kenyans faced at independence. (2 marks)
11. Identify **one** reason why trade unions were formed in Kenya by 1914. (1 mark)
12. State **one** way of becoming a member of parliament in Kenya. (1 mark)
13. Name the body in charge of election in Kenya. (1 mark)
14. Identify **one** demerit of parliamentary supremacy. (1 mark)
15. Give **one** factor considered in reviewing electoral boundaries in Kenya. (1 mark)
16. Give **one** importance of the rule of law. (1 mark)
17. Give **one** function of the Senate. (1 mark)

Section B (45 marks)

Answer any three questions from this section

18. (a) Give **five** reasons why the Maasai collaborated with the British during the colonial period in Kenya.. (5 marks)
- (b) Explain **five** reasons why the Nandi resisted the British for so long. (10 marks)
19. (a) List **five** reasons why Seyyid Said transferred his capital from Muscat to Zanzibar. (5 marks)
- (b) Explain **five** effects of plantation agriculture. (10 marks)

20. (a) Identify **five** results of Devonshire White Paper of 1923. (5 marks)
- (b) Explain **five** consequences of colonial land policies in Kenya. (10 marks)
21. (a) Give **five** characteristics of early political organizations in Kenya. (5 marks)
- (b) Explain **five** problems faced by trade union movements in Kenya during colonial period. (10 marks)

SECTION C (30 MARKS)

Answer any two questions from this section

22. (a) Give **three** advantages of unwritten constitution. (3 marks)
- (b) Describe the features of Kenya's independence constitution. (12 marks)
23. (a) Give the composition of the National Security Council in Kenya. (3 marks)
- (b) Explain **six** functions of the Public Service Commission in Kenya. (12 marks)
24. (a) Identify **three** principles of Devolution. (3 marks)
- (b) Explain **six** functions of County Government in Kenya. (12 marks)

KCSE JOINT PREMOCK

SERIES 2 EXAMS-2023

HISTORY AND GOVERNMENT

311/2

PAPER 2

TIME: 2½ HOURS

NAME.....

SCHOOL..... SIGN.....

INDEX NO..... ADM NO.....

FOR EXAMINERS USE

SECTION	QN	MAX	SCORE
A (25 Marks)	1-17	25	
B (45 Marks)	18	15	
	19	15	
	20	15	
	21	15	
C (30 Marks)	22	15	
	23	15	
	24	15	
GRAND TOTAL		100%	

INSTRUCTIONS TO CANDIDATES

- (a) This paper consists of **three** sections **A**, **B** and **C**.
- (b) Answer **all** questions in section **A**, **three** from Section **B** and **two** from Section **C**.
- (c) Answers to all the questions must be written legibly in the answer booklet provided.

SECTION A (25 MARKS)

Answer all questions in this section

1. Define the term history. (1 mark)
2. Identify **two** methods used by archeologists to date fossils. (2 marks)
3. Name **one** sub-species of Homo Sapiens. (1 mark)
4. Give **two** characteristics of early agriculture in Europe before the Agrarian revolution. (2 marks)
5. Identify **one** river responsible for early agriculture in Mesopotamia. (1 mark)
6. Give **two** shortcomings of barter trade. (2 marks)
7. Give **two** advantages of using a motorcycle as a means of transport. (2 marks)
8. Identify the person who invented the first aeroplane. (1 mark)
9. Name **two** early metals used in industrial development. (2 marks)
10. Give **two** advantages of metal tools over stone tools. (2 marks)
11. Identify **one** early urban centre in Europe. (1 mark)
12. Give the **main** reason for the development of Kilwa as an early urban centre. (1 mark)
13. Identify **two** communities that took part in the Maji Maji rebellion. (2 marks)
14. Give the **main** reason why Europeans used scorched earth policy against African resistance. (1 mark)
15. Name **two** communes in Senegal where the policy of assimilation was applied successfully. (2 marks)
16. Name the policy adopted by France and Britain to avoid the outbreak of another war after the First World War. (1 mark)
17. Identify the immediate cause of the Second World War. (1 mark)

SECTION B (45 MARKS)

Answer any three questions from this section

18. (a) Identify **five** hunting methods used by early man. (5 marks)
(b) Describe the culture of man in the Middle Stone Age period. (10 marks)
19. (a) Identify **five** methods used to acquire slaves during the Trans-Atlantic slave trade. (5 marks)
(b) Explain **five** factors responsible for the decline of the Trans-Atlantic slave trade (10 marks)

20. (a) List **five** traditional forms of communication. (5 marks)
(b) Explain **five** negative impacts of modern means of communication. (10 marks)
21. (a) Give **five** economic activities of the Shona Empire during the pre-colonial period. (5 marks)
(b) Discuss the social organization of the Asante Empire in the pre-colonial period. (10 marks)

SECTION C (30 MARKS)

Answer any two questions from this section

22. (a) Give **three** methods used by African nationalist in South Africa in their struggle for independence. (3 marks)
(b) Explain **six** problems encountered by nationalists in Ghana in their struggle for independence. (12 marks)
23. (a) Give **three** terms of the Berlin Conference of 1884-1885. (3 marks)
(b) Explain **six** results of Buganda collaboration. (12 marks)
24. (a) Outline the structure of the League of Nations. (3 marks)
(b) Explain **six** causes of the Second World War. (12 marks)

KCSE JOINT PREMOCK

SERIES 2 EXAMS-2023

ENGLISH

101/1

PAPER 1

TIME: 2 HOURS

NAME.....

SCHOOL.....

SIGN.....

INDEX NO.....

ADM NO.....

Instructions:

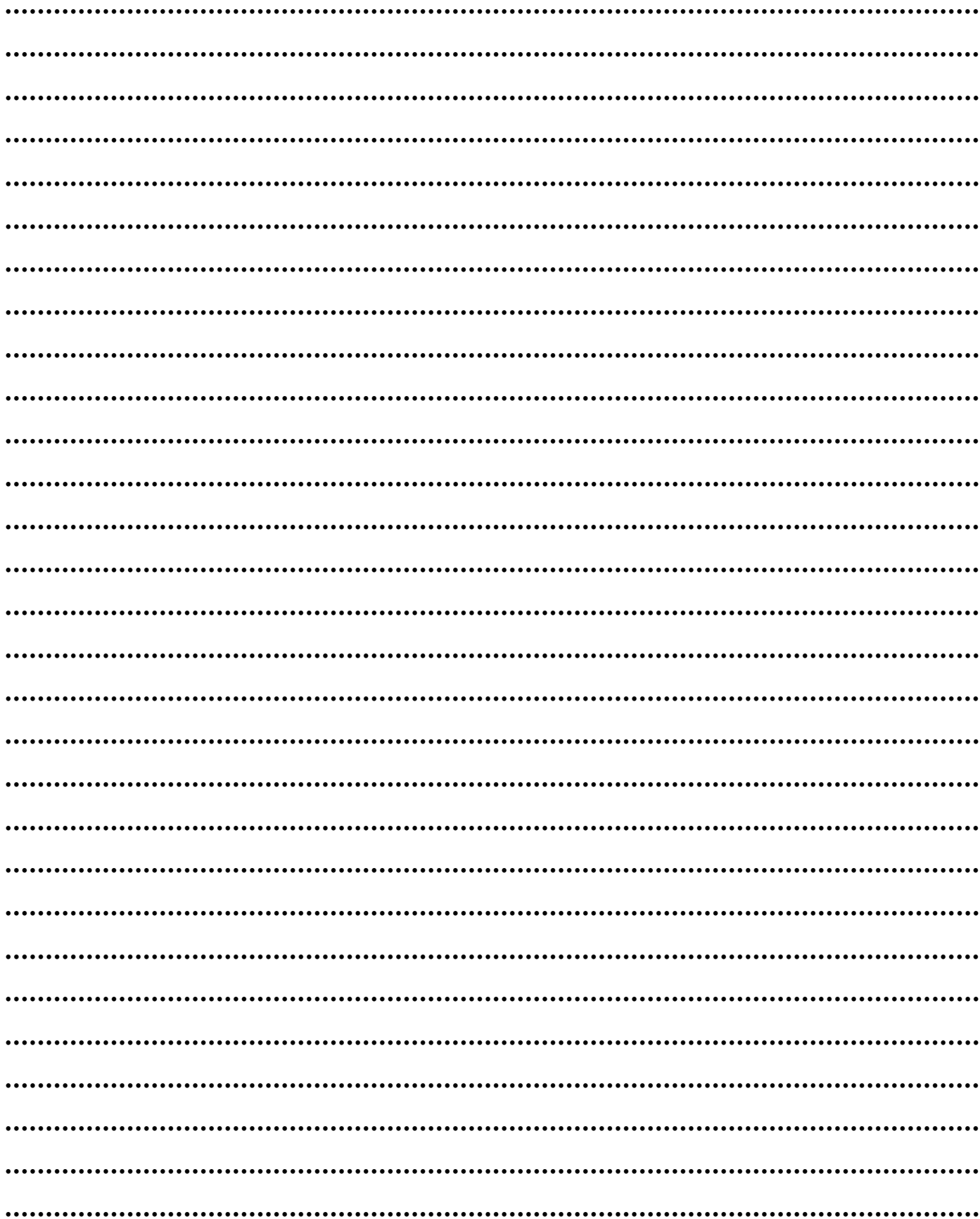
- *Answer all Questions*
- *All answers should be in English*

For Official Use Only

Question	Maximum	Candidate's Score
1	20	
2	10	
3	30	
Total	60	

(20 marks)

This image shows a full page of white paper with horizontal dotted lines. The lines are evenly spaced and run across the width of the page, providing a guide for handwriting or typing. There are no margins, text, or other markings on the page.



2. Fill in the blank with the most appropriate word

(10 marks)

It is undeniable that our education system.1 Kenya has done a lot for students. Our literacy 2..... has risen tremendously over the 3.....thirty years. More youths are leaving school for the work force at 4..... educational levels. The majority of Kenyans have had the 5..... of primary education, something most of our grandparents do not 6.....

However, there are still 7.....which need improvement in our educational system. There is need for enough space experimentation 8.....the cultivation of genuine interest.9.....is required is a real understanding and appreciation of the subject,10.....merely high marks.

3. a) i) Provide homophones for the following words

(3marks)

- i) Coup
- ii) Brooch
- iii) Muscle

b) Assign intonation to the following sentences.

(3 marks)

- i) I think we are completely lost
- ii) We will be able to go, won't we?
- iii) She bought a house

c) Write down a word with a silent letter as indicated.

(3marks)

- i) **p**
- ii)**s**
- iii)**n**

b) Identify the odd one out based on the pronunciation of the underlined letter(s).

3 marks

- i) Quay, quaint, quack, quality
- ii) Chain, Charter, Flinch, Champion
- iii) Sachet, Packet, Ticket, Thicket

c) Explain the different meanings of the sentence below when different words are stressed as indicated:

Wafula saw the thieves enter the house.

2 mks

i) Wafula.....

ii) House

.....

- d) i)** Your class had invited a former student, now employed by a top company to give a talk on ‘succeeding in the corporate world’. However, during the talk, you realize that most of your classmates are not concentrating. List four things on the part of the **speaker** that contributed to this. **(4marks)**

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- ii)** Suggest two non-verbal cues you would advise the speaker to employ to enhance the delivery of the message **(2marks)**

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e) Read the narrative below and answer the questions that follow.

WHY THE OWL IS NOT KING OF THE BIRDS (INDIAN TALE)

WHY is it that Crows torment the Owls as they sleep in the daytime? For the same reason that the Owls try to kill the Crows while they sleep at night

Listen to a tale of long ago and then you will see why.

Once upon a time, the people who lived together when the world was young took a certain man for their king. The four-footed animals also took one of their numbers for their king. The fish in the ocean chose a king to rule over them. Then the birds gathered together on a great flat rock, crying:

"Among men there is a king, and among the beasts, and the fish have one, too; but we birds have none. We ought to have a king. Let us choose one now."

And so the birds talked the matter over and at last they all said, "Let us have the Owl for our king."

No, not all, for one old Crow rose up and said, "For my part, I don't want the Owl to be our king. Look at him now while you are all crying that you want him for your king. See how sour he looks right now. If that's the cross look he wears when he is happy, how will he look when he is angry? I, for one, want no such sour-looking king!"

Then the Crow flew up into the air crying, "I don't like it! I don't like it!" The Owl rose and followed him. From that time on the Crows and the Owls have been enemies. The birds chose a Turtle Dove to be their king, and then flew to their homes.

- i)** You have been asked to narrate the above story to a group of young people. What **four** things would you do to attract their attention? **(2marks)**

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ii) If you were narrating the above story to young children, how do you ensure you sustain their attention for the entire course of the narration? **(2marks)**

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.....

iii) How would you say the line “I don't like it! I don't like it!”? **(2marks)**

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.....

f) Read the following telephone conversation and answer the questions that follow.

Secretary: (Phone rings) Hello, Purpose Drive Secondary school, may I help you?

Caller: I want to speak to the principal.

Secretary: May I know who is calling please?

Caller: (Impatient and irritated) I have said I want to speak to the principal, period

Secretary: Excuse me I am sorry He is in a meeting with the board of management, could you please call later, Sir?

Caller: (Shouting) are you stopping me from talking to your boss, do you know who I am? Had you even heard of the supplier of your stationery?

Secretary: (Politely) Oh, Mr. Erickson? I am sorry you cannot talk to him now call after an hour or may I take a message to him please?

Caller: (Bangs the receiver)

i) Identify two instances that show the caller lack of telephone etiquette. **(2 marks)**

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ii) How can you tell that the secretary observes professional conversational skills in the above telephone conversation? **(2 marks)**

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KCSE JOINT PREMOCK

SERIES 2 EXAMS-2023

ENGLISH

101/2

PAPER 2

TIME: 2½ HOURS

NAME.....

SCHOOL.....

SIGN.....

INDEX NO.....

ADM NO.....

INSTRUCTIONS TO CANDIDATES

- Write your name and index number in the spaces provided.
- Sign and write the date of the examination in the spaces provided above.
- Answer **all** the questions in this paper.
- All your answers must be written in the spaces provided in this question paper.

FOR EXAMINER'S USE ONLY

Question	Max Score	Student's Score
1	20	
2	25	
3	20	
4	15	
Total Score		

1. COMPREHENSION

Read the following passage and answer the questions that follow.

(20 marks)

In the end I was duly discharged (from hospital) and sent back relieved but not cured. A very elaborate belt kept death at arm's length. My congregation was deeply sympathetic, but started making representations for my transfer. Shortly afterwards the final blow was delivered. The circumstances in which I was forced to retire from the work for which I had sacrificed my youth and strength and hope were so confused and sad that a bitter taste will forever remain. I had toiled for over half a century only to end like this. Somehow I feel my third courtship had something to do with it, for I drew bitter opposition from some new relations of the lady. The campaign of mudslinging grew to ugly proportions and became an organized campaign to throw me out. Charges were trumped up. I was declared feeble, aged and unable to visit outstations, and probably I was secretly called immoral. These charges were duly handed to the superintendent minister.

Meanwhile at Mankessim angry mobs made the place untenable. I was in the end transferred – nowhere. That was the end. My retirement was skillfully managed by the chairman and superintendent minister, and I went quietly into obscurity with no laurels and no respect, no last-minute farewell or godspeeds; no visible means of support save that which my own sons were hopefully expected to give. For catechists are the scum of the earth and command no respect and expect none. They are entitled to no gratuities or pension and when they are strong enough to outlive their usefulness..... “God will provide” I had worked half a century to bring salvation to other people. It would probably be appropriate to say, “Physician heal thyself.” Sometimes I think we, the workers in the Lord's vineyard, have the greatest need of salvation ‘in the obscurity of retirement I can now have time to look back on my life and into my soul and try to assess where I failed and try to effect my own salvation.’ God indeed never leaves those who believe in Him really desolate. I have my wife with me now. My sons are all securely settled in life and work to support my old age. At the throne of God, I hope the Almighty will not deal too harshly with his servant, but in His infinite mercy will forgive my sins and accept even me.

(From: Joseph W. Abruquah, The Catechist, London – 1965)

QUESTIONS

a) What was the narrator's occupation before he was taken ill? (1 mark)

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b) Mention **four** factors responsible for the narrator's dismissal from his duty. (2 marks)

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c) Justify the narrator's bitter attitude in the third paragraph. (3 marks)

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d) Identify and explain the feature of style in the sentence below: They are entitled to no gratuities or pension and why they are strong enough to outlive their usefulness..... "God will provide."
(2 marks)

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e) Basing your argument on one major failing of the narrator, why should you not be sympathetic with is situation (2 marks)

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f) On the whole, what feelings towards the narrator does this passage arouse? Explain your answer.
(3 marks)

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g) The narrator uses the word 'salvation' to elicit two implications. Explain these two implications.
(2 marks)

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h) Quote a statement in the last paragraph that hints at the narrator's sense of remorse(1 mark)

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i) My congregation was deeply sympathetic but started making representations for my transfer.

(Rewrite this sentence beginning: Much as **(1 mark)**

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j) Explain the meaning of the following words and clause in the passage **(3 marks)**

(i) Mudslinging

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.....

(ii) Obscurity

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(iii) Physician heal theyself

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2. EXCERPT

Read the excerpt below and then answer the questions that follow. (25 marks)

Krogstad: Are you aware that is a dangerous confession?

Nora: In what way? You shall have your money soon.

Krogstad: Let me ask you a question: Why did you not send the paper to your father?

Nora: It was impossible: papa was so ill. If I had asked him for his signature, I should have had to tell him what the money was to be used for: and when he was so ill himself, I couldn't tell him that my husband's life was in danger – it was impossible.

Krogstad: It would have been better for you if you had given up your trip abroad.

Nora: No, that was impossible. That trip was to save my husband's life. I couldn't give that up.

Krogstad: But did it never occur to you that you were committing a fraud on me?

Nora: I couldn't take that into account: I didn't trouble myself about you at all. I couldn't bear you, because you put so many heartless difficulties in my way, although you knew what a dangerous condition my husband was in.

Krogstad : Mrs. Helmer, you evidently do not realise clearly what it is that you have been guilty of. But I can assure you that my one false step, which lost me all my reputation, was nothing more or nothing worse than what you have done.

Nora: You? Do you ask me to believe that you were brave enough to run a risk to save your wife's life?

Krogstad: Foolish or not, it is the law by which you will be judged, if I produce this paper in court.

Nora: I don't believe it. Is a daughter not to be allowed to spare her dying father anxiety and care? Is a wife not to be allowed to save her husband's life? I don't know much about law: but I am certain that there must be laws permitting such things as that. Have you no knowledge of such laws – you who are a lawyer? You must be very poor Mr Krogstad.

Krogstad: Maybe. But matters of business – such business as you and I have had together – do you think I don't understand that? Very well. Do as you please. But let me tell you this – if I lose my position a second time, you shall lose yours with me. (He bows and goes out through the hall)

Nora (appears buried in thought for a short time, then tosses her head) Nonsense! Trying to frighten me like that! – I am not so silly as he thinks. (begins to busy herself putting the children's things in order) And yet-? No it's impossible! I did it for love's sake.

QUESTIONS:

a) Briefly describe the dangerous confession Nora admits to in the onset of the excerpt. (3 marks)

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b) Explain why Nora did not send the paper to her father for signing. (3 marks)

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c) Explain **two themes evident in the excerpt above. (4 marks)**

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d) Contrast Krogstad's and Nora's views on the law

(2 marks)

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e) How is Krogstad portrayed in the excerpt

(2 marks)

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f) The law cares nothing about motives. (Add a question tag)

(1 mark)

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g) Krogstad informs Nora that "one false step, lost him all reputation." Briefly explain how.

(2 marks)

.....

.....

.....

h) ".....If I lose my position a second time, you shall lose yours with me." From elsewhere in the play, show the truth of this statement

(2 marks)

.....

.....

.....

i) What is the general tone in this excerpt? Explain your answer.

(3 marks)

.....

.....

.....

.....

j) **Explain** the meaning of the following words as used in the excerpt. **(2 marks)**

(i) defiantly

.....

.....

(ii) false step

.....

.....

3. **ORAL POETRY**

Read the oral poem below and then answer the questions that follow. **(20 marks)**

Ha! That mother who takes her food alone
Ha! That mother before she has eaten
Ha! That mother she says, “lull the baby for me”.
Ha! That mother, when she has finished eating,
Ha! That mother, she says, “give the child to me.”

QUESTIONS

a) What type of oral poem is this? **(2 marks)**

.....

.....

.....

b) Explain briefly what the above oral poem is about **(4 marks)**

.....

.....

.....

.....

c) Who is the speaker in the above oral poem? **(2 marks)**

.....

.....

.....

d) What is the speaker's attitude towards the mother? (2 marks)

.....

.....

.....

e) What evidence is there to show that this is an oral poem? (6 marks)

.....

.....

.....

.....

.....

.....

.....

f) State two functions of the above oral poem. (2 marks)

.....

.....

g) Mention one feature that is characteristic of this sub-genre (2 marks)

.....

.....

4. GRAMMAR (15 marks)

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

i) "I get up at six o'clock every morning." Said my friend (Rewrite in indirect)

.....

ii) It is possible to buy bread here. (Rewrite beginning: There is)

.....

iii) My sister is older than me. (Rewrite using 'I')

.....

iv) The guard refused a student admittance. (Rewrite the sentence in the passive form)

.....

b) Complete each of the sentences with an appropriate question tag. (3 marks)

- i) It's very cold,
- ii) You are free,
- iii) They haven't come yet,

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

- i) Peter sang yesterday(melody)
- ii) The state will undertake the (maintain) of the road.
- iii) Her argument was obviously (error)

d) Choose the correct alternative from the words given in brackets after each sentence. (4 marks)

- i) The boys left (their, there) books in the field.
- ii) All matatus have hiked the (fair, fare)

e) Rewrite the underlined phrasal verbs with appropriate verbs in each sentence. (2 marks)

- i) Juma's performance did not measure upto the expected standards.

-
- ii) Mary walked out on her family

f) Rewrite the following sentence to remove gender bias. (1 mark)

The steward is in the restaurant

KCSE JOINT PREMOCK

SERIES 2 EXAMS-2023

ENGLISH

101/3

PAPER 3

TIME: 2½ HOURS

NAME.....

SCHOOL.....

SIGN.....

INDEX NO.....

ADM NO.....

101/3

ENGLISH

PAPER 3

(Creative Compositions and Essays Based on Set Texts)

2 ½ HOURS.

INSTRUCTIONS TO CANDIDATES

- (a) Answer **three** questions only.
- (b) Questions one and **two** are compulsory.
- (c) In question three choose only **one** of the **optional texts** you have prepared on
- (d) Where a candidate presents work on more than **one optional text**, only the **first one** to appear **will be marked**.
- (e) Each of your essay must not exceed **450 words**.
- (f) All answers should be written in the booklet provided.
- (g) This paper consist of **two** printed pages.

Answer **three** questions only.

1. Imaginative Composition (Compulsory)

(20 marks)

EITHER

a. Write a composition that has the following: explosion, crowd, siren and hospital

OR

b. Write a composition on the following statement:

“Technological advancement has impacted negatively on the society, especially the youth.”

2. The Compulsory Set Text.

“Self-interest is a vice that whoever engages in it is bound to fail.” Using ***Blossoms of the Savannah***, write an essay to support this assertion. **(20 marks)**

3. The Optional Set Texts.

(20 marks)

Answer any **one** of the following two questions.

Either

a) The Short Story:

1) When one is given power, he/she should use it only for good but more often than not people use it for wrong purposes. Support this statement basing your argument from Naguib Mahfouz's '**A Man of Awesome Power**' **(20 marks)**

OR

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

(20 marks)

KCSE JOINT PREMOCK

SERIES 2 EXAMS-2023

KISWAHILI

102/1

KARATASI YA 1

MUDA: SAA 1¾

NAME.....

SCHOOL.....

SIGN.....

INDEX NO.....

ADM NO.....

MAAGIZO

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

Kwa matumizi ya mtahini pekee

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

1. Lazima

Visa vya utumizi wa afyuni miongoni mwa wanafunzi katika taasisi za masomo ulimwenguni vinazidi kuongezeka. Wewe kama afisa mkuu mtendaji katika Tume ya kupambana na Mihadarati nchini umealikwa kuhutubu katika kongamano la Kimataifa lililoandaliwa kujadili suala hili. Andika hotuba.

2. ‘ Haki za mtoto kupata kisomo cha kimsingi zinakiukwa sana nchini’. Fafanua

3. Andika kisa kitakachodhihirisha maana ya methali: Jifya moja haliinjiki chungu.

4. Tunga kisa kitakachomalizika kwa maneno yafuatayo;

...Nilishawishika kuuchukua mtazamo wa pili wa maisha.

KCSE JOINT PREMOCK

SERIES 2 EXAMS-2023

KISWAHILI

102/2

KARATASI YA 2

MUDA: SAA 2½

NAME.....

SCHOOL..... SIGN.....

INDEX NO..... ADM NO.....

Hati ya Kuhitimu Kisomo cha Sekondari Kenya (K.C.S.E.)

MAAGIZO

- (a) Andika jina lako na namba yako ya usajili katika nafasi ulizoachiwa hapo juu.
- (b) Tia sahihi yako kisha uandike tarehe ya mtihamu katika nafasi ulizoachiwa hapo juu.
- (c) Jibu maswali yote.
- (d) Majibu yote yaandikwe kwenye nafasi ulizoachiwa katika kijitabu hiki cha maswali.
- (e) Majibu yote ni **lazima** yaandikwe kwa lugha ya Kiswahili.
- (f) Usitoe ukurasa wowote kutoka kwenye kijitabu hiki.

KWA MATUMIZI YA MTAHINI PEKEE: -

Swali	Upeo	Alama
1	15	
2	15	
3	40	
4	10	
JUMLA	80	

Soma kifungu kifuatacho kisha ujibu maswali yanayofuata.

Ustawi wa dola lolote lile hutegemea mseto wa nguvu, maarifa chipukizi, uchapuchapu wa barubaru, pamoja na maarifa, upevu, uvumilivu na tajriba ya wazee. Tunaweza kuumithilisha ufanisi wa nchi na jumba la ghorofa lililojengwa juu ya tegemezo: msingi huu ukiwa imara, ghorofa nyingi zaweza kuinuliwa. Nayo imara ya tegemezo hutegemea vyuma imara visivyotetereka na vifaa vinginevyo. Zaidi ya haya yote, mafundi wahusika kama vile wasanifu mjengo, wahandisi, mafundi bomba na wengineo sharti wawe na ujuzi tosha ili kufanikisha kazi inayohusika. Katika taswira hii, twaweza kuelewa ni kwa nini baadhi ya nchi zimestawi huku nyingine zikiitwa ulimwengu wa tatu. Shida za nchi hizo ni kutozistawisha taaluma ambazo ndizo msingi wa maendeleo, hivyo huwa na walakini katika utekelezaji. Matokeo yake ni kulimatia.

Nchi nyingi humu barani mwetu zimekosa kustawi kutokana na kasoro nyingi tulizo nazo katika uimarishaji wa taaluma zetu. Sababu kuu ni kuwa, wengi wetu hukimbilia kutekeleza kazi mbalimbali hata bila ujuzi wowote kwa kazi hizo. Tabia kama hii inatokana na ukweli kuwa sisi hatujali kama tuna vipawa vya kufanya kazi fulani. Wengine huvunjwa moyo na waliowazingira kuwa vipawa vyao havifai. Hivyo, si ajabu kuona kijana aliye na kipawa fulani akikosa kukivuvia kwa sababu labda hata hatambui kuwa anacho.

Wengi wa wakembe wetu hukosa kuvitambua vipawa vyao, hivyo kukosa kuendeleza utaalamu unaohusiana navyo kwa kukosekana kwa **mtalaa** wa kuvichochea katika mfumo wa elimu. Mfumo wa elimu nchini Kenya kwa sasa unasisitiza wanafunzi kupita mtihamu ili kuingia vyuoni. Hata hivyo, ni muhimu kuvikuza vipawa walivyo navyo vijana ili wavitumie katika siku za halafu. Vitambuliwe mapema shuleni bali si vyuoni. Kunao wanagenzi wengine ambao, licha ya kuvitambua vipawa vyao hawavifukutii kamwe, huvipuuza na kujisukuma katika taaluma ambazo hazikuwafaa kamwe. Kunao wanagenzi wengine ambao hutamani na kuingilia taaluma fulani, si kwa kuzipenda, bali kwa kuwa wandani wao wazishiriki. Hawajui kuwa kibaya chako si kizuri cha mwenzio. **Huliona tanga la nguo wakalisahau la miyaa.** Kuna wengine ambao huziandama taaluma fulani kwa kushurutishwa na wazazi au wadhamini wao. Nao vijana hukosa ukakamavu wa kujiamulia na kukubali shingo upande maamuzi hayo. Hata hivyo, kuna wale ambao hujitosa katika taaluma hizo bila kushurutishwa ili wapate hadhi. Matokeo ni kuwa kijana huzifanya kazi hizo kwa chati wala si kwa dhati. Wengine hujipenyeza kwa taaluma fulani eti kwa kuwa wamekosa nyingine. Si ajabu basi kutokana na ukosefu wa ajira kumwona mtaalamu wa mifugo akiwa mwalimu, mwalimu akiwa dereva na tabibu akiwa mkulima hali zaraa haimudu.

Ili kupata suluhu katika jambo hili, sharti kila mmoja wetu ashiriki katika kuitambua, kuikuza, kuikomaza na kutumia taaluma ya kila kijana. Twaweza kuuiga mfano wa Wazungu wafanyavyo kwao. Wao hujitahidi kuvitambua vipawa vya watoto wangali wachanga hali ambayo huwasaidia kuzikuza taaluma zao baadaye. Naye kijana akishajua atakachofanya, afaa kufanya utafiti ili kufikia kina cha taaluma yake.

MASWALI

(a) Eleza sababu za watu kujishughulisha na taaluma zisizo zao. **(alama 2)**

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.....

.....

(b) Eleza kikwazo cha ustawi wa nchi zinazoendelea. **(alama 1)**

.....

.....

(c) Taja mambo manne yanayostawisha taifa. **(alama 4)**

.....

.....

.....

.....

(d) Taja mambo matano yanayokwamiza uendelezaji wa vipawa miongoni mwa vijana. **(alama 5)**

.....

.....

.....

.....

.....

(e) Kuna tofauti gani kati ya Waafrika na Wazungu katika ukuzaji wa taaluma? **(alama 2)**

.....

.....

.....

(f) Eleza maana ya ‘Huliona tanga la nguo wakalisahau la miyaa’. **(alama 1)**

.....

.....

(g) Eleza maana ya vifungu vifuatavyo vilivyotumika katika ufahamu.

(alama 2)

(i) kulimatia

.....

(ii) mtalaa

.....

2. MUHTASARI

(Alama 15)

Tunapinga na kulaani vikali visa vya ugaidi vinavyoendelea kutetemesha usalama wa wananchi. Hivi ni vitendo vya kinyama vinavovyotekelezwa na watu waliokosa ubinadamu na utu kabisa. Inaghadhabisha kuona Wakenya wasio na makosa wakiteswa na kuuawa kinyama bila huruma na watu wasio na utu. Hatuogopi wala hatuna fedheha kuamba kuwa magaidi hawa wamelaaniwa na siku zao zimehesabiwa hapa duniani. Damu ya mwananchi asiye na makosa katu watailipia. Napinga vikali pale magaidi hawa wanapohusisha vitendo hivi kuwa vita vya kidini; vita hivi si vya kidini kwani hakuna dini yoyote iliyo na imani ya kumuua kinyama binadamu asiye na makosa.

Kando na tishio la ugaidi, Wakenya pia wanakabiliwa na hatari za ujambazi, mauaji, unajisi, ubakaji na maovu mengine. Katika juhudi za kudumisha usalama, polisi wana jukumu la kutumia kila mbinu kuhakikisha kuwa haki za kikatiba za Wakenya kuhusu kulindwa kwa maisha na mali yao zimedumishwa. Lakini cha kusikitisha ni kuwa, mbinu ambazo polisi wamekuwa wakitumia hasa ile ya kufanya misako inayoishia kuwanasa mamia ya raia wasio na habari kuhusu kinachoendelea, inawaongezea Wakenya mateso. Hali hii inawaacha kwenye hatari ya kunaswa na majambazi ama polisi.

Matumizi ya mbinu hii ya misako yameishia kunasa raia wengi wasio na makosa. Wanaponaswa, hurundikwa kwenye seli usiku mzima ama siku kadha na hata kama wanaaachiliwa huwa tayari wameteseka. Huu ni ukiukaji wa haki za raia. Kadhalika, mbinu hii inaonekana kama hila ya polisi kutaka kuonyesha wanafanya kazi lakini sio mwafaka kwani wanapokuwa wakiwanasa raia mijini na mitaani, magaidi na majambazi wanaendelea na shughuli zao.

Badala ya kusaka wakora kwa kubahatisha kwenye umati, polisi wanapaswa kubuni njia ambazo zitawapa mwelekeo mwafaka zaidi kuhusu wahalifu ili waweze kuwafuatilia. Ushirikiano baina yao na majasusi uwepo. Hii itawezesha polisi kupata habari muhimu kuhusu vitisho vya uhalifu. Maafisa wa usalama pia wanaweza kupata habari muhimu kutoka kwa raia.

MASWALI

(a) Ni nini maoni ya mwandishi kuhusu suala la ugaidi (alama 7,1 utiririko) (maneno 60-70)

Matayarisho:

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.....

Nakala safi

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(b) Kwa kutumia maneno yasiyozidi 50 fupisha aya mbili za mwisho. (alama 6, 1 utiririko)

Matayarisho:

.....

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.....

(c) Nakala safi

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3. MATUMIZI YA LUGHA

(Alama 40)

(a) (i) Eleza jinsi kitamkwa /u/ kinavyozuiliwa

(alama 2)

.....

.....

.....

(ii) Andika tofauti moja kati ya sauti hizi.

(alama 1)

/t/ na /d/

.....

.....

(b) Bainisha kiima na chagizo katika sentensi ifuatayo.

(alama 2)

Mwanajamii yule alijibu maswali yote kwa makini.

.....

.....

.....

(c) (i) Eleza maana ya vitenzi vishirikishi.

(alama 1)

.....

.....

(ii) Tunga sentensi moja moja kuonyesha aina mbili za vitenzi vishirikishi. **(alama 2)**

.....

.....

.....

(d) Yakinisha sentensi ifuatayo. **(alama 1)**

Mtoto hakufundishwa wala kupewa vitabu.

.....

.....

(e) (i) Eleza maana ya silabi. **(alama 1)**

.....

.....

(ii) Huku ukitoa mifano, eleza miundo miwili ya silabi za Kiswahili. **(alama 2)**

.....

.....

.....

(f) Ainisha viambishi katika sentensi hii kimuundo na kidhamira. **(alama 3)**

Wataonana

(i) Kimuundo:

.....

.....

(ii) Kidhamira

.....

.....

(g) Tumia nomino yoyote katika ngeli ya KU-KU pamoja na kiashiria kisisitizi cha karibu kutunga sentensi. **(alama 1)**

.....

.....

(h) Tunga sentensi moja katika wakati uliopita hali **isiyodhihirika**

(alama 1)

.....

.....

(i) Tunga sentensi mbili ili kubainisha maana za neno: Jinsi

(alama 2)

.....

.....

.....

(j) Huku ukitoa mifano, eleza matumizi mawili ya alama ya kinyota katika uakifishaji. **(alama 2)**

.....

.....

.....

(k) Eleza miundo mitatu ya vishazi tegemezi na kuitolea mifano mwafaka katika sentensi. **(alama 3)**

.....

.....

.....

.....

(l) (i) Eleza maana ya shamirisho kipozi.

(alama1)

.....

.....

(ii) Benta alimlimia mamake shamba kwa trekta. Anza kwa **yambiwa**

(alama1)

.....

.....

(m) (i) Tunga sentensi yenye muundo ufuatao.

$S - KN (N/W\theta) + KT (Ts+T+RH+E)$

(alama 2)

.....

.....

(ii) Changanua kwa matawi sentensi ifuatayo:

(alama 2)

Kile chake kipya kinanipendeza mno.

.....

.....

.....

(n) Eleza matumizi yoyote mawili ya kiambishi KU na kuyatolea mfano mmoja mmoja wa sentensi.

(alama 2)

.....

.....

(o) Tunga sentensi sahihi ukitumia kivumishi cha ki ya mfanano na kielezi cha namna kitumizi.

(alama 2)

.....

(p) Tunga sentensi ukitumia kitenzi cha silabi moja kinachomaanisha kuogopa katika kauli ya kutendeka.

(alama 2)

.....

.....

(q) Eleza maana ya:

(i) Papo kwa papo kamba hukata jiwe.

(alama 1)

.....

.....

(ii) Ua langu la waridi limechanuka.

(alama 1)

.....

.....

(r) (i) Tunasema baraza la wazeecha kuni na ya nguo

(alama 1)

(ii) Ajuza ni kwa mwanamke mzee nani kwa msichana mchanga ilhali shaibu ni kwa mwanamume mzee nani kwa mvulana aliyebaleghe.

(alama 1)

4. ISIMUJAMII

(Alama10)

Soma makala yafuatayo kisha ujibu maswali.

Niaje wasee! Midterm ilibamba lakini ilkua fupi sana, tumerudi books, huu ni mwaka wa mwisho
tujikaze jo. Msifikirie hizo hepi zetu ni reality, kuchill ni jambo la maana jo! ama niaje
bro...hustle ni real, bidii ndio itatuokoa

(a) Tambua sajili inayohusishwa na kifungu hiki

(alama2)

.....
.....

(b) Eleza sifa zozote **nne** za kimtindo zinazojitokeza katika kifungu hiki.

(alama 4)

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

(c) Eleza sababu **nne** zinazosababisha matumizi ya lugha ya aina hii.

(alama 4)

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

KCSE JOINT PREMOCK

SERIES 2 EXAMS-2023

KISWAHILI

102/3

KARATASI YA 3

MUDA: SAA 2½

NAME.....

SCHOOL..... SIGN.....

INDEX NO..... ADM NO.....

Maagizo

- (a) Andika jina lako na nambari yako ya mtihani katika nafasi ulizoachiwa hapo juu.
(b) Tia sahihi yako kisha uandike tarehe ya mtihani katika nafasi ulizoachiwa hapo juu.
(c) Jibu maswali manne pekee.
(d) Swali la **kwanza** ni la lazima.
(e) Maswali hayo mengine yachaguliwe kutoka sehemu nne zilizobaki: yaani; Riwaya, Ushairi na Fasihi simulizi **Kwa matumizi ya mtahini pekee**

Swali	Upeo	Alama
1	20	
2	20	
3	20	
4	20	
5	20	
6	20	
7	20	
8	20	
Jumla	80	

SEHEMU A: TAMTHILIA

Bembea ya Maisha

1. Lazima

alama 20

Eleza ufaafu wa anwani **Bembea ya Maisha** katika tamthilia ya **Bembea ya Maisha**

SEHEMU B: USHAIRI

Jibu swali la 2 au la 3

2. **Soma shairi lifuatalo kisha ujibu maswali.**

Ewe hisia!

Umeniamshia ndoto niloisahau zamani

nyimbo ya kale

na mdundo usonivutia

ila hayawani na mwangu rohoni.

Tulia sasa tulia

Hebu tulia ewe hisia ulo mtimani

Nataka katu kusionika

kwa sauti yako laini

Kwani njia zetu ni

daima hazioani

Umesubutu vipi kuniita

kutoka mwako ngomeni

ulimosahauliwa tangu zamani

Basi yawache maombolezi yako yaso maoni,

yawateke hao mashujaa wa kale

wafu walo kaburini.

Hebu tulia, usiniingilie

Usinihangaisha!

Kukuandama katu haimkini

Kwani hata sasa...kwa kukuwaza tu dakika hini

naona majuto ya mbali moyoni

kama kwamba nimegawa wangu wakati

na wazimu, majinuni.

Basi nenda zako hisia...shuu...hebu tokomea.

Maswali

(a) Huu ni utungo wa aina gani?

(alama 2)

(b) Huku ukitoa mifano, fafania sifa zinazoufanya utungo huu kuwa **shairi**

(alama 5)

(c) Mistari mishata ni nini? Toa mifano kwenye shairi hili.

(alama 4)

(d) Fafania tamathali za kifasihi katika shairi hili.

(alama 3)

(e) Eleza mbinu **tatu** alizotumia mtunzi kutosheleza kaida za kishairi.

(alama 6)

3. *Soma shairi lifwatalo kisha uyajibu maswali yanayoliandama:*

Naandika yangu haya, kwa uwezo wa Wadudi,
Kanipa njema afiya, kumsifu sina budi,
Nifundishie insiya, hino methali ya jadi,
Mchama ago hanyeli, huenda akauya papo

Ago mchama huuya, mbele mambo yakizidi,
Hurudi pakawa kaya, kupapenda hana budi,
Kwingi angawayawaya, ago shuruti arudi,
Mchama ago hanyeli, huenda akauya papo.

Kule kwetu Mwarakaya, kijiji chetu cha jadi,
Yalidhihirika haya, bwana mmmoja mkaidi,
Aloalikwa ulaya, kadhani ‘mepata sudi,
Mchama ago hanyeli, huenda akauya papo,

Alidhani hatauya, ‘endapo nchi **baidi**,
Na kusema bila haya, kwa inda na ukaidi,
Kwamba akenda ulaya, harudi kwenya samadi,
Mchama ago hanyeli, huenda akauya papo.

Aliranda akitaya, kwa mbwembwe na zake tadi,
Nguo moto kazitiya, nyumbaye akainadi,
Kasema vyote ‘ishiya; kurudi sina ahadi
Mchama ago hanyeli, huenda akauya papo.

Matusi aliyamwaya, mengi yasiyo idadi,
Mkewe kamwita yaya, na kudharau abidi,
Kanena ‘**mekata waya**’, ng’ambo nenda kufaidi,
Mchama ago hayeli, huenda akauya papo,

Ng’ambo alielekeya, kwa vishindo kama radi,
Kumbe aliyemwendeya, kabambwa kwa ufisadi,
Vya watu amebugiya, rushwa na kuhepa kodi,
Mchama ago hanyeli, huenda akauya papo.

Kombo yakamwendeya, mambo mno yakazidi,
Akabakia kuliya, nyumbani ataka rudi,
Nyumba ipi ‘taingiya’, hana tena tabaradi,
Mchama ago hanyeli, huenda akauya papo

Maswali

- a) Kwa kutolea ushahidi ufaao shairini, jadili kifupi maswala **matatu** makuu ambayo mtunzi ameyashughulikia. (alama 6)
- b) “Mtunzi huyu ni bingwa wa kutumia lugha kupitisha ujumbe.” Tetea. (alama 4)
- c) Fasiri ujumbe wa mtunzi katika ubeti wa **sita**. (alama 4)
- d) Nafsi nenewa katika shairi hili ni nani? Thibitisha. (alama 2)

e) Zaidi ya tarbia, ungelipangaje tena shairi hili?

(alama 2)

f) Fafanua msamiati ufwatao kama ulivyotumika shairini:

(alama 2)

i. Baidi

ii. 'mekata waya'

SEHEMU C: HADITHI FUPI

Jibu swali la 4 au la 5

Mapambazuko ya Machweo na Hadithi Nyingine

4. Rachel Wangari katika hadithi ya mapambazuko ametumia mbinu ya JAZANDA kwa upana.

Jadili

alama 20

5. Swala la Elimu limepewa kipaumbele katika hadithi ya sabina. Jadili

alama 20

SEHEMU D: FASIHI SIMULIZI

6. "Magwiji wa uwanda mpana wa tamaduni za Kiafrika: wazee walioila chumvi wakabobea katika falsafa za turathi zetu, maghuluma wenye misuli tinginya na vifua vya mfumbata vinavyostahimili hujuma za kila nui na malaika wa kike uliosheheni mizinga na chemichemi ya urembo, nawasabahi. Wa zamani waliamba kuwa mwacha mila ni mtuma. Turathi zetu ni uhai. Turathi zetu ni msingi wa ubinadamu wetu. Turathi zetu zinabeba mustakabali wetu. Tuzienzi kama tuenzivyo asali."

Maswali

(a) (i) Tambua kipera cha utanzu wa mazungumzo kinachohusishwa na kifungu **hiki**. (alama 1)

(ii) Thibitisha jibu lako katika (i) kwa mifano yoyote **mitatu**.

(alama 3)

(b) Iwapo umehudhuria utendaji wa kipera hiki nyanjani eleza sifa **tano** za mtendaji utakazoziona zisizojitokeza kwenye kifungu.

(alama 5)

(c) Taja na kueleza miktadha **minne** ambamo kipera hiki kinaweza kutumiwa katika jamii ya kisasa.

(alama 4)

(d) Andika sifa zozote **nne** za jamii ya nafsi neni katika utungo huu.

(alama 4)

(e) Eleza njia **tatu** za ukusanyaji wa data unazoweza kutumia kukusanya data kuhusu kipera hiki.

(alama 3)

SEHEMU YA E: RIWAYA

A. Matei: Chozi la Heri

Jibu swali la 7 au la 8

7. "Nitapigana kwa jino na ukucha kuulinda utu wangu."

(a) Eleza muktadha wa dondoo hili.

(alama 4)

(b) Eleza umuhimu wa msemaji wa dondoo hili.

(alama 4)

(c) Kwa kutolea mifano riwayani, thibitisha namna binadamu alivyopungukiwa na utu. (alama 12)

8. **Mwanamke** ametwezwa katika kiwango sawa na namna alivyotukuzwa. Thibitisha ukweli wa madai haya kwa kurejelea riwaya ya *Chozi la Heri*.

(alama 20)

KCSE JOINT PREMOCK

SERIES 2 EXAMS-2023

MATHEMATICS

121/1

PAPER 1

TIME: 2½ HOURS

NAME.....

SCHOOL..... SIGN.....

INDEX NO..... ADM NO.....

Instructions to Candidates

- (a) Write your name and index number in the spaces provided below
- (b) Sign and write the date of examination in the spaces provided above.
- (c) The paper consists of **TWO** sections: **Section I** and **Section II**.
- (d) Answer **ALL** questions in **Section I** and **ONLY** five from **Section II**.
- (e) All answers and working must be written on the question paper in the spaces provided below each question.
- (f) Show all the steps in your calculations, giving your answers at each stage in the spaces 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

GRANT TOTAL

17	18	19	20	21	22	23	24	Total	

SECTION 1 (50 MARKS)

Answer all the questions in the space provided below each question

1. Find the equation of a straight line passing through the points A (1,-3) and B (-2, 5). Express your answer in the form $ax + by = c$ where a, b and c are integers. **(3marks)**

2. Evaluate without using mathematical tables or calculator $\frac{-10 \div 2 + 6 \times 4 - 8 \times 5}{-5 + (-12) \div 3 \times 2}$ **(3marks)**

3. Solve for x in the equation $\frac{\cos(2x-30)^\circ}{\sin(3x+10)^\circ} = \tan 45^\circ$ **(3marks)**

4. Two taps P and Q together can fill a water tank in 6 minutes. Tap P alone takes 5 minutes longer than tap Q. How many minutes does it take tap P alone to fill the tank? **(3marks)**

5. Given that, $27^{5x-2y} = 243$ and $81^{2x-y} = 3$, Calculate the values of x and y. **(3marks)**

6. A point P is mapped onto P' by a negative quarter turn about the origin. P' is mapped onto P'' by a translation represented by the vector $\begin{pmatrix} -2 \\ 3 \end{pmatrix}$. If P'' has coordinates (11,-5) determine the coordinates of p. **(3marks)**

7. A metallic pipe which is 21 meters long has an internal radius of 13 cm and an external radius of 15 cm. if the density of the metal is 8620 kg/ m^3 , find its mass. **(3marks)**

8. Using logarithms evaluate $\sqrt[3]{\frac{82.73 \times 0.2943^2}{613.5}}$ (3marks)

9. A proper fraction is such that the denominator exceeds the numerator by 3. If 2 is subtracted from both the numerator and denominator, the fraction formed is $\frac{1}{8}$ less. Determine the original fraction. (3 marks)

10. Given that $\vec{OM} = 2\mathbf{i} + 3\mathbf{j} - 6\mathbf{k}$ and $\vec{ON} = -3\mathbf{i} + 5\mathbf{j} + \mathbf{k}$. Find the magnitude of $\vec{MN}$ to 2 decimal places. (3marks)

11. Find the range of the integral values of x in the inequality $10 < 3(x + 2) < 35$, giving your answer in the form $a \leq x \leq b$ **(3marks)**

12. Simplify completely $\frac{2-2x}{6x^2-x-12} \div \frac{x-1}{2x-3}$ **(3marks)**

13. The marked price of a recliner sofa set in a furniture store was ksh 400,000. A customer bought the recliner at 10% discount. The dealer still made a profit of 20%, Calculate the amount of money the dealer paid for the recliner. **(3marks)**

14. Draw a line AB of length 9 cm. On one side of line AB construct the locus of a point P such that the area of triangle ABC is 13.5 cm^2 . On this locus locate two positions of a point P1 and P2 such that $\angle AP_1B = \angle AP_2B = 90^\circ$

15. Given that the area of an image is four times the area of the object under a transformation whose matrix is $\begin{pmatrix} x & x-4 \\ x+8 & x \end{pmatrix}$, find the possible value of x . **(3 marks)**

16. Construct a triangle ABC in which AB = 5cm and AC = 8cm and $\angle ABC = 105^\circ$. Using line AC, locate point x on AB produced such that AX:XB = 3:-2. **(4marks)**

SECTION II (50 MARKS)

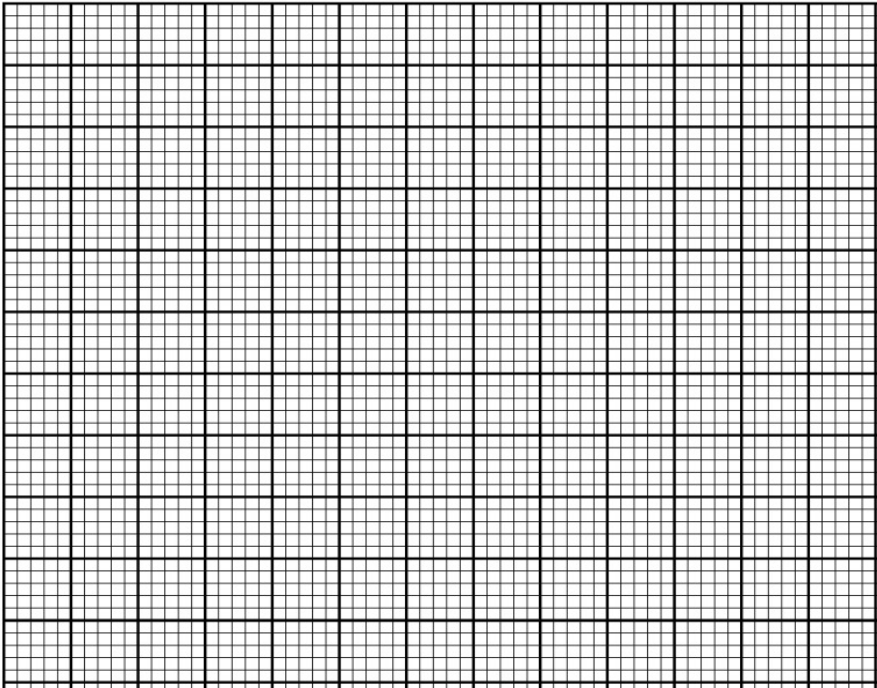
Answer only five questions in this section

17. The table below shows the weekly salary (k£) paid to workers in a school.

Salary (k£)	$50 \leq x \leq 100$	$100 \leq x \leq 150$	$150 \leq x \leq 250$	$250 \leq x \leq 350$	$350 \leq x \leq 500$
No. of Workers	25	27	30	26	24

a) Calculate the differences between the mean and the median. (6 marks)

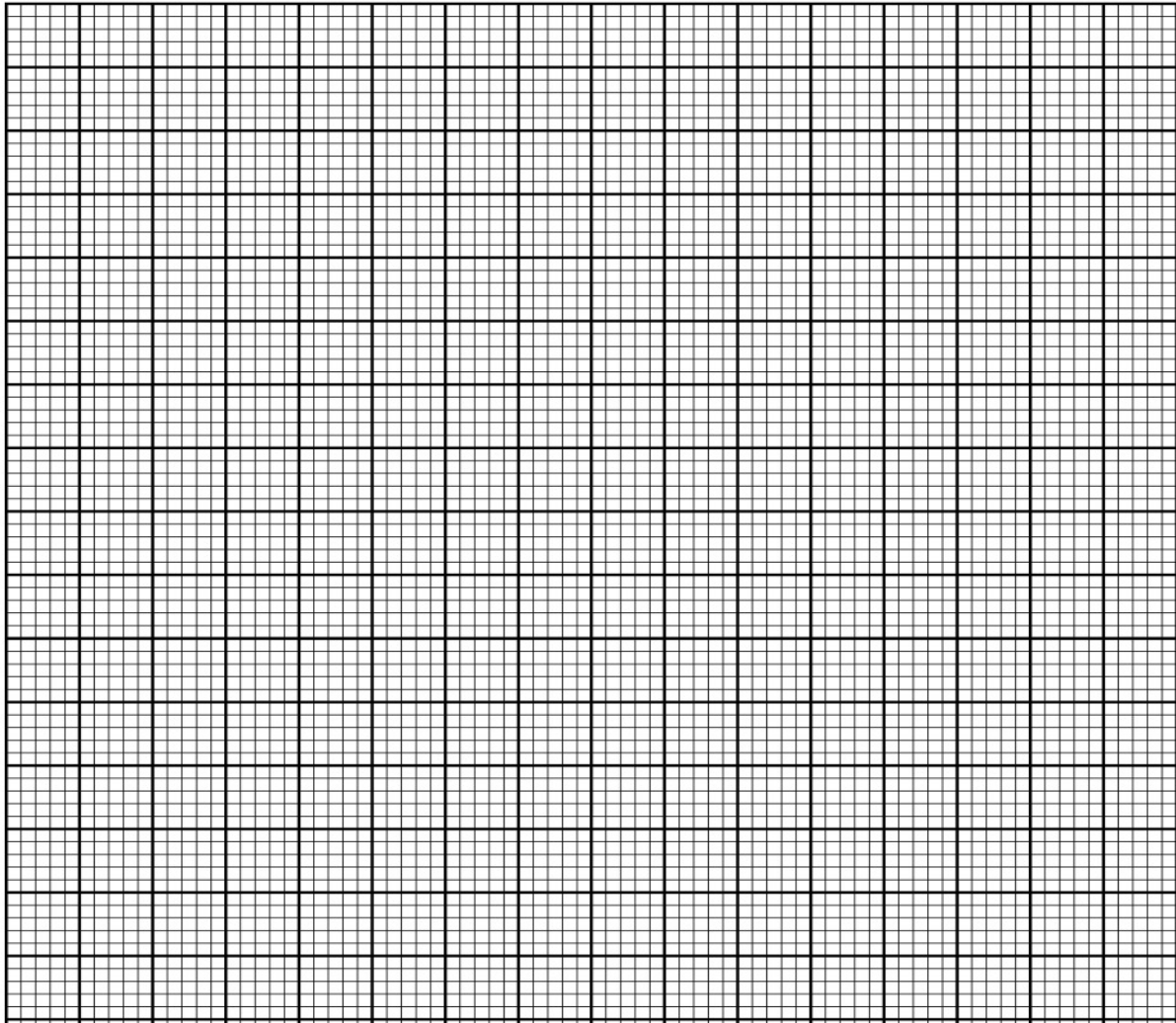
b) Draw a frequency polygon to illustrate the above information. (4marks)



18. a) Complete the table of values for the equation, $y = -2x^2 + x + 8$. **(2marks)**

x	-3	-2	-1	0	1	2	3	4
y								

b) Use the values above to draw the graph of $y = -2x^2 + x + 8$. **(3marks)**



c) Using the graph drawn above Solve the equations:-

(i) $2x^2 = x + 8$ **(2marks)**

(ii) $-2x^2 + 4x + 12 = 0$ **(3marks)**

19. Three towns P, Q and R are such that Q is 16 km north of P and the distance of R is 12 km from P and on a bearing of 60° from Q.

a). Using a scale of 1cm to represent 4km, Make a scale drawing showing the relative positions of the three towns. **(3marks)**

b) Using the scale drawing above, find the

i) Distance of R from Q. **(1mark)**

ii) Bearing of P from Q. **(1mark)**

iii) How far town R is east of Q **(1mark)**

c) A Passenger in an aero plane after take-off from town R spotted town P at an angle of depression of 48° , by means of a scale drawing determine the vertical height of the plane at town R. **(3marks)**

20. a) The equation of a straight line L_1 is of the form $3y + 2x = 5$. L_1 is perpendicular to L_2 and meets it at the point where $X = -2$, determine the equation of L_2 in the form $y = mx + c$ where m and c are constants. **(5marks)**

b) L_3 is parallel to the line L_2 and passes through the point $(-3, 2)$, find the equation of L_3 , leaving your answer in its double intercept form. **(3marks)**

c) Determine the angle of inclination of L_2 to the Y-axis. **(2marks)**

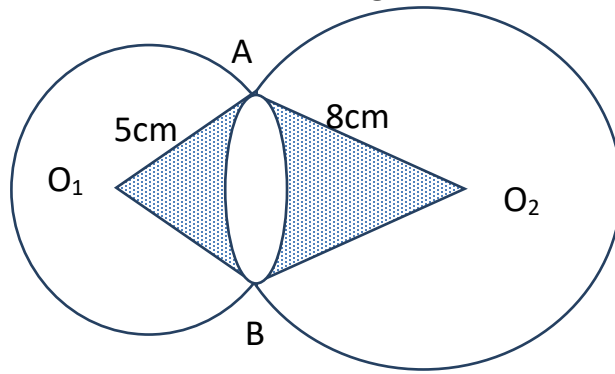
21. The points **P**, **Q**, **R** and **S**, have position vectors **$2\mathbf{p}$** , **$3\mathbf{p}$** , **$\mathbf{r}$** and **$3\mathbf{r}$** respectively, relative to an origin **O**. A point **T** divides **PS** internally in the ratio 1:6.

a) Find, in its simplest form **OT**, **QT** and **TR** in terms of **$\mathbf{p}$** and **$\mathbf{r}$** . **(6 marks)**

b) Show that the points **Q**, **T** and **R**, are collinear. **(3marks)**

c) Determine the ratio in which **T** divides **QR**. **(1mark)**

22. In the figure below, O_1 and O_2 are the centers of the circles whose radii are 5 cm and 8 cm respectively. The circles intersect at A and B and angle $AO_1O_2 = 64^\circ$.



Calculate the area of the:-

a) Sector

i) AO_1B

(2marks)

ii) AO_2B

(3 marks)

b) Intersecting region.

(3marks)

c) The shaded region.

(2marks)

23. a) Find the x –intercept of the curve $y = (x+2)(x-1)^2$. **(1mark).**

b) Find the gradient function of the curve $y = (x+2)(x-1)^2$ **(2marks)**

c) Find the co-ordinates of the turning point. Hence sketch the curve $y = (x+2)(x-1)^2$. **(4 marks)**

d) Calculate the exact area enclosed by the curve and the x - **axis** **(3marks)**

24. P and Q are two points on latitude 40°N . Their longitudes are 30°E and 150°W respectively. Find to one decimal place : (Take the radius of the earth = 6370km and $\pi = \frac{22}{7}$)

a) The distance in km between P and Q along the parallel of latitudes. **(2marks)**

b) The shortest distance along the earth's surface between P and Q in km. **(3marks)**

c) A weather forecaster reports that the center of a cyclone at $(40^{\circ}\text{N}, 60^{\circ}\text{W})$ is moving due north at 24 knots. How long will it take to reach a point $(45^{\circ}\text{N}, 60^{\circ}\text{W})$. **(2marks)**

d) A plane leaves P at 2.15 pm at a speed of 350 knots to town R $(40^{\circ}\text{N}, 65^{\circ}\text{E})$. Determine the time at R when the plane arrived. **(3marks)**

KCSE JOINT PREMOCK

SERIES 2 EXAMS-2023

MATHEMATICS

121/2

PAPER 2

TIME: 2½ HOURS

NAME.....

SCHOOL..... SIGN.....

INDEX NO..... ADM NO.....

Instructions

- Write your name, class, admission number, school, date and signature in spaces provided above.
- The paper contains **two** sections **I** and **II**.
- Answer **all** questions in section **I** and **any five** questions from section **11** in the spaces provided below each question.
- Show all the steps in your calculations giving your answers at each stage in the spaces below each question.
- Non-programmable silent electronic calculator and mathematical tables may be used except where stated otherwise.

FOR EXAMINER'S USE ONLY

SECTION A

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

SECTION B

17	18	19	20	21	22	23	24	TOTAL

PERCENTAGE

SCORE

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SECTION I (50 MARKS)

Answer **all** the questions from this section

1. The expression $(1 + \frac{x}{2})$ is taken as an approximation for $\sqrt{1+x}$. Find the percentage error in doing so if $x = 0.44$. (Give answer correct to 2 d.p) **(3 Marks)**

2. Express the following in surd form and simplify by rationalizing the denominator. $\frac{1}{\cos 60^\circ - \sin 45^\circ}$ **(3 Marks)**

3. Make q the subject of the formula

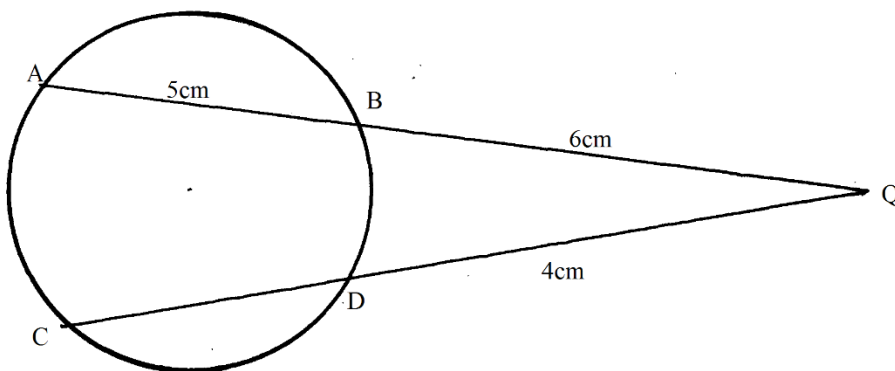
(3 Marks)

$$P = \sqrt[3]{\frac{nq-m}{q}}$$

4. The data below shows the age of 10 pupils picked at random in a primary school 6, 11, 13, 14, 8, 7, 12, 20, P and 9 if $\sum fx^2 = 1360$. Determine the value of P hence, find the standard Deviation to 3d.p **(4 Marks)**

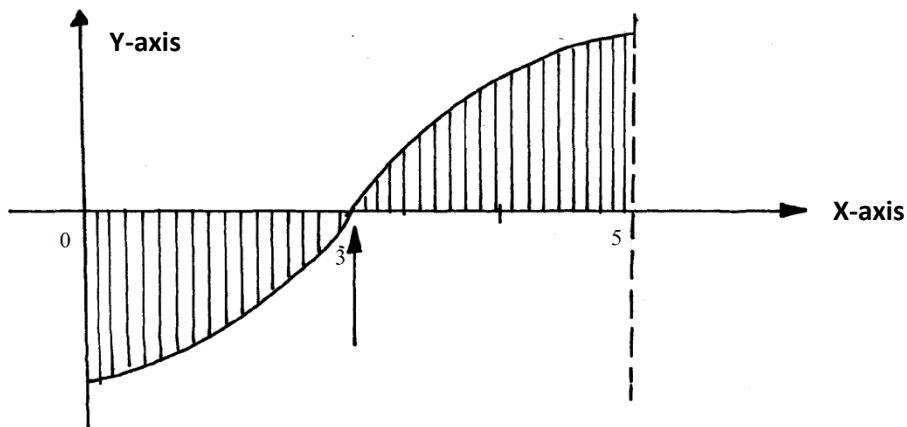
5. The volume, V of a cylinder varies jointly as its height, (h) and the square of its radius, (r), Calculate the percentage increase in its volume (V), when radius increases by 5% and height, h increases by 10%. **(3 Marks)**

6. Chords AB and CD in the figure below intersect externally at Q. if AB = 5cm BQ = 6cm and DQ = 4cm, calculate the length of chord CD. **(2 Marks)**



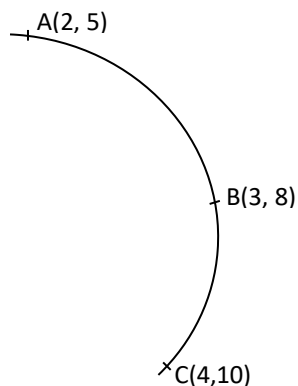
7. Jane can do a piece of job in 4 days while Mary can do the same piece of work in 7 days. Mary and Jane did the job together for two days before Jane fell sick. Mary was left to complete the job. How long did it take to do the job? **(3 Marks)**

8. The sketch below represents the graph of $y=x^2-x-6$. Find the area bounded by the curve, x-axis, y-axis and the line $x=5$. **(3 Marks)**



9. Use matrix method to determine the co-ordinates of the point of intersection of the two lines. $3x-2y=13$, $2y+x+1=0$ **(3 Marks)**

10. The figure **below** shows an arc of a circle through three points A, B and C.



Calculate the co-ordinates of the centre of the circle.

(4 Marks)

11. A bag contains 4 white balls and 5 Red balls of similar shape and size. Two balls are picked at random without replacement. Find the probability that both balls are:

a) White

(1 Mark)

b) Of different colour

(2 Marks)

12. A point P(2, -3) undergoes transformation represented by the matrix $\begin{pmatrix} 3 & 0 \\ 0 & 1 \end{pmatrix}$. **Find** the

Co-ordinate of the image of P.

(2 Marks)

13. Expand $(2 + x)^6$ up to the fourth term. (2 Marks)

Hence use the above expansion to evaluate $(1.96)^6$ correct to 4 d.p. (2 Marks)

14. Find the value of x in the equation $10\sin^2 x - 7\cos x + 2 = 0$ for the range $270^\circ \leq x \leq 360^\circ$ (3 Marks)

15. Find the value of x in (3 Marks)
 $\text{Log}(x-2) + \log(x+1) = 1 + \log 4$

16. The sum of two numbers is 9. The sum of the square of the number is 41. Find the numbers (4 Marks)

SECTION II (50 MARKS)

*Answer **FIVE** questions **ONLY** from this section*

17. The table below shows the taxation rates for income earned.

Income in ksh pm	Tax rates (%)
1 – 9680	10
9681 – 18800	15
18801 – 27920	20
27921 – 37040	25
Excess over 37041	30

In that year, Mr. Hamisi paid a net tax of KSh. 5,512 per month. He gets a house allowance of KShs. 10,000, medical allowance of KShs. 2400 and acting allowance of KShs. 2820 per month. He was entitled to a monthly personal relief of KShs. 162. He has a life insurance policy for which he pays a monthly premium of KSh. 1,500 and claims a relief at a rate of 10% of the premium paid per month. The following deductions also made every month.

(i) N.H.I.F. KSh. 320

(ii) Co-operative society shares KSh. 6000

(iii) Union dues KSh. 200

(a) Calculate Mr. Hamisi's monthly basic salary in KSh.

(7 Marks)

(b) Calculate his net monthly salary.

(3 Marks)

18. A jet leaves town P(30°S , 26°W) at 2.00 p.m on Monday and flew due north to town Q(50°N , 26°W).

a) Calculate the distance covered by the jet in Km. (take $\pi = \frac{22}{7}$ and $R = 6370$) **(3 Marks)**

b) After 35 min stoppage at town Q the jet flew due East to town R a distance of 2500 nautical miles from town Q.

Find i) the position of town R **(3 Marks)**

ii) The local time the jet landed at R if its average speed for the whole journey is 1000km/h.

(Take 1nm=1.853km) **(4 Marks)**

19. Use a ruler and a pair of compasses only in all constructions in this question.

(a) Construct the rectangle ABCD such that $AB = 7.2\text{cm}$ and $BC = 5.6\text{cm}$. **(3 Marks)**

b) Constructs on the same diagram the locus L_1 of points equidistant from A and B to meet with another locus L_2 of points equidistant from AB and BC at M. Measure the acute angle formed at M by L_1 and L_2 . **(3 Marks)**

c) Construct on the same diagram the locus of point K inside the rectangle such that K is less than 3.5cm from point M. Given that point K is nearer to B than A and also nearer to BA than BC, shade the possible region where K lies. Hence calculate the area of this region. Correct to one decimal place. **(4 marks)**

20. (a) The first term of a geometric progression is 36. the sum of the first three terms is 27. Calculate the common ratio and the value of the second **term** **(4 Marks)**

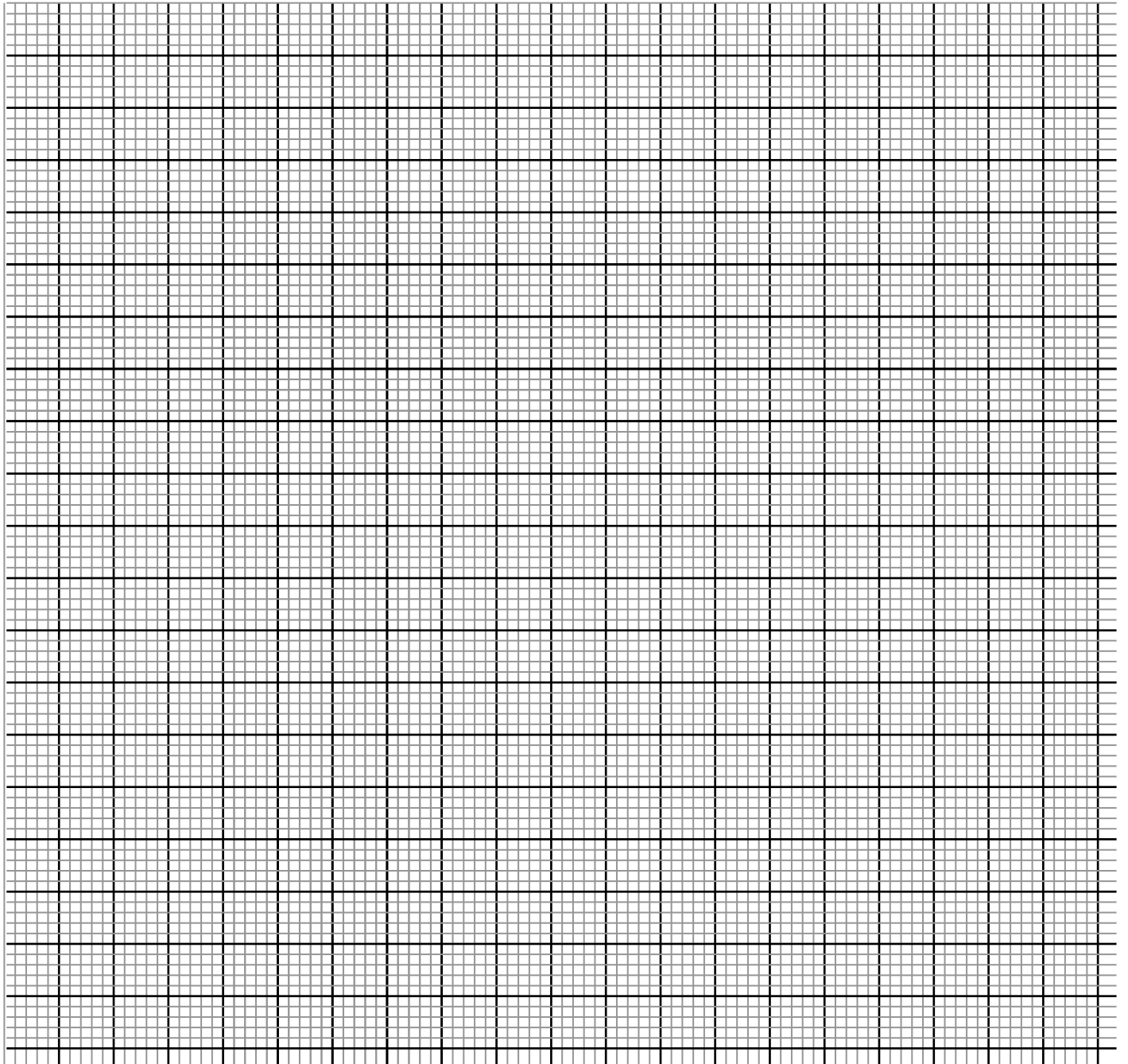
(b) The first term of an AP is 2. the first term of a geometric sequence is also 2 and its common ratio equals the common difference of the arithmetic sequence. The square of the fifth term of arithmetic sequence exceeds the third term of the geometric sequence by 2. Find the common difference and the sum of the first 50 terms of an AP. **(6 Marks)**

21. a) Draw triangle PQR whose vertices are P(1,1) Q(-3,2) and R(0,3) on the grid provided. **(1 Mark)**

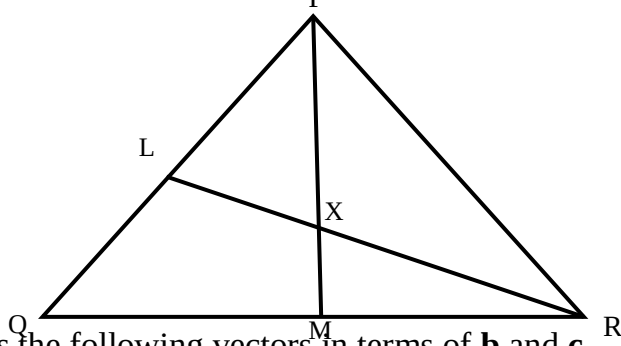
b) Find the coordinates of triangle $P^1Q^1R^1$ the image of triangle PQR under the transformation whose matrix is $\begin{pmatrix} 3 & 0 \\ 1 & 1 \end{pmatrix}$. Draw triangle $P^1Q^1R^1$. **(3 Marks)**

c) $P^1Q^1R^1$ is then transformed onto $P^2Q^2R^2$ by the transformation with matrix $\begin{pmatrix} \frac{2}{3} & 0 \\ \frac{-2}{3} & 2 \end{pmatrix}$
Find the coordinates of $P^2Q^2R^2$ and draw triangle $P^2Q^2R^2$ **(3 Marks)**

d) Describe fully a single transformation which maps PQR onto $P^2Q^2R^2$. Find the matrix of this transformation **(3 Marks)**



22. In the triangle PQR below, L and M are points on PQ and QR respectively such that PL:LQ=1:3 and QM:MR=1:2, PM and RL intersect at X, given that $PQ = \mathbf{b}$ and $PR = \mathbf{c}$,



(a) Express the following vectors in terms of $\mathbf{b}$ and $\mathbf{c}$

(i) $\mathbf{QR}$ (1mark)

(ii) $\mathbf{PM}$ (1mark)

(iii) $\mathbf{RL}$ (1mark)

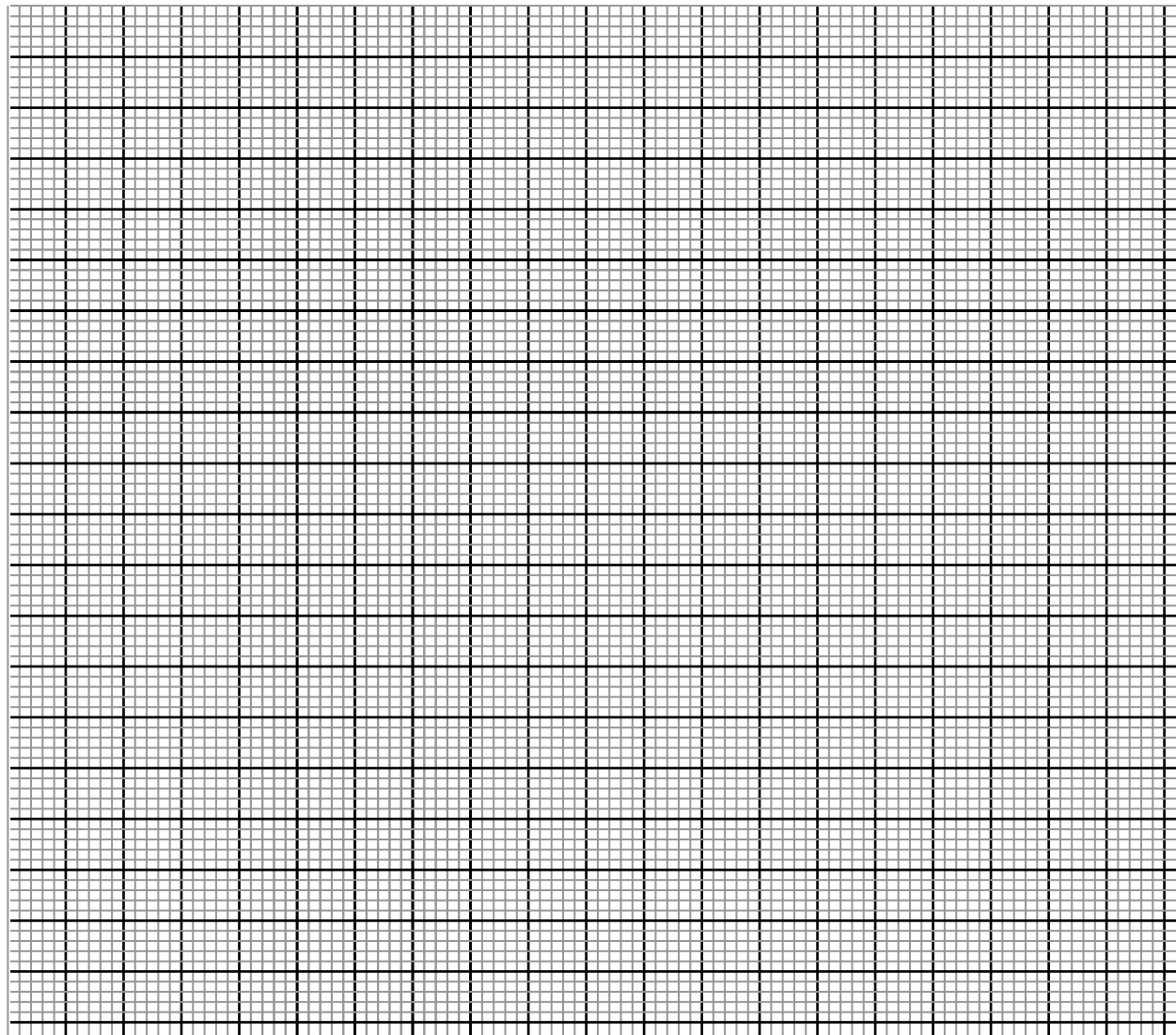
(b) By taking $\mathbf{PX} = h\mathbf{PM}$ and $\mathbf{RX} = k\mathbf{RL}$ where h and k are constants find two expressions of $\mathbf{PX}$ in terms of h , k , $\mathbf{b}$ and $\mathbf{c}$. Hence determine the values of the constant h and k . (6marks)

(c) Determine the ratio LX: XR (1mark)

23. a) Complete the table below for the function $y=2x^2 + 4x -3$ (2 Marks)

x	-4	-3	-2	-1	0	1	2
y					-3		

b) On the grid provided, draw the graph of the function $y=2x^2 + 4x -3$ for $-4 \leq x \leq 2$ using the scale of 1cm to represent 1 unit on axis and 1cm to represent 2 units on y-axis. (3 Marks)



c) Use the graph above to:

i) Determine the roots of the equation $2x^2 + 4x -3=0$ (2 Marks)

ii) Solve the equation $2x^2 + x -5 =0$ (3 Marks)

24. The acceleration of a particle, t seconds after passing a fixed point P is given by $a = 3t - 3$.

Given that the velocity of the particle when $t = 2$ is 5m/s , find;

a) Its velocity when $t = 4$ seconds

(3 Marks)

b) Its displacement at the time in (a) above

(3 Marks)

c) The displacement during the third second

(4 Marks)

KCSE JOINT PREMOCK

SERIES 2 EXAMS-2023

COMPUTER STUDIES

451/1

PAPER 1

TIME: 2½ HOURS

NAME.....

SCHOOL..... SIGN.....

INDEX NO..... ADM NO.....

Instructions to Candidates

- (a) Write your name and index number in the spaces provided above.
- (b) This Paper consists of **two** sections **A** and **B**.
- (c) Answer **all** the questions in **section A**.
- (d) Answer **question 16** (compulsory) and any other **three** questions from section **B**.
- (e) All answers should be written in the spaces provided.

FOR EXAMINER'S USE ONLY

Section	Questions	Candidate's score
A	1- 15	
B	16	
	17	
	18	
	19	
	20	
	TOTAL SCORE	

SECTION A (40 MARKS)

Answer ALL questions in the spaces provided

1. Differentiate between embedded computer and dedicated computer (2 marks)

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2. The current monitor technology uses LED back lit technology. Give **two** advantages of using TFT monitors over CRT monitors (2 marks)

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3. A Form four student wants to send a large document to a printer.

- a) State the name for the area of memory that the document is sent to immediately from RAM.

(1 mark)

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- b) As the printer runs out of paper during printing, the operating system sends a signal back to the computer to stop temporarily. Name this function of the operating system (1 mark)

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4. a) Differentiate between a flash memory and compact disk as used in computer storage devices. (2 marks)

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b) People like using DVDs over compact disks yet they are of the same physical size. State **three** reasons that justifies this. **(3 marks)**

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5. For a monitor to display images, it must be connected through video port to a video adapter or controller mounted on the mother board. What is the role of a **video adapter**? **(2 marks)**

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6. Name four categories of input devices **(2 marks)**

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7. State any **two** physical measures taken to protect a computer laboratory from unauthorized access. **(2 marks)**

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8. Most word processors have some automated features such as word wrap and type over modes. Describe these features **(2 marks)**

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9. Differentiate between proofreading and formatting a document as used in word processing**(2 mks)**

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10. Most computerized systems in different organizations face a lot of unauthorized access such as **Eavesdropping**, **Surveillance** and **Industrial espionage**. State a control measure against each vice. (3 marks)

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11. A world wide web is a vast virtual space in the internet where information is made available such as web portals and blogs. Different between a **web portal** and a **blog**. (2 marks)

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12. Differentiate between **filtering** and **hiding** of rows/columns as used in spreadsheets(2 mks)

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13. Industrial plants use computer systems in different ways such as **Computer Aided design**, **manufacturing**, **Simulation** and **process control**. Explain how computers are used in the mentioned areas above. (4 marks)

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14. a) Differentiate between **Job displacement** and **Job replacement**. (2 marks)

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b) State **three** advantages of using automated production in manufacturing plants. (3 marks)

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15. Due to high demand and dynamic nature of computers and information systems, there is need for qualified computer trainers. What are the roles of computer trainers? (3 marks)

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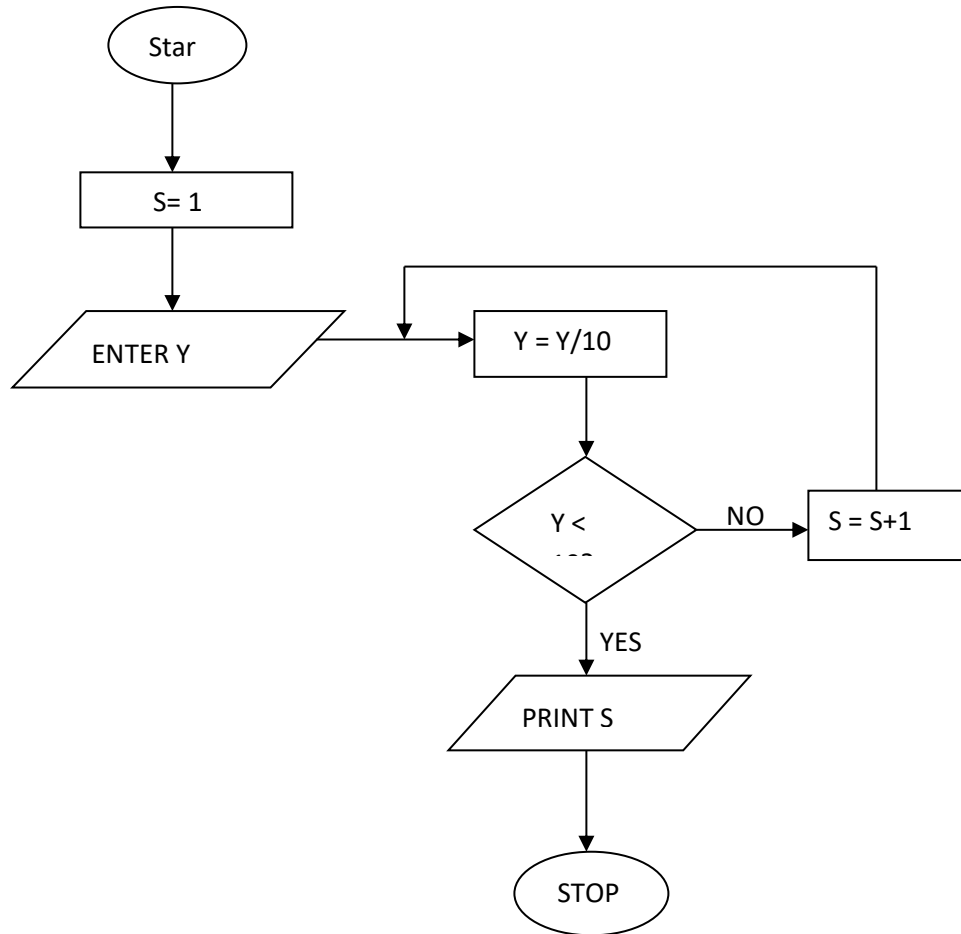
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SECTION B (60 MARKS)

Answer question 16 (compulsory) and any other THREE questions from this section.

16. a) By use of a Flowchart construct, differentiate between a **while loop** and **Repeat... Until loop** (4 marks)

b) Study this flowchart and use it to answer questions that follows



c) Give the expected output from the flowchart when the value of Y is: (4 marks)

i) 48

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ii) 800

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d) Write the pseudocode that can be used to create a program represented by the above flowchart.

(7 marks)

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17. a) Differentiate between a **primary key** and a **foreign key** as used in databases. (2 marks)

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b) State **four** factors to be considered when designing a good database (4 marks)

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c) Explain the use of each of the following field data types as used in database (3 marks)

i) OLE object

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ii) Lookup wizard

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iii) Memo

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d) Kibet has been experiencing a lot of problems in his computer. As a result, he decided to format his computer and re-installed a new operating system.

i) What is **formatting** in relation to the above context (2 marks)

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ii) What precaution must Kibet observe before formatting his computer (1 mark)

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e) You are required to purchase an operating system. State **three** factors that you should consider before acquiring the software. (3 marks)

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18. a) Define the following terms as used in networking

(3 marks)

i) Broadband

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ii) Bandwidth

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iii) Multiplexing

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b) List **four** elements of networking

(2 marks)

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d) Most institutions are moving towards the use of fibre optic cables. State **three** reasons why fibre optic is preferred

(3 marks)

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e) Differentiate between **Hub** and **Bridge** as used in networking.

(2 marks)

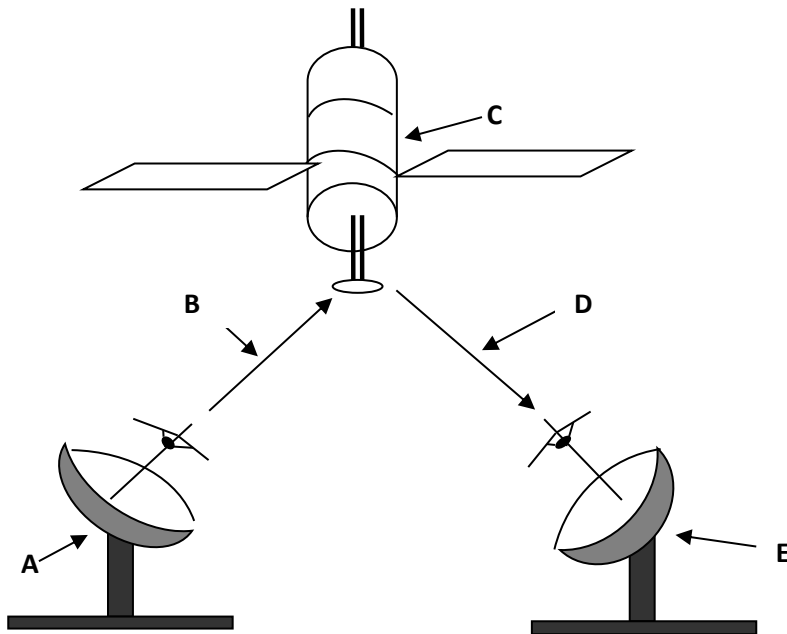
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- f) The diagram below represents a signal transmission from point A to point E. Name the parts labeled A, B, C, D, E (5 marks)



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19. a) Binary systems has been used to develop most electronic devices. Give **three** advantages of using binary. (3 marks)

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- b) Convert the following number systems (4 marks)

i) 37.625_{10} to binary

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ii) BCD. EF₁₆ to Octal

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c) Using twos complement, perform the following arithmetic operation leaving your answer in decimal notation. (4 marks)

$$39_{10} - 19_{10}$$

d) A Mwalimu Consultancy student was developing a file. List any **four** attributes that the student must consider in the development process (2 marks)

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20. a) A system analyst in Changamwe preferred using phased changeover to implement a new system. State **three** reasons for this preference. (3 marks)

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b) State **three** reasons why an organization may change an information system. (3 marks)

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c) Different students were asked to state the characteristics of a system. The responses were:

- i. They are holistic
- ii. They are open or closed systems
- iii. They have a boundary and environment.

Explain each of the above responses.

(3 marks)

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e) Explain the following data collection stages as used in data processing

(3 marks)

i) Data preparation

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ii) Media conversion

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iii) Input validation

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f) State **three** ways a data entry clerk may use to reduce threats to data integrity (3 marks)

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KCSE JOINT PREMOCK

SERIES 2 EXAMS-2023

COMPUTER STUDIES

451/2

PAPER 2

TIME: 2½ HOURS

NAME.....

SCHOOL.....

SIGN.....

INDEX NO.....

ADM NO.....

INSTRUCTIONS TO CANDIDATES

- This paper has **two** questions.
- Answer all the **questions**.
- All questions carry equal **marks**.
- Type your name and index number at the right hand corner of each print out.
- Write your name and index number on the storage medium provided.
- Write your name and version of software used for each question attempted.
- Passwords **should not** be used while saving in your work.
- Make a printout of the answers on the answer sheets provided
- Hand all the **print outs** and the **storage medium**

1. a) Kipto'smilling company limited has given you the details below to be used in calculating expenses incurred during two quarters of the year as indicated. Use a spreadsheet package to enter the details, and save your work as Expenses 1.

(10 marks)

	A	B	C	D	E	F	G
	KIPTO'S MILLING COMPANY LIMITED						
	<u>P.O BOX 625 NAKURU</u>						
		First quarter			Second quarter		
		January	February	March	April	May	June
	Production cost	15642	14687	18741	19457	15412	15441
	Transportation	1564	1469	1874	1946	1541	1544
	Warehousing	1125	1056	1347	1398	1107	1109
	Promotion	2564	2407	3071	3188	2525	2530
	Salary	4525	4248	5420	5626	4456	4465

- b) i) Copy the details of Kipto's milling company limited to sheet 2 of your worksheet. (2marks)
- ii) Add a column called "Total" and calculate the Total production cost of the two Quarters. (4marks)
- iii) Use relative referencing to calculate the total for the other expenses. (4marks)
- c) i) Calculate the total expenses for each month so as to give the results as "Total expenses" on row 10. (4marks)
- ii) On the paper provided, write the formula used to calculate the expenses for the month of April. (2marks)
- d) i) Use absolute referencing to calculate the cumulative total expenses for the two quarters in cell H10. (4marks)
- ii) Write the formula used to get the cumulative total on the paper provided. (2marks)
- iii) Calculate the percentage of total expenses of the respective months and display the results on row 11 as "percentage of total expenses". (4marks)
- iv) Write the formulae used to get the percentage of May. (2marks)
- v) Draw a line graph to illustrate the percentage of the total expenses for the six months indicating the months. Save your work as Expenses 2. (10 marks)
- vi) Print Expenses 1 and Expenses 2. (2marks)

2. a) A hospital uses a database to maintain data about its employees.

Create a database file named **EMPLOYEE**.

(1 mark)

b) Create a table called **EMPLOYEE 1** with the following fields and hence enter data into it as shown in fig 1 below. NB: Choose an appropriate primary key. (14 marks)

- EMP NO
- NAME
- DATE OF BIRTH
- DEPARTMENT
- BASIC PAY

Fig 1

Emp	Name	Date of birth	Department	Gross pay
01	John Kirui	16/2/1972	Computer	28000
02	Margaret Wairimu	2/2/1960	Medical	30000
03	Jane Cherono	2/5/1970	Management	15000
04	Victor Oduor	8/12/1981	Accounts	25000
05	Harry Wanyama	23/6/1983	Medical	30000
06	Jacob Kiprono	19/4/1973	Management	45000
07	Ali Mohammed	1/1/1969	Medical	30000
08	Daniel Omondi	3/5/1983	Accounts	25000
09	Everlyne Kitune	11/3/1971	Medical	20000
10	Nancy Kerubo	22/9/1980	Medical	20000

- c) i) Insert **two** new fields to hold the employee's profession and deductions. (4 marks)
ii) Data for included fields is as follows;

Profession

Mohammed, Wanyama and Wairimu are Doctors. Oduor and Omondi are accountants. Kiprono is an Administrator, Kirui is a systems analyst and Cherono is a secretary.

Deductions

Emp no Amount

07, 05, 02 8,000

04, 08 7,500

06 10,000

01 12,000

03 3,500

09, 10 4,000

Enter the above data into the respective fields.

(6 marks)

- iii)** Sort the records in ascending order based on the name field and save as EMPLOYEE 2. **(3marks)**
- d) i)** From EMPLOYEE 2, extract a list of employees who were born between 1960 and 1972 both years inclusive and are accountants, nurses or doctors. Write down on paper provided the query expression you used to extract the data. Save the extracted list as LIST1.**(8marks)**
- ii)** Remove the date and occupation criteria on LIST 1. Add a calculated field to calculate the Net pay of all employees as Gross Pay - Deductions. Save as LIST 2. **(5marks)**
- e)** Generate a columnar report based on LIST 2 with the following fields; Emp no, Name, Department and Net Pay. Sum up the Net Pay for all employees in the report. Save your report as REPORT. **(6marks)**
- f)** Print **EMPLOYEE1, EMPLOYEE2, LIST1, LIST 2** and **REPORT**. **(3marks)**

KCSE JOINT PREMOCK

SERIES 2 EXAMS-2023

HOME-SCIENCE

441/1

PAPER 1

TIME: 2½ HOURS

NAME.....

SCHOOL..... SIGN.....

INDEX NO..... ADM NO.....

441\1

HOME-SCIENCE

PAPER 1

THEORY

TIME: 2 ½ HRS

Instruction to candidates

- a. Write your name and index in the spaces provided.*
- b. This paper consists of 3 sections A, B and C.*
- c. Answer all questions in section A.*
- d. Section B is compulsory.*
- e. Choose ANY 2 questions in section C.*
- f. Answers to all questions must be written in the spaces provided.*
- g. Candidates should answer all questions in English.*

SECTION A: COMPULSORY

1. State 2 disadvantages of maisonettes (2mks)
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.....
2. Give 2 reasons why butter/margarine are unsuitable for deep fat frying (2mks)
.....
.....
3. State 2 self-neatening seams (1mk)
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.....
4. List 2 conditions that encourage the growth of micro-organisms (2mks)
.....
.....
5. Name 2 types of Beriberi (2mks)
.....
.....
6. Give 2 advantages of advertising on a billboard (2mks)
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.....
7. Give 2 ways of preventing the spread of dandruff (2mks)
.....
.....
8. State 3 points to bear in mind when choosing a good candle (3mks)
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9. Outline 4 edge neatening stitches (2mks)
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10. Give 2 reasons for blanching vegetables (2mks)

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11. Suggest 4 reasons which may cause menstruation to cease (2mks)

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12. Distinguish between sponging and spotting (2mks)

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13. State 4 uses of milk in cookery (2mks)

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14. Give 2 advantages of home confinement (2mks)

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15. State two factors that determine the cleansing action of a detergent (2mks)

.....

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16. Suggest two reasons that may lead to a mother giving birth to a deformed baby (2mks)

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17. List four soft furnishings used in the bedroom (2mks)

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18. State 2 functions of pockets in a garment (2mks)

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19. List 2 grooming habits that prevents skin diseases (2mks)

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SECTION B COMPULSORY

20. Your brother is celebrating his birthday and has requested you assist in cleaning

- a) Outline the procedure of thoroughly laundering his loose coloured T-shirt (8mks)
- b) Clean an oil painted wall (8mks)
- c) Clean a plain wooden chopping board (4mks)

SECTION C

Answer any two questions from this section in the spaces provided

21. a.Explain 4 precautions to take to prevent occurrence of food poisoning when handling left over foods (8mks)
- b. Highlight 4 laundry practices that harm wool (4mks)
- c. write down 3 qualities of a well-made pastry (8mks)
- d. Explain the preparation of a sewing machine in readiness for stitching (5mks)
22. a. State 5 ways of saving energy when lighting a home (5mks)
- b. Highlight 4 ways of enhancing personal health (4mks)
- c. Giving a reason suggest 3 nutrients that should be increased during pregnancy (3mks)
- d. With the aid of a diagram outline in procedure of making an overlaid seam (8mks)
23. a.State 4 reasons for softening hard water for laundry work (4mks)
- b. Explain 4 main causes of malnutrition in the country (8mks)
- c. Explain the preparation and attachment of a squared patch pocket (8mks)

KCSE JOINT PREMOCK

SERIES 2 EXAMS-2023

HOME-SCIENCE

441/2

PAPER 2

TIME: 2½ HOURS

SCHOOL.....

SIGN.....

441/2

HOME SCIENCE

CLOTHING AND CONSTRUCTION

PAPER 2

CONFIDENTIAL

- 1. Plain light weight cotton fabric 50 cm by 90 cm wide.*
- 2. Sewing thread to match the colour of the fabric.*
- 3. One large A4 envelope*

KCSE JOINT PREMOCK

SERIES 2 EXAMS-2023

HOME-SCIENCE

441/2

PAPER 2

TIME: 2½ HOURS

NAME.....

SCHOOL..... SIGN.....

INDEX NO..... ADM NO.....

441/2

HOME SCIENCE

CLOTHING CONSTRUCTION

A pattern of a girl's blouse is provided. You are advised to study the sketch, the question and the layout before the test.

MATERIALS PROVIDED

1. Pattern pieces

- A - BLOUSE FRONT
- B - BLOUSE BACK
- C - FRONT YOKE
- D - FRONT FRILL
- E - BACK FRILL
- F - BACK NECK FACING

2. Plain light weight cotton fabric 50 cm by 90 cm wide.
3. Sewing thread to match the colour of the fabric.
4. One large envelope.

THE TEST

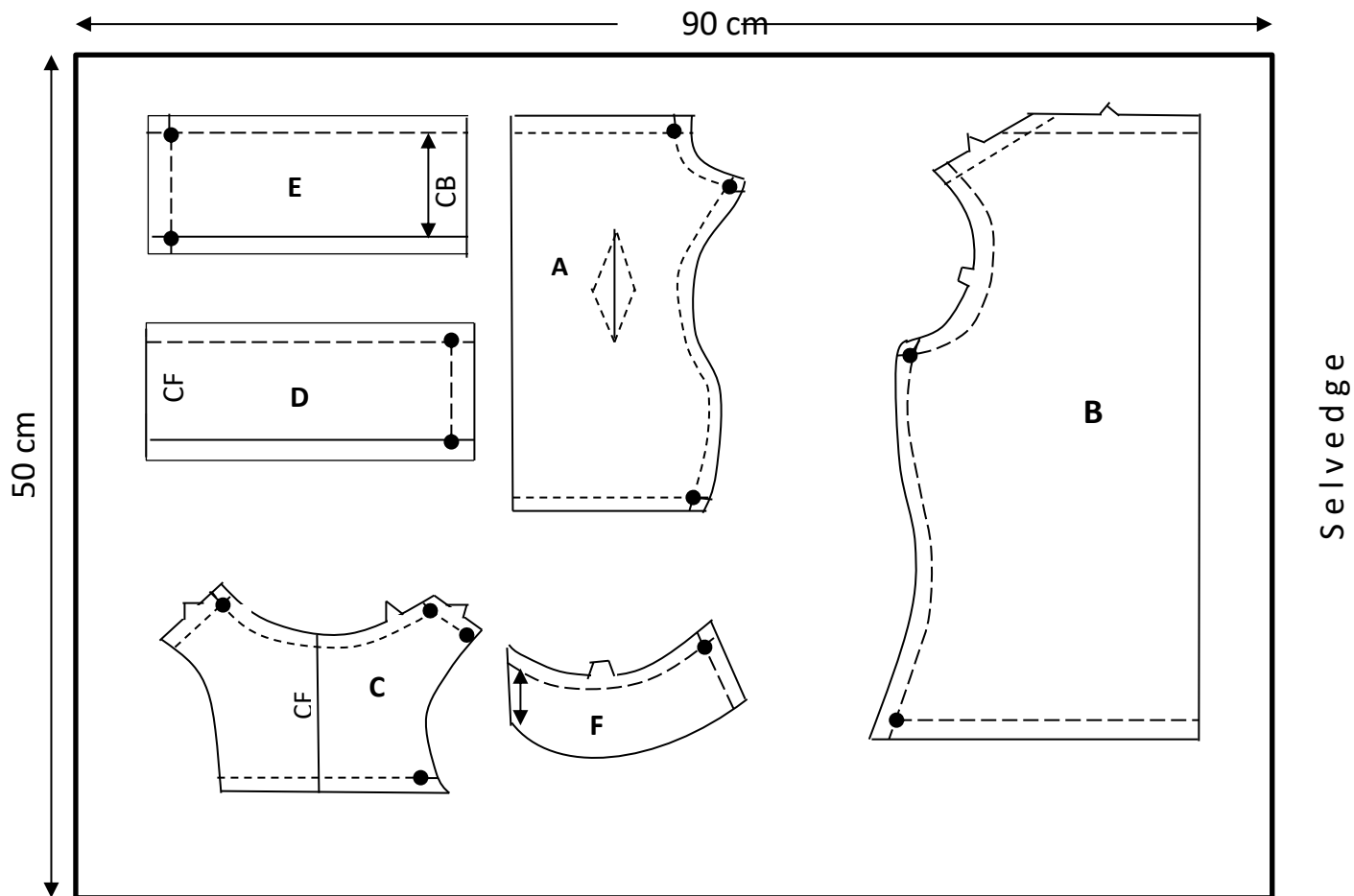
Using the materials provided, cut out and make up the **RIGHT HALF** of the child's blouse to show the following.

1. Cutting out. (13 marks)
 2. The making of the double pointed dart. (5 ½ marks)
 3. Making of the shoulder seam using double stitched seam. (7 ½ marks)
 4. Joining the back facing to front facing and neatening the free edge. (8 marks)
 5. Neatening the neckline using the joined facings. (4 marks)
 6. Joining the front yoke to the blouse front using overlaid seam. (11 marks)
 7. Working the side seam using an open seam. (6 marks)
 8. Preparation of the frill to include:
 - (a) Joining the back and front frill using a French seam. (7 marks)
 - (b) Control of fullness. (3 marks)
 - (c) Attachment of the frill to the lower part of the blouse using a plain seam.
- (Do not trim; Do not neaten) (7 marks)**
9. Working of buttonhole using hand-worked stitches. (6 marks)
 10. Management of the hem and holding it using long and short tacking. (6 marks)
 11. Presentation. (6 marks)

NOTE:

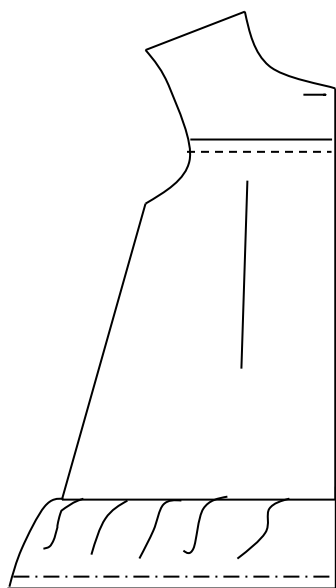
At the end of the examination, firmly sew on a single fabric a label bearing your name and index number, Remove the needles and pins from your work then fold your work neatly and place it in the envelope provided. Do not put scraps of fabric with your work.

LAYOUT - NOT DRAWN TO SCALE

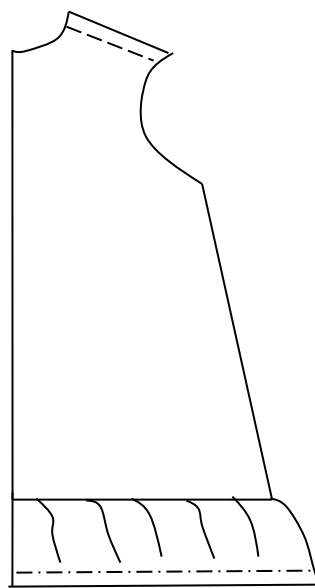


VIEW

FRONT VIEW



BACK VIEW



KCSE JOINT PREMOCK

SERIES 2 EXAMS-2023

HOME-SCIENCE

441/3

PAPER 3

TIME: 1¾ HOURS

NAME.....

SCHOOL..... SIGN.....

INDEX NO..... ADM NO.....

441/3

HOME SCIENCE (FOODS AND NUTRITION)

Paper 3

(PRACTICAL)

1 ¾ hours

Instructions to candidates

PLANNING SESSION: 30 minutes

PRACTICAL TEST SESSION: 1 ¼ hours

- (a) Read the test carefully.*
- (b) No stationery is provided.*
- (c) Write your name and index number on every sheet of paper used.*
- (d) Textbooks and recipes may be used during the planning session as reference materials.*
- (e) You will be expected to keep your order of work during the practical session.*
- (f) You are only allowed to take away your reference materials at the end of the planning session*
- (g) You are **not** allowed to bring additional notes to the practical session.*

THE TEST

You are expected to release your two friends after lunch who visited during the weekend.

- (i) Prepare a one course meal to be taken during lunch. Include a nutritious drink.
- (ii) In addition prepare and pack juice, a snack and a ready to serve convenience food they will take on their way back.

Ingredients

- Rice/ Potatoes
- Beef
- Cabbage
- Mangoes
- Plain wheat flour
- Baking powder
- Cooking oil/ fat
- Sugar
- Salt
- Carrots
- Green pepper
- Dhania
- Tomatoes
- Onions
- Convenience food
- Spices

PLANNING SESSION – 30 MINUTES

For each task listed below, use separate sheets of paper and make duplicate copies using carbon paper.

Proceed as follows:

1. Identify the dishes and write down the recipes.
2. Write down order of work.
3. Make a list of the foodstuff and equipment you will require.

KCSE JOINT PREMOCK

SERIES 2 EXAMS-2023

ISLAMIC RELIGIOUS EDUCATION

314/1

PAPER 1

TIME: 2½ HOURS

NAME.....

SCHOOL..... SIGN.....

INDEX NO..... ADM NO.....

INSTRUCTIONS:

- a) There are **six** questions in this paper.*
- b) This paper has got **two** pages.*
- c) Answer any **five** questions.*
- d) Each student must verify that all pages and questions are present in the paper.*
- e) All answers must be in the answer sheets provided.*
- f) All answers must be in English.*

FOR EXAMINERS' USE ONLY

Question	1	2	3	4	5	6	TOTAL
Score							

QUESTIONS

- 1 a) *Highlight six* lesson derived from suratul An-Nasr (6marks)
b) *What* are the results of compiling Quran in one volume? (6marks)
c) *Explain* the modern ways adapted in teaching the Quran (8marks)
- 2 a) *Explain* the difference between Abubakar's Mashaf and Uthman's Mashaf (8marks)
b) *Explain* the significance of reciting Ayatul Kursy Q2:255 (6marks)
c) *Show six* similar themes found in Suratul Hujrat Q49 and Suratul Nur Q. 24 (6marks)
- 3 a) *Enumerate five* shia collections of Hadith (5marks)
b) **Give** reasons why the fourth period of Hadith collection is regarded as golden age (8marks)
c) The holy Prophet (S.A.W) said, "Looking for lawful earning is an obligatory act next to the obligatory worship" in reference to the above hadith, how can Muslims eradicate poverty(7mrks)
- 4 a) *Discuss* the relevance of punishment according to Sharia law. (8marks)
b) *Describe six* factors that led the emergence of schools of thought. (6marks)
c) *Mention six* obligatory rites main activities of Haj (6marks)
- 5 a) **Discuss** the relevance of the *sunnah* acts observed during the month of Ramadhan. (7marks)
b) *Highlight five* ways of asking for *tawbah* (forgiveness) (5marks)
c) *Discuss* the challenges of zakat collection in Kenya (8marks)
- 6 a) *Give* the rational of forbidding Shirk in Islam. (6marks)
b) *Discuss* the relevance of the belief in Qadar. (8marks)
c) *Explain six* characteristics of the revealed books of Allah (sw) (6marks)

KCSE JOINT PREMOCK

SERIES 2 EXAMS-2023

ISLAMIC RELIGIOUS EDUCATION

314/2

PAPER 2

TIME: 2½ HOURS

NAME.....

SCHOOL..... SIGN.....

INDEX NO..... ADM NO.....

INSTRUCTIONS:

- a) There are **six** questions in this paper.*
- b) This paper has got **two** pages.*
- c) Answer any **five** questions.*
- d) Each student must verify that all pages and questions are present in the paper.*
- e) All answers must be in the answer sheets provided.*
- f) All answers must be in English.*

FOR EXAMINERS' USE ONLY

Question	1	2	3	4	5	6	TOTAL
Score							

QUESTIONS

1. a) *Discuss* the importance of marriage in Islam. (6marks)
b) *Outline* **six** Islamic teaching on an ideal Muslim home. (6marks)
c) *Why* is it important for Muslims to conserve the environment? (8marks)
2. a) *State* the Islamic rule governing the treatment of employees. (6marks)
b) *Outline* the rationale for eddat. (6marks)
c) *Discuss* impact of Talaq (divorce) on children (8marks)
3. a) *Mention* the Islamic manners of eating. (5marks)
b) *Identify* **five** legal ways of earning in Islam. (5marks)
c) *Discuss* the rights of a woman in Islam. (10marks)
4. a) *State* the importance of the battles of Hunain. (8marks)
b) *Give* **five** lessons Muslims can learn from the treaty of hudaibiya. (5marks)
c) *Discuss* the religious conditions of Pre-islamic Arabia. (7marks)
5. a) *Explain* **five** the factors that led to the spread of Islam in Mumias. (10marks)
b) *Assess* the achievements of the Abbassids to education. (10marks)
6. a) What were the views of Ib Khaldun on politics? (10marks)
b) *Explain* the reasons for the decline of the Fatimid Dynasty. (10marks)

THE END

FOR THE FOLLOWING;

- ✓ ONLINE TUITION
- ✓ REVISION NOTES
- ✓ SCHEMES OF WORK
- ✓ SETBOOKS VIDEOS
- ✓ TERMLY EXAMS
- ✓ QUICK REVISION KITS
- ✓ KCSE TOPICALS
- ✓ KCSE PREMOCKS
- ✓ TOP SCHOOLS PREMOCKS
- ✓ JOINT PREMOCKS
- ✓ KCSE MOCKS
- ✓ TOP SCHOOLS MOCKS
- ✓ JOINT MOCKS
- ✓ KCSE POSTMOCKS
- ✓ TOP SCHOOLS PREDICTIONS
- ✓ KCSE PREDICTIONS
- ✓ KCSE REVEALED SETS

CALL/TEXT/WHATSAPP

0746 222 000

0742 999 000

mwalimuconsultancy@gmail.com

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