SUKELLEMO JOINT MOCK

ALL SUBJECTS

SUNSHINE-KENYA HIGH-LIGHT ACADEMY-LENANA-MOI GIRLS JOINT TRIALS

SUBJECTS COMPILED;

Mathematics, English, Kiswahili, Biology, Chemistry, Physics, CRE, History, Geography, Business Studies, Agriculture, French, IRE, Homescience &Computer Studies.

1st Series of JOINT TRIAL EXAMS Amongst Shared COMMUNAL SCHOOLS Administered to ALL KCSE CANDIDATES.

SERIES 1

FOR MARKING SCHEMES/ANSWERS

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COMPILED BY MWALIMU PUBLISHERS

SUKELLEMO JOINT MOCKS

KCSE 2021/22 TRIALS

(SERIES 001)

NAME……

SCHOOL…… **INDEX NO**……

SIGN…… **ADM NO** ……

231/1

BIOLOGY

PAPER 1

2 HOURS

Kenya Certificate of Secondary Education.

INSTRUCTIONS TO CANDIDATES

1. *Write your name, admission number, school and stream in the spaces provided above.*
2. *Answer all the questions in the spaces provided.*

FOR EXAMINERS USE ONLY

QUESTIONS	MAXIMUM SCORES	CANDIDATE'S SCORE
1 – 31	80	

1. Define the term Entomology. **(1mk)**

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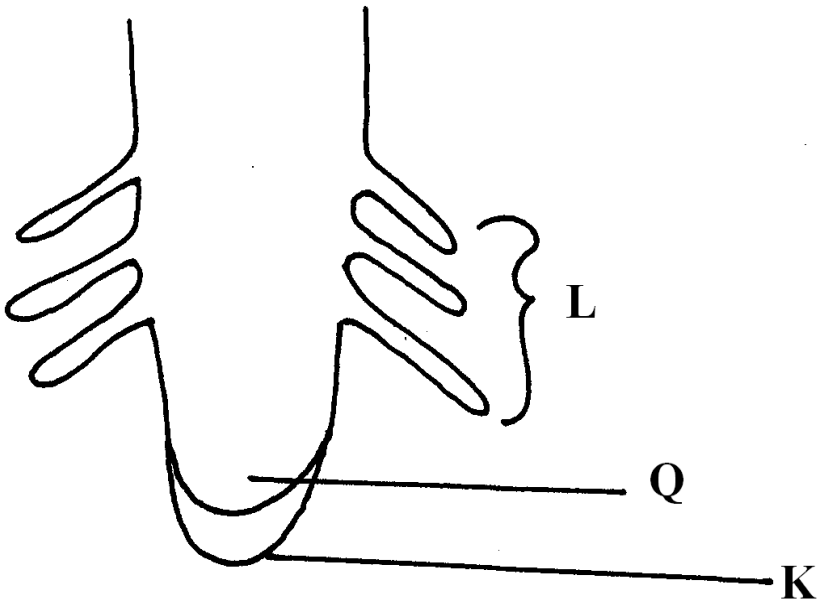
2. What is meant by the term Natural Selection. **(2mks)**

……

……

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3. The diagram below shows regions of a root-tip



a) What is the function of the part labeled K**.** **(1mk)**

……

……

b) Name the region labeled L. **(1mk)**

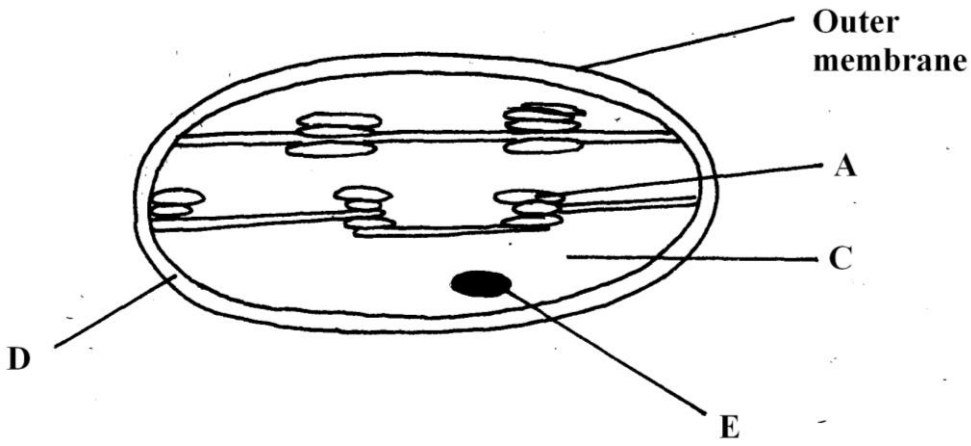
……

c) Give **ONE** characteristics of the cells in the part labeled Q. **(1mks)**

……

……

4. The organelle below is important in the process of Nutrition.



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

……

b) Name the part labeled C. **(1mk)**

……

c) Identify the structure within the organelle that would make the leaf to be variegated. **(1mk)**

……

5. A Rhinocerous in a game park was found to be infested with ticks. State the trophic level occupied by Ticks **(2mks)**

……

6. State the causative agent of the following diseases. **(2mks)**

a) Typhoid

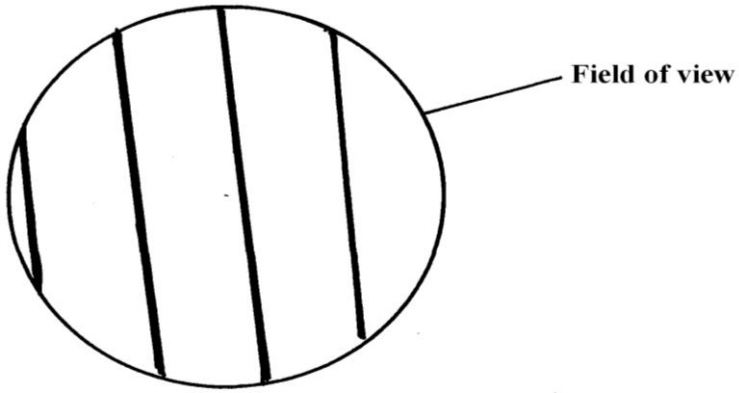
……

b) Pneumonia

……

7. A student estimating a cell size of an onion epidermal cells observed the following on

The microscope field of view using a transparent ruler.



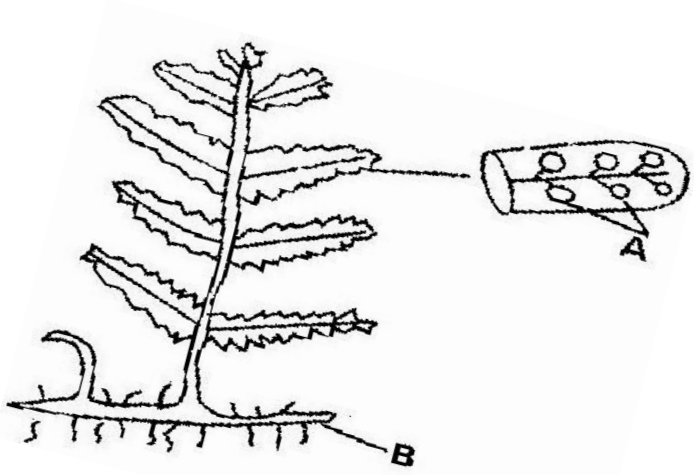
The student identified 20 cells across the field of view. Calculate the size of the cell in Micrometers **(show your working)** **(3mks)**

8. Name the tissues whose cells are thickened with:

a. Cellulose and pectin. **…….……. (1mk)**

b. Lignin. **……..…… (1mk)**

9. The diagram below represents a fern.



(a) Name Parts labeled A and B. **(2mk)**

A ……..

B ……

(b) To which division does the plant belong? **(1mk)**

……..

10. Explain how the following factors hinder self-pollination in plants:

(i) Protogyny **(1mk)**

……

……

(ii) Dioecism **(1mk)**

……

……

11. Explain the likely effect on humans and other organisms of untreated sewage discharged into water body that supplies water for domestic use. **(3mk)**

……

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……

……

12. State TWO differences between osmosis and active transport. **(2mk)**

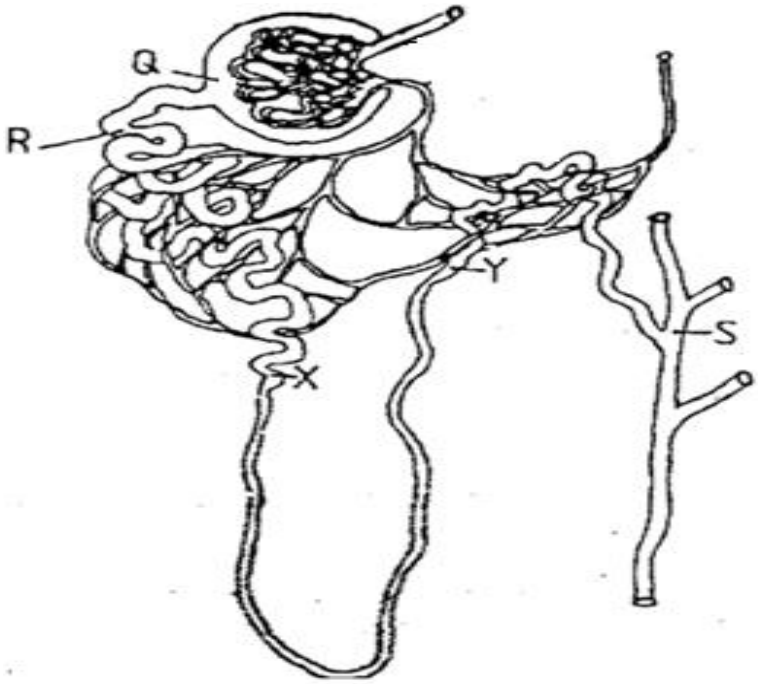
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13. The diagram below illustrates part of a nephron from a mammalian kidney.



a) Name the fluid found in the part labeled Q. **(1mk)**

……

b) Identify the process responsible for the formation of the fluid named in (a) above. **(1mk)**

……

c) Which two hormones exert their effect in the nephron? **(2mk)**

……

……

14. State **TWO** characteristics of members of kingdom Monera that are not found in other kingdoms. **(2mk)**

……

……

……

15. What is meant by the following biological terms?

i) Crenation **(1mk)**

.....

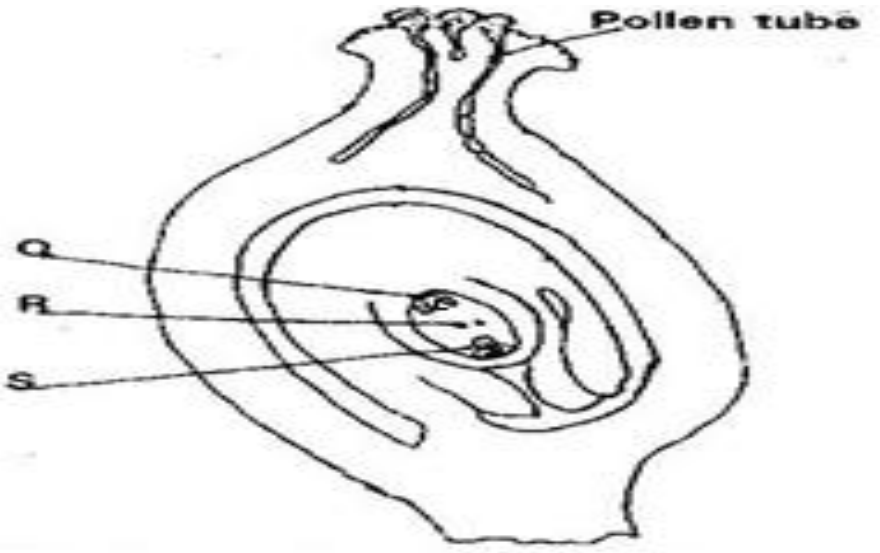
.....

ii) Haemolysis **(1mk)**

.....

.....

16. The diagram below shows a stage during fertilization in flowering plant.



a) Name the parts labeled Q, R, and S. **(3 mk)**

Q .....

R .....

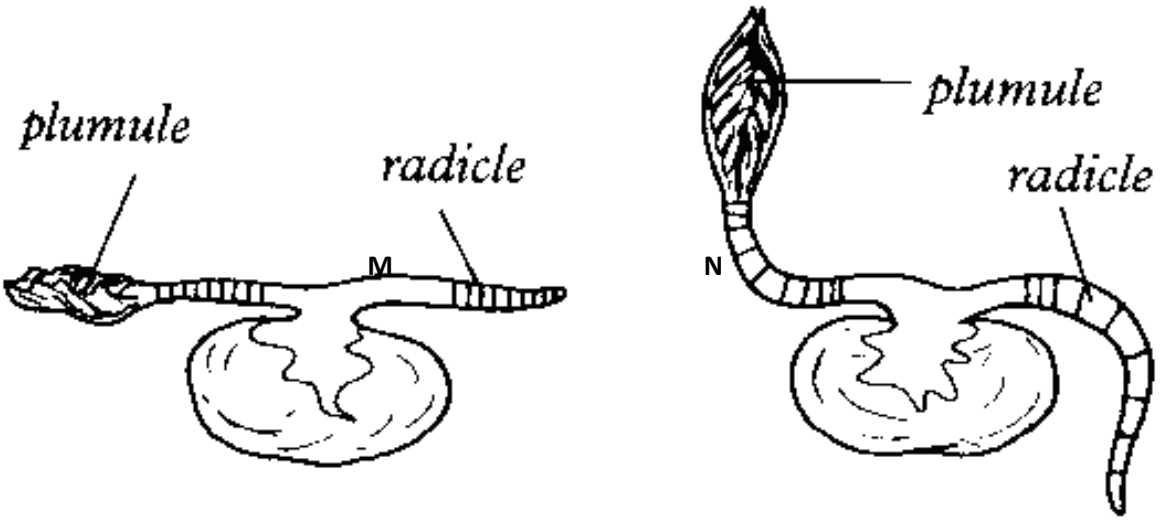
S .....

b) State the function of the pollen tube. **(1 mk)**

.....

.....

17. An experiment was set to investigate a certain aspect of response. A seedling was put on a horizontal position as shown in figure M below. After 24 hours, the set up was as shown in figure N.



a) Name the response exhibited. **(1mk)**

……

b) Explain the curvature of the shoot upwards. **(3mk)**

……

……

……

……

18. The paddles of whales and the fins of fish adapt these organisms to aquatic habitats.

a) Name the evolutionary process that may have given rise to these structures. **(1mk)**

……

……

b) What is the name given to such structures? **(1mk)**

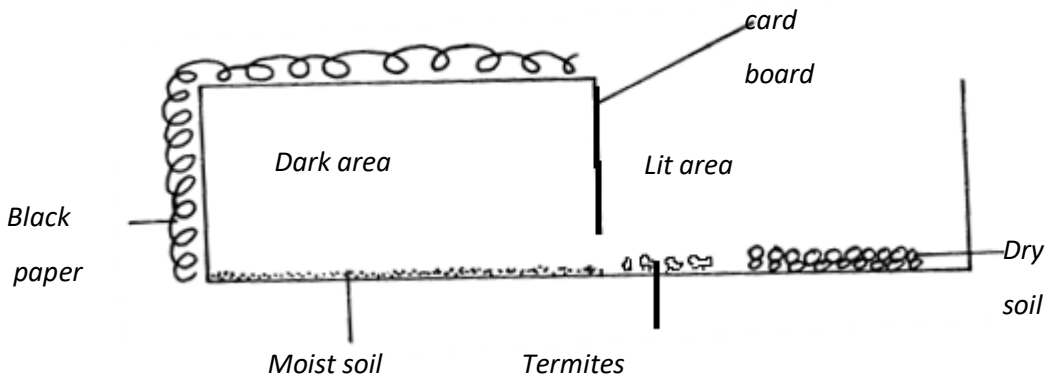
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c) Give **ONE** examples of vestigial organs in man. **(1mk)**

……

19. A group of Form four students set up an experiment to investigate a biological process using termites. They used a small box in which a portion was covered with black paper and had moist soil.

The open part had dry soil. Termites were placed inside in open area of the box.



a) Predict what happened to the termites after 30 minutes. **(1mk)**

……...

b) What form of response is exhibited by termites? **(1mk)**

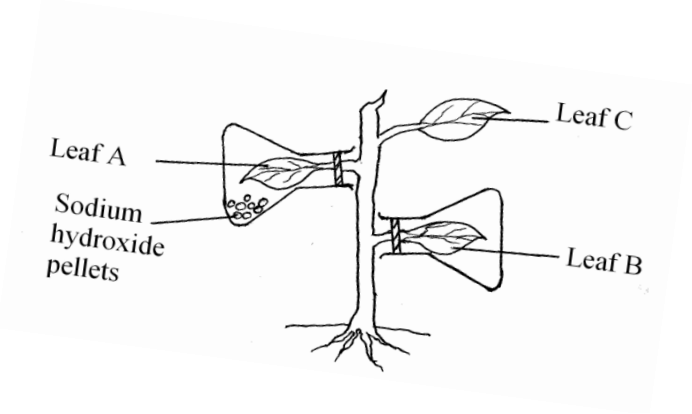
……

c) State one biological significance of the above response to termites.**(1mk)**

……...

……

20. The diagram below represents an experimental set up to investigate a certain scientific concept. The potted plant was first destarched by keeping it in dark for four days.



The set up was then placed in sunlight for five hours and leaves were tested for starch.

a) What scientific concept was being investigated? **(1mk**

……

b) i) Give the results likely to be obtained after starch test for A and B.

A and B.

A …… **(1mk)**

B …… **(1mk)**

ii) Account for the results in leaf A in b (i) above. **(1mk)**

……..

……

c) Why was leaf C included in the set-up**?** **(1mk)**

……

21) Explain why a pregnant woman excretes less urea compared to a woman who is not-pregnant**.** **(2mk)**

……

……

……

22. a) Outline the main features of Lamarckian theory of evolution. **(2mk)**

……

……

……

b) In view of modern genetics, explain why Lamarck's theory is unacceptable. **(1mk)**

……

……

c) Name one factor in nature that increases the process of evolution. **(1mk)**

……

23. Explain why fresh water Protozoa like amoeba do not burst when placed in distilled water. **(2mks)**

……

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……

24. The equation below shows an oxidation reaction of flow food substance

$5C_{51}H_{98}O_6 + 145O_2 \longrightarrow 102CO_2 + 98H_2O$ + Energy

(a) Determine respiratory quotient of the oxidation of the food substance above.**(2mks**

……

……

(b) Identify the food substance **(1mk)**

……

25. Give the one aspect of dichogamy in flowers **(1mk)**

……

26. The table below shows the concentration of important plant nutrients

Ion	Concentration in pond water (ppm)	Concentration in cell sap (ppm)
Chloride	200	50
Potassium	1	15

Name the process by which the above ions could have been taken up by the plants

(i) Potassium …… **(1mk)**

(ii) Chloride……..**(1mk)**

27. In an experiment **<u>Drosophila</u> <u>melanogaster</u>** (fruit flies) with broad abdomens were crossed with those having narrow abdomens. All the offspring (F1 generation) from the crosses had broad abdomens. Using A to denote the genes for abdomen size,

(a) Give the genotypes of the parents **(2mks)**

……

……

(b) If 150 fruit flies had narrow abdomens in the second filial generation (F2) how many fruit flies with broad abdomens were in the same generation (show your working) **(2mks)**

……

……

28. Give a reason why two species in an ecosystem cannot occupy the same niche. **(1mk)**

……

……

29. A person was found to pass out large volume of dilute urine frequently. Name the:

(a) Disease the person was suffering from? **(1mk)**

……

(b) Hormone that was deficient **(1mk)**

……

30. Identify the processes X and Y and the unknown product Z in the chemical equations below;

[i] Glucose + Galactose $\xrightarrow{X}$ Lactose + Z **(2mks)**

X _____

Z _____

[ii] G + water $\xrightarrow{Y}$ Glucose + Fructose **(2mks)**

Y _____

SUKELLEMO JOINT MOCKS

KCSE 2021/22 TRIALS

(SERIES 001)

NAME……

SCHOOL…… **INDEX NO**……

SIGN…… **ADM NO** ……

231/2

BIOLOGY

PAPER 2

THEORY

TIME: 2 HOURS

INSTRUCTIONS TO CANDIDATES.

1) *Write **your name** and **index number** in the spaces provided above.*
2) *Sign and write the date of examination in the spaces provided above.*
3) *This paper consists of section **A** and **B**.*
4) *Answer **ALL** questions in section A in the spaces provided.*
5) *In section **B** answer questions 6 (compulsory) and either question **7** or **8** in the spaces provided after question **8**.*

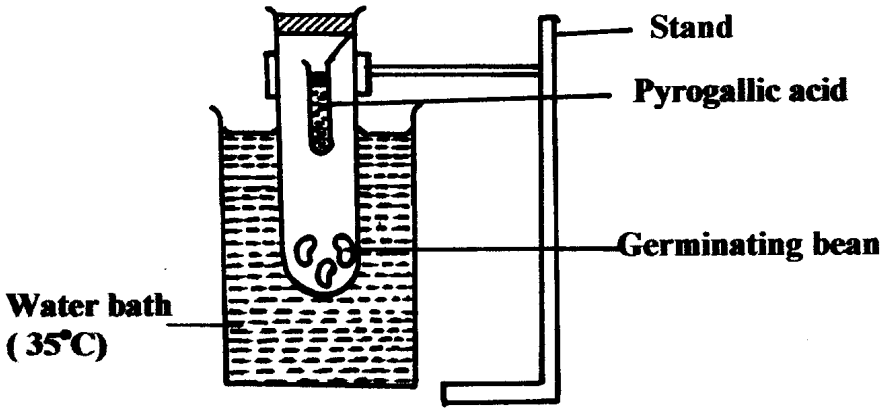
FOR EXAMINERS' USE ONLY.

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

SECTION A (40MARKS)

Answer all questions in this section in the spaces provided.

1 The diagram below shows a set up to investigate a factor necessary for germination.



a) Name the factor under investigation. **(1mk)**

……

……

b) State the role of pyrogallic acid in the set up. **(1mk)**

……

……

c) Which type of respiration is taking place in the beans? **(1mk)**

……

……

d) Write a word equation for the process named in (c) above. **(1mk)**

……

……

e) Explain why plants can only carry out the above respiration process for a short while. **(1mk)**

……

……

f) State other **three** factors necessary for germination. **(3mks)**

……

……

……

……

2 **a)** Birds have beaks which are structurally modified to different modes of feeding.

(i) What is the name given to such structures in evolution? **(1 mark)**

.....

.....

(ii) What is the name given to the evolution of beaks of birds? **(1 mark)**

.....

.....

b) **(i)** What is meant by "vestigial structures"? **(1 mark)**

.....

.....

(i) Name two vestigial structures present in man. **(1 mark)**

.....

.....

c) Bacteria tend to develop resistance to antibiotics after they have been subjected to them for a long period of time. Explain. **(2 marks)**

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.....

.....

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

.....

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.....

3 **a)** What is internal fertilization? **(1mk)**

.....

.....

b) Suggest two disadvantages of internal fertilization in most mammals.

.....

.....

..... **(2mks)**

c) State two roles of placenta in mammals.

.....

.....

..... **(2mks)**

d) Mention one role played by each of the following hormones in human menstrual cycle.

i) Oestrogen

.....

ii) Luteinizing hormone

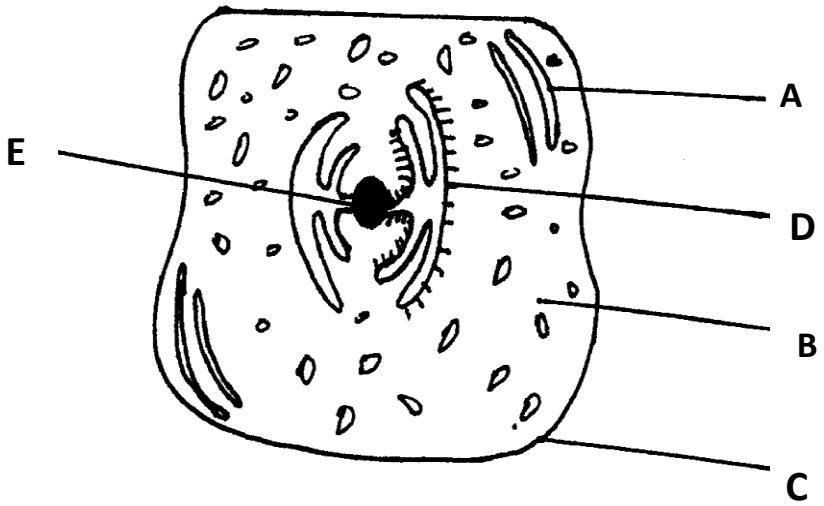
.....

iii) Follicle stimulating hormone

.....

(3mks)

4. Below is a cell obtained from a living organisms. Study it and answer the questions that follow



(a) From which kingdom of organism was the cell obtained? **(1mk)**

.....

……

(b) Give **two** reasons for your answer in 4 (a) above **(2mks)**

……

……

……

(c) On the diagram identify parts **A,B** and **C**.

(3mks)

(d) State the role of parts **D** and **E**. **(2mks)**

D:……

E:……

5 a) What is meant by the term linked genes**?** **(1mk)**

……

……

b). Haemophilia is a genetic condition transmitted through a recessive gene linked to **X** chromosome. The normal gene may be represented by $\mathbf{X^H}$**.**

i) What is the genotype of a haemophilic female? **(1mk)**

……

……

A woman who is a carrier for the haemophilia gene marries a normal man. Work out the phenotypic ratio for their offspring. **(4mk)**

ii) Haemophilia is more common in males than in females. Explain this phenomenon.

……

……

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……

(2mks)

SECTION B (40 MARKS)

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

6. The table below shows how the quantities of sweat and urine vary with external temperature.

External temperature	Urine cm^3/hr	Sweat cm^3/hr
0	100	5
5	90	6
10	80	10
15	70	20
20	60	30
25	50	60
30	40	120
35	30	200

(a) On the same axis plot graphs of the quantities of urine and sweat produced against the external temperature. **(7mks)**

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(b) At what temperature are the amounts of sweat and urine produced equal?

……

…… **(1mk)**

(c) What happens to the amount of sweat produced as the temperature rises? Explain the observation. **(3mks)**

……

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……

……

(d) Account for the observation made on the amount of urine produced as the temperature increases

……

……

……

……

……

…… **(3Mks)**

(e) (i) How is the kidney adapted to its function

……

……

……

……

…… **(4mks)**

(ii) Differentiate between excretion and egestion.

……

……

……

…… **(2mks)**

7. Explain how the following organisms are adapted to their mode of feeding

(a) Herbivores **(10mks)**

. (b) Carnivores **(10mks)**

8. (a) (i) State **two** significances of transpiration**.** **(2mks)**

(ii Discuss the forces involved in movements of water from roots to the leaves **(8mks)**

(b) Describe the mechanism of opening and closing of stomata using photosynthetic theory **(10mks)**

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SUKELLEMO JOINT MOCKS

KCSE 2021/22 TRIALS

(SERIES 001)

NAME……

SCHOOL…… **INDEX NO**……

SIGN…… **ADM NO** ……

CONFIDENTIAL

BIOLOGY

REQUIREMENTS PRACTICALS

INSTRUCTIONS TO SUKELLEMO SCHOOLS

(Care must be taken to ensure that the information herein doesn't reach the candidates)

Candidates require the following in the working Bench

(a) Ripe orange fruit- **labeled E (Each *candidate)***

(b) Scalpel

(c) 1%Cuso4

(d) 10%NaoH

(e) Distilled water/tap water

(f) Test tube rack

(g) Test tube holder

(h) 0.01% Dichlorophenol Indophenol (**DCPIP**) Solution

(i) Three clean test tubes

(j) Means of labeling

(k) Source of heat

(l) Benedict's solution

(m) Tripod stand

(n) Wire gauze

(o) 50ml glass beaker

(p) Water bath

SUKELLEMO JOINT MOCKS

KCSE 2021/22 TRIALS

(SERIES 001)

NAME……

SCHOOL…… **INDEX NO**……

SIGN…… **ADM NO** ……

231/3

BIOLOGY

PRACTICAL

Paper 3

Time: 2 hours

INSTRUCTIONS TO CANDIDATES.

a) Write your name and index number in the spaces provided above.
b) Sign and write the date of examination in the spaces provided above.
*c) Answer **ALL** questions in the spaces provided above.*
*d) All workings **MUST** be clearly shown where necessary.*

FOR EXAMINERS' USE ONLY.

Question	Maximum Score	Candidates' Score
1 2 3	11 15 14	
TOTAL	40	

1. You are provided with specimen labeled **E**, examine specimen **E**

a) Giving reasons, identify the type of the fruit? **(2mks)**

b) Cut a transverse section through **specimen E**, make a well labeled diagram **(5mks)**

c) State the type of placentation of **E** **(1mk)**

d) i) Name the agent of dispersal for **E** **(1mk)**

ii) State how **E** is adapted to its mode of dispersal **(2mks)**

e) Squeeze out the juice from **specimen E** into test tubes and using the regents provided carry out food test and fill in the table below **(6mks)**

Food test	**Procedure**	**Observation**	

2. Study the photographs and answer the following questions.



PLATE 5

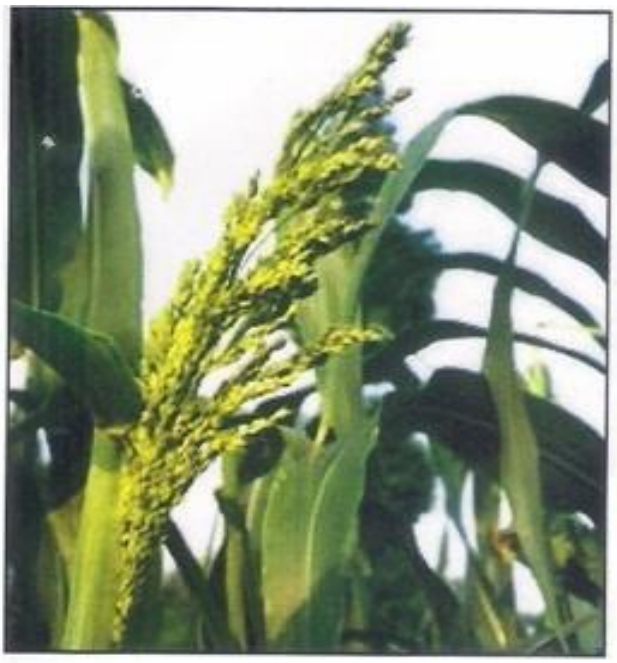


PLATE 6



PLATE 7

(i) The photograph in Plate **5** shows the germination process in a species of legume.

(a) (i) Name the type of germination shown in the photograph. **(1 mark)**

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

(b) Other than germination the seedling has shown some responses.

(i) Name **two** responses shown in the photograph. **(2 marks)**

(ii) State **one** survival value of each of the response named above. **(1 mark)**

(ii) Examine the photograph in Plate **6** and Plate **7** which show different essential parts of a flower of a species on two different plants.

(a) Name the flower parts shown in Plate **6** and Plate **7**. **(2 marks)**

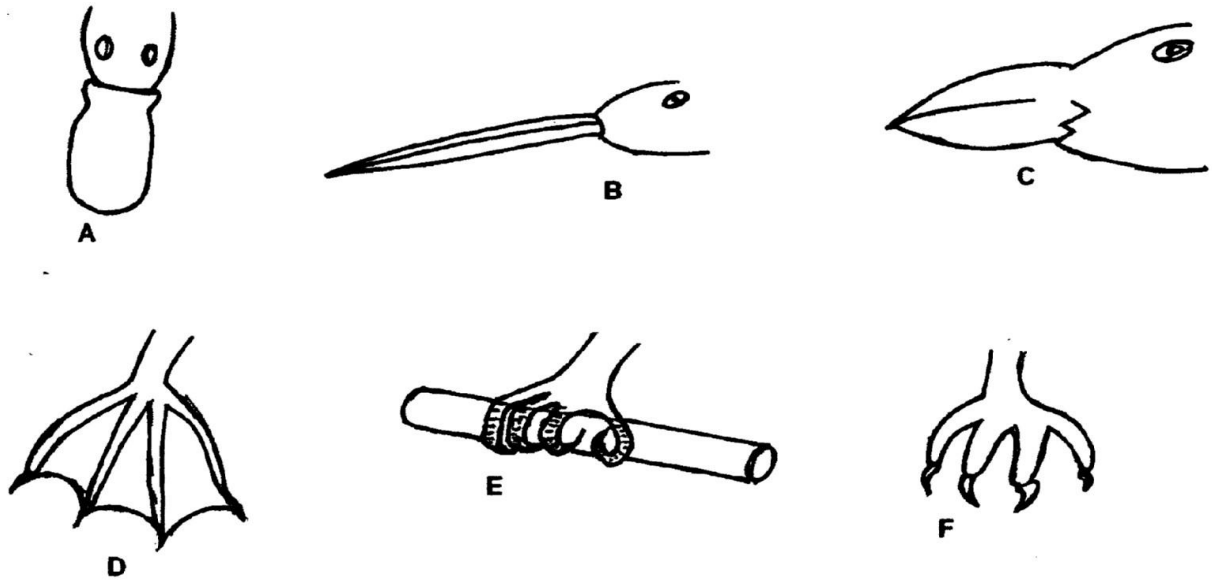
(b) (i) Name the phenomenon described in the statement above. **(1 mark)**

(ii) Explain the significance of the phenomena stated in (a)(i) above. **(1 mark)**

(c) (i) State the mode of pollination of the flower shown in the photograph. **(1 mark)**

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

The diagrams below represent body parts of some organisms (animals). Study them and answer the question that follow.



(a) **i)** Suggest the type of food eaten by organisms with the parts labeled A, B, C and F **(4 ks)**

ii) With reasons, suggest the likely habitat of the organism from which the parts labeled D and E were obtained. **(4 mrks)**

(b) **(i)** Suggest the type of evolution that is exemplified by the organisms labeled D, E and F. Give reason for your answer. The type of evolution **(2mks)**

(ii) Suggest the significance of the above named type of evolution for the organism **(2mks)**

SUKELLEMO JOINT MOCKS

KCSE 2021/22 TRIALS

(SERIES 001)

NAME……

SCHOOL…… **INDEX NO**……

SIGN…… **ADM NO** ……

233/1

CHEMISTRY

PAPER 1

TIME: 2 HOURS

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

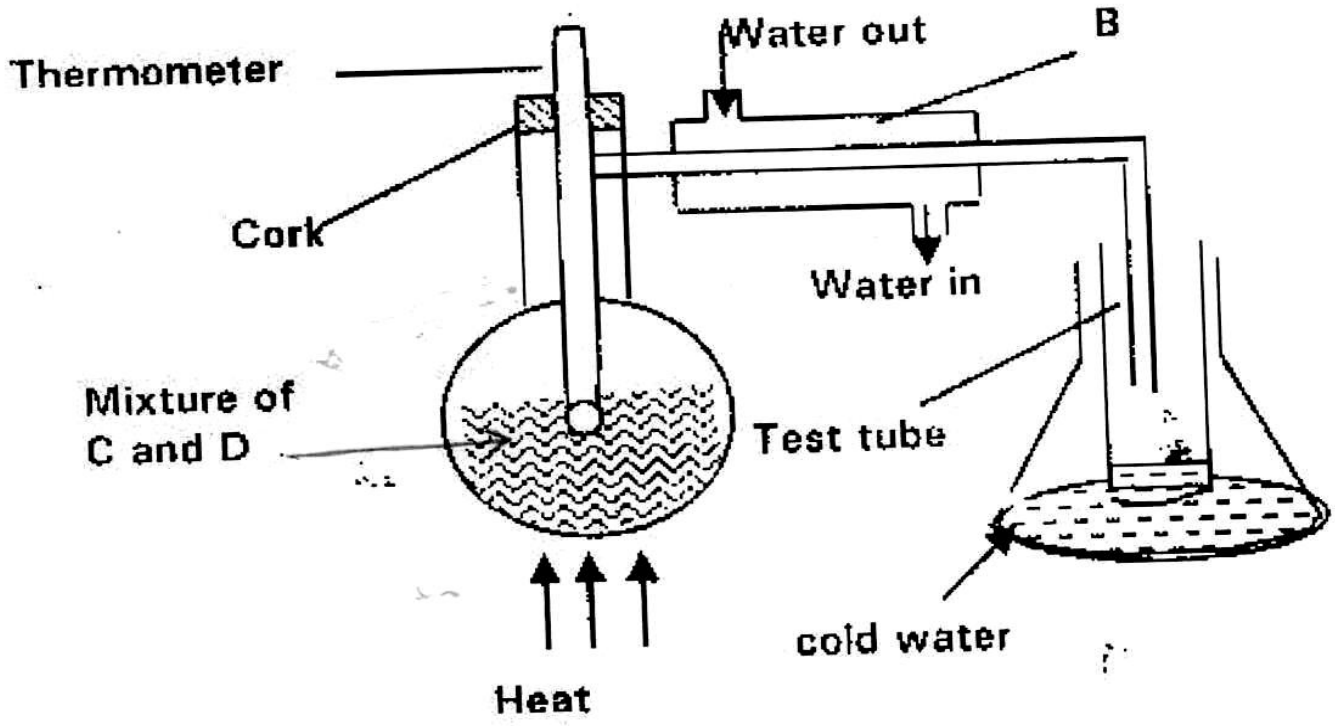
INSTRUCTIONS TO CANDIDATES

- Write your Name, Index Number and School in the spaces provided above.
- Sign and write the Date of the examination in the spaces above.
- Answer all the questions in the spaces provided in the question paper.
- Mathematical tables and silent scientific calculators may be used.
- ALL the working must be clearly shown where necessary.

FOR EXAMINER'S USE ONLY

QUESTIONS	MAX SCORE	CANDIDATE'S SCORE
1 – 28	80	

1. The set-up below represents apparatus that may be used to separate a mixture of two miscible liquids "C" and "D" whose boiling points are 80^0C and 100^0C respectively.



(a) Name B. **(1mk)**

……

(b) What is the purpose of the thermometer? **(1mk)**

……

(c) Which liquid is collected in the test tube? **(1mk)**

……

2. The table below gives some properties of gas D and E.

Gas	**Density**	**Effect on H_2SO_4**	**Effect on NaOH**
D	Lighter than air	React to form salt	Dissolve without reacting
E	Heavier than air	Not affected	Not affected

(a) Describe how you would obtain a sample of gas E from the mixture of gas D and E.

(2mks)

……

……

……

……

(b) Suggest a possible identity of gas D. Give reasons for your answer. **(2mks)**

……

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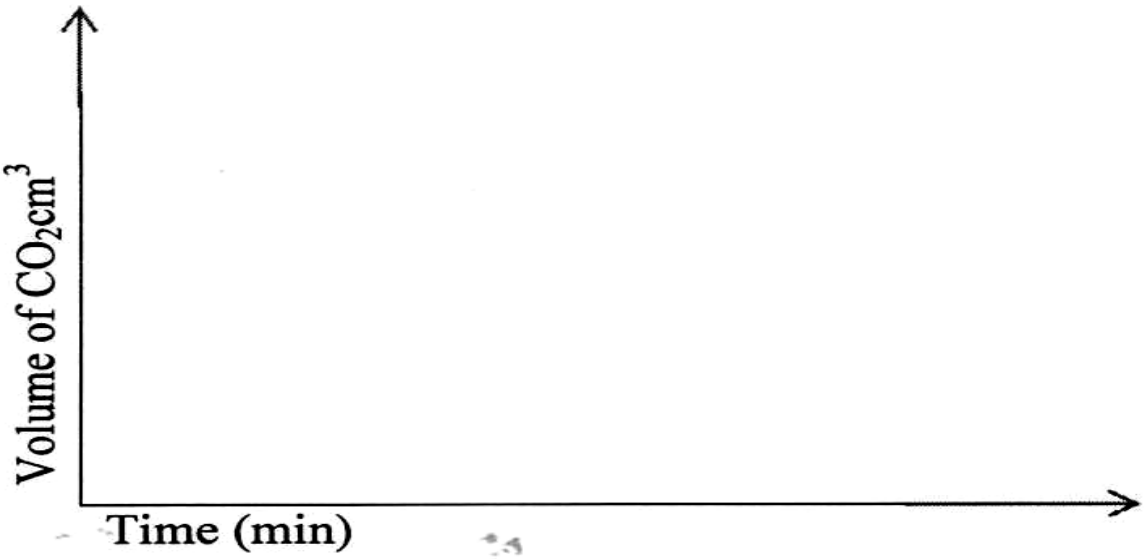
3. (a) What is meant by a strong base? **(1mk)**

……

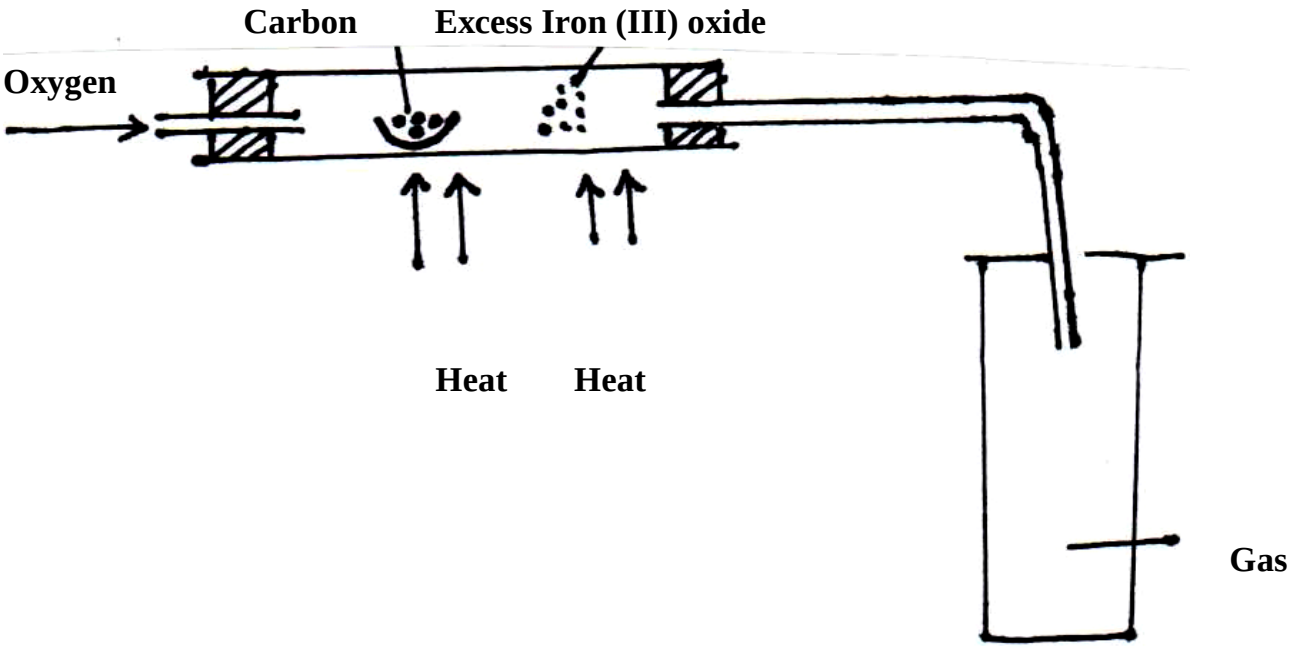
……

(b) In an experiment, $20cm^3$ of 2M hydrochloric acid was reacted with excess sodium carbonate and the volume of carbon (IV) oxide produced recorded with time. In another experiment, the same volume and concentration of ethanoic acid was also reacted with excess sodium carbonate and the volume of carbon (IV) oxide produced recorded with time.

On the grid below, sketch and label the curves if the volumes of carbon (IV) oxide were plotted against time. **(2mks)**



4. The set-up below was used to obtain a sample of Iron.



Write **two** equations for the reactions which occur in the combustion tube. **(2mks)**

……

……

5. Give the name of the product formed when magnesium reacts with phosphorus. **(1mk)**

……

……

6. The table below gives the energy required to remove the outer most electrons from same group.

Elements	**I**	**II**	**III**	**IV**
Energy kJ / Mole	494	418	519	376

Arrange the elements in the order of their reactivity starting with the most reactive. **(2mks)**

.....

.....

.....

.....

7. The electronic structures for elements represented by letters A, B, C and D are:-

A = 2:8:6 B = 2:8:2 C = 2:8:1 D = 2:8:8

(a) Select the element which forms:

(i) Double charged cation. **(1mk)**

.....

.....

(ii) A solobule carbonate **(1mk)**

.....

.....

(b) Which element has the smallest atomic radius? **(1mk)**

.....

.....

8. State any **two** differences between luminous flame and non luminous flame. **(2mks)**

.....

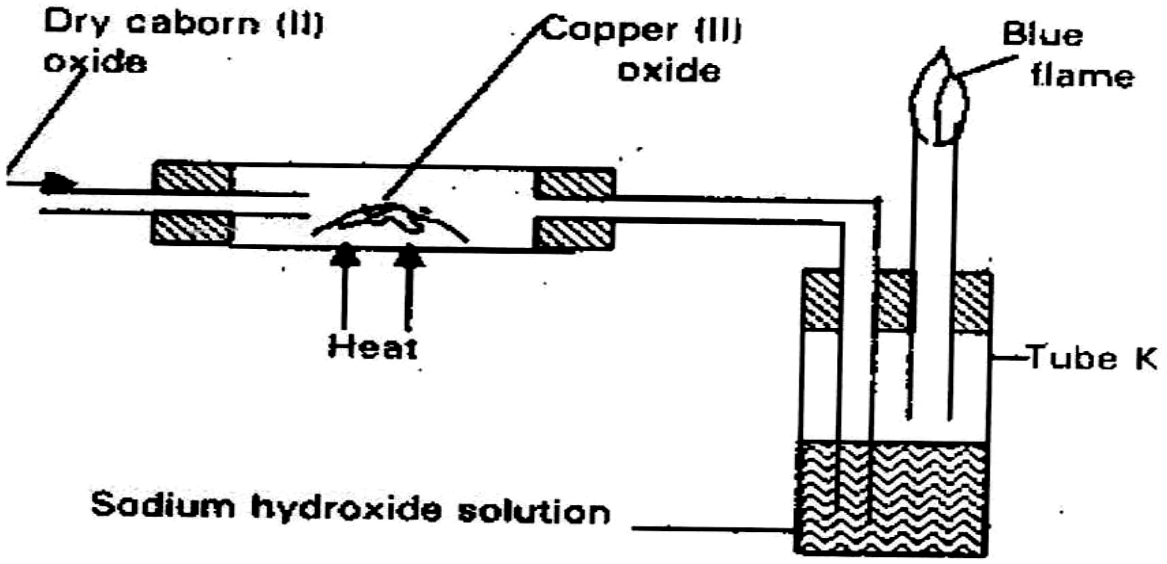
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9. The apparatus shown below was used to investigate the effect of carbon (II) oxide on Copper (II) oxide.



(a) State the observation that was made in the combustion tube at the end of the experiment. **(1mk)**

……

……

(b) Write an equation for the reaction that took place in the combustion tube. **(1mk)**

……

(c) Why is it necessary to burn the gas coming out of tube K? **(1mk)**

……

……

10. (a) State Graham's Law of Diffusion. **(1mk)**

……

……

……

(b) If it takes 30 seconds for 100cm^3 of carbon (IV) oxide to diffuse across a porous plate, how long will it take 150cm^3 of nitrogen (IV) oxide to diffuse across the same plate under similar conditions? (C = 12.0, N = 14.0, O = 16.0) **(2mks)**

11.(a) Given the IUPAC names of the following compounds:- **(2mks)**

(i) $CH_3(CH_2)CH_2OH$

.....

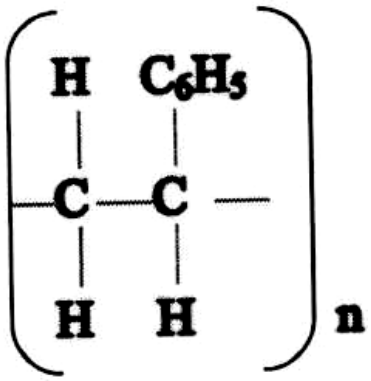
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(ii) $CH_3CH_2CH(CH_3)COOH$

.....

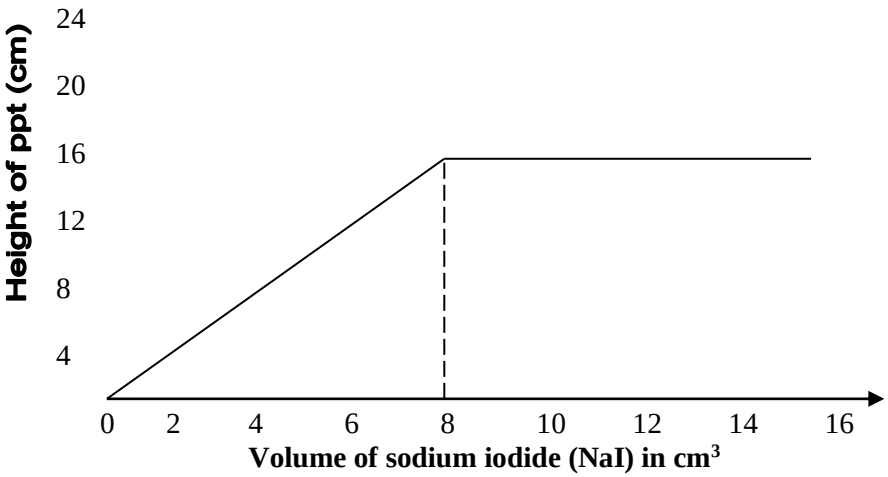
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(b) Given the following polymer, draw the structure of the monomer. **(1mk)**



12. In an experiment, various volumes of 1M sodium iodide solution was added to the same volume of 1M lead (II) nitrate solution. The height of the precipitate were measured and plotted against volume of 1M sodium iodide used. The graph below was obtained.

FOR MARKING SCHEMES, CALL 0705525657/ 0707550000



(a) State the observation made when sodium iodide solution is mixed with lead (II) nitrate solution. **(1mk)**

……

……

(b) What volume of sodium iodide was required to react completely with lead (II) nitrate? Explain. **(1mk)**

……

……

(c) Explain the shape of the curve. **(1mk)**

……

……

13. When excess zinc powder is added to $30cm^3$ of solution containing copper (II) ions and the mixture stirred, the temperature is noted to have risen by 15^0C.

(a) State the observation made after stirring the mixture. **(1mk)**

……

……

(b) Calculate the heat change for the reaction (specific heat capacity of H_2O = $4.2KJkg^{-1}k^{-1}$) **(2mks)**

14. When bismuth (III) chloride is added to water, a reaction occurs and a white precipitate forms as shown below.

$$BiCl_{3(aq)} + H_2O_{(l)} \rightleftharpoons BiOCl_{(s)} + 2HCl_{(aq)}$$

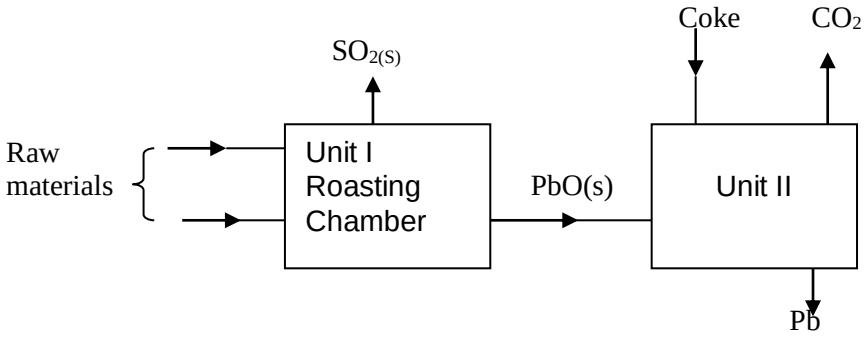
What would be the effect on the amount of the precipitate formed if sodium hydroxide solution is added to the equilibrium mixture? Explain your answer. **(2mks)**

……

……

……

15. The flow chart below shows some process in extraction of lead metal. Study it and answer the questions that follow.



(a) Name **<u>two</u>** raw materials that were fed into Unit I. **(1mk)**

……

……

(b) State **<u>one</u>** environment hazard associated with the process in Unit I. **(1mk)**

……

……

(c) What is the function of coke in unit II? **(1mk)**

……

……

16.(a) Radioactive Polonium – 216 decays as shown below.

$$^{216}_{84}Po \longrightarrow {}^{208}_{82}Pb + M + n\beta$$

Determine the value of m and n. **(2mks)**

(b) The table below gives the rate of decay of a radioactive element y.

NUMBER OF DAYS	MASS IN G
0	48
270	1.5

Calculate the half-life of the radioactive element y. **(2mks)**

17. Water reacts with sodium peroxide forming sodium hydroxide and oxygen gas. Draw a well labelled diagram showing how a sample of oxygen gas can be prepared and collected in the laboratory using the above reagents. **(3mks)**

18. 15g of sodium chloride was dissolved in 120cm^3 of distilled water. Calculate the concentration of the resulting solution in moles per litre. (Na = 23, Cl = 35.5) **(3mks)**

19. (a) State Boyle's law. **(1mk)**

……

……

(b) The volume of a gas at 30^{0}C and 780mmHg is 400cm^3. What will be its volume at 50^{0}Cat 600mmHg. **(2mks)**

20. Sulphur exhibits allotropy.

(a) What is allotropy? **(1mk)**

……

……

(b) Name the **two** allotropes of sulphur. **(1mk)**

……

……

(c) Sulphur powder was placed in a deflagrating spoon and heated on a Bunsen burner.

(i) State the observation made. **(1mk)**

……

……

(ii) The product obtained was dissolved in water. Comment on the PH of the solution formed. **(1mk)**

……

……

21.(a) A luminous flame has a yellow zone. Explain how the yellow zone is produced. **(1mk)**

……

……

(b) Explain why a non-luminous flame is preferred for heating substances in a laboratory. **(2mks)**

……

……

22. (a) State **two** differences between the terms electrolyte and non-electrolyte. **(2mks)**

……

……

……

……

(b) Graphite is a non-metal yet it conducts electric current. Explain. **(1mk)**

……

……

23. 0.318g of an oxide of metal M was completely reduced by hydrogen gas to 0.254g of metal. Calculate empirical formula of the metal oxide. (M = 63.5, O = 16). **(3mks)**

24. In an experiment to electroplate iron with silver, a current of 0.5A was passed through a solution of silver nitrate for 60 minutes.

(i) Give **<u>two</u>** reasons why it is necessary to electroplate iron with silver. **(1mk)**

……

……

……

(ii) Calculate the mass of silver that was deposited on iron. (Ag = 108, 1 Faraday = 96500C).

(2mks)

25. Given the following reagents: solid sodium carbonate, water, solid lead (II) nitrate. Describe how a sample of lead (II) carbonate can be prepared in the laboratory. **(3mks)**

……

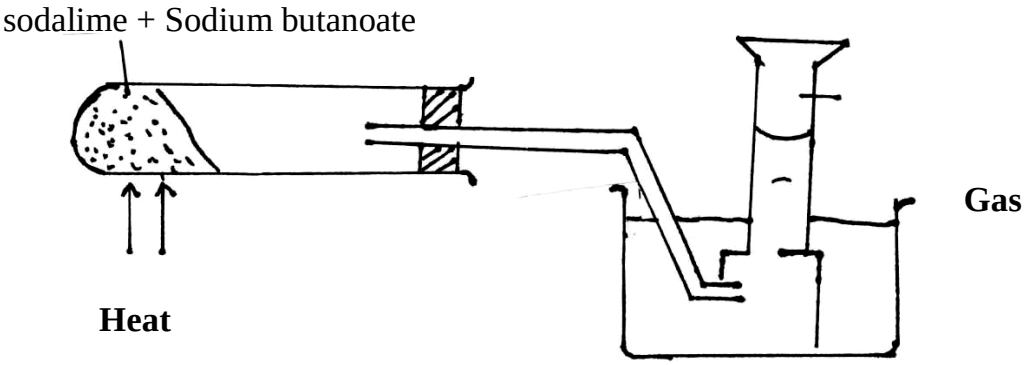
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26. The set-up below was used to prepare a sample of an organic compound X.



(a) Identify gas X. **(1mk)**

……

(b) Write the equation for the reaction that produces gas X. **(1mk)**

……

……

(c) 1 Mole of Chlorine was reacted with gas X in presence of sunlight.

(i) State **one** observation made. **(½mk)**

……

(ii) Name the major product formed. **(½mk)**

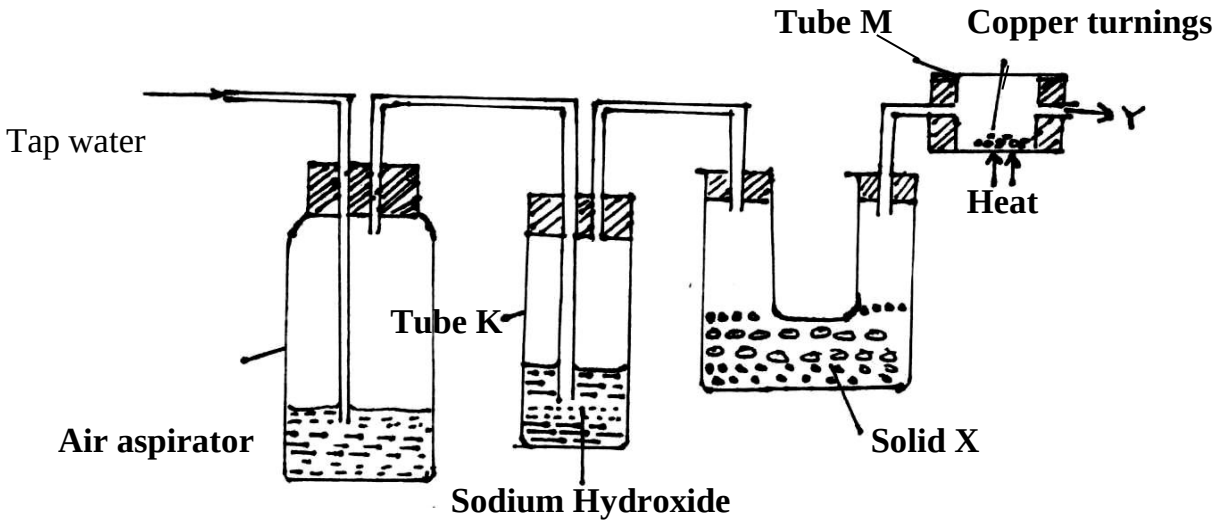
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27. Draw dot (•) an cross (x) diagram to show bonding in:

(i) Nitrogen molecule (N_2) **(1mk)**

(ii) Hydroxonium ion. (H_3O^+) **(1mk)**

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



(i) What is the purpose of passing tap water through the air aspirator? **(1mk)**

……

……

(ii) State and explain the observation that would be made in tube M after sometime. **(1mk)**

……

……

……

……

(iii) The sample of nitrogen collected at point Y had greater density than expected. What conclusion could be made about the gas? **(1mk)**

……

……

……

……

SUKELLEMO JOINT MOCKS

KCSE 2021/22 TRIALS

(SERIES 001)

NAME……

SCHOOL…… **INDEX NO**……

SIGN…… **ADM NO** ……

233/2

CHEMISTRY

PAPER 2

TIME: 2 HOURS

INSTRUCTIONS TO CANDIDATES

- *Write your Name, Index Number and School in the spaces provided above.*
- *Sign and write the Date of Examination in the spaces above.*
- *Answer all the questions in the spaces provided in the question paper.*
- *Mathematical tables and non-programmable electronic calculators may be used.*
- *ALL working must be clearly shown where necessary.*

FOR EXAMINER'S USE ONLY

QUESTIONS	MAX SCORE	CANDIDATE'S SCORE
1	13	
2	11	
3	12	
4	12	
5	10	
6	15	
7	08	
TOTAL	**80**	

1. Study the information in the table below and answer the questions that follow.

The letters do not represent the actual symbols of the elements.

Elements	Electronic configuration	Ionization energy $kJmol^{-1}$
P	2:1	519
C	2:8:1	494
R	2:8:8:1	418

(i) What is the general name given to the group which elements P, C and R belong? **(1mk)**

……

(ii) What is meant by ionization energy? **(2mks)**

……

……

(iii) Explain why element P has the highest ionization energy. **(2mks)**

……

……

(iv) (a) When a piece of element "C" is placed on water, it melts and hissing sound is produced as it moves on the surface of the water. Explain these observations. **(2mks)**

……

……

……

(b) Distinguish between a strong and a weak base. Give an example of each. **(2mks)**

……

……

(c) Neutralization is one of the methods of preparing salts.

i. What is meant by neutralization? **(1mk)**

……

……

ii. Describe how you would prepare crystals of sodium nitrate starting with 200cm^3 of 2M sodium hydroxide. (3mks)

……

……

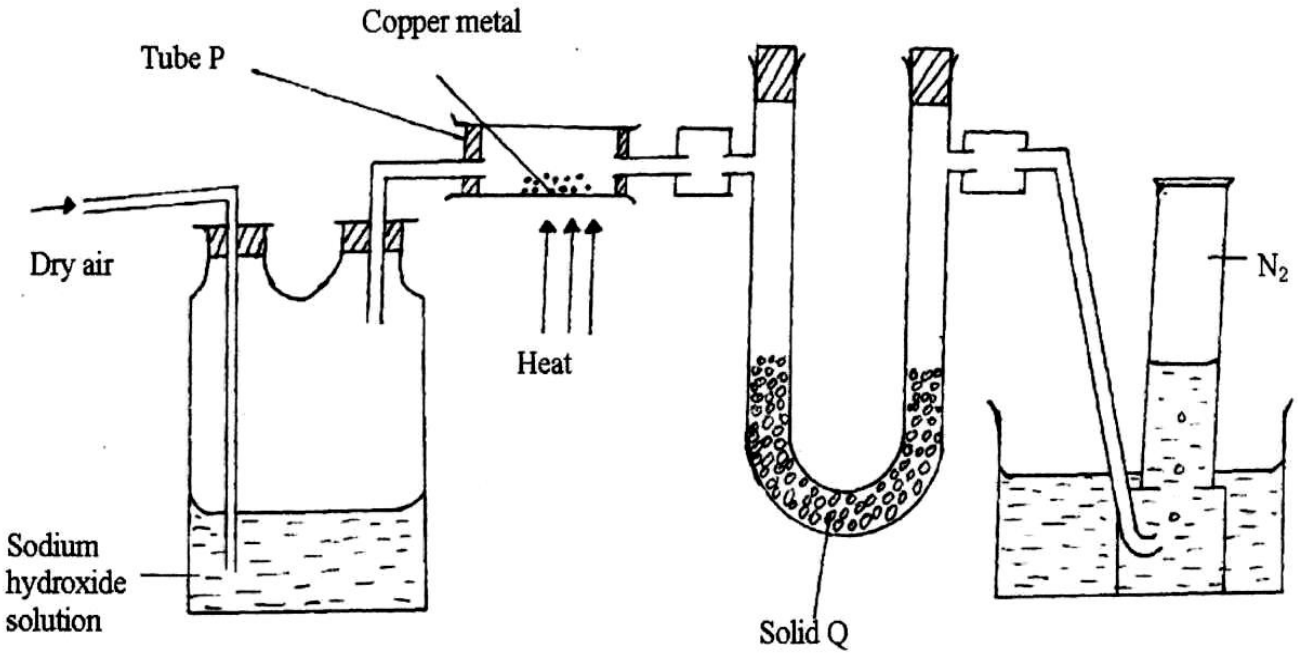
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iii. Write an equation for the reaction that takes place when a solid sample of sodium nitrate is heated. **(1mk)**

……

2. The diagram below represents a set-up that was used to obtain dry nitrogen from air. Study it and answer the questions that follow.



(i) Name solid Q. **(1mk)**

……

(ii) What is the purpose of $NaOH_{(aq)}$? **(1mk)**

……

……

(iii) Write an equation for the reaction which took place in tube P. **(1mk)**

……

(iv) Give the name of one impurity in the nitrogen gas obtained. **(1mk)**

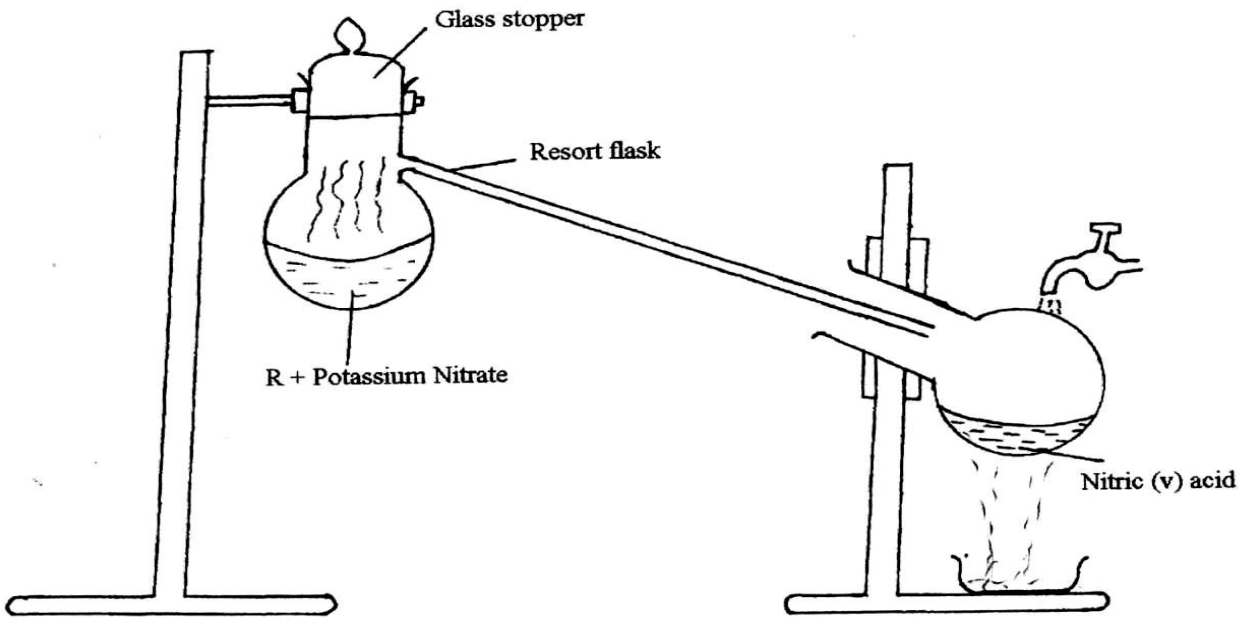
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(v) Why is liquid nitrogen used for storage of semen for artificial insemination? **(1mk)**

……

……

(b) The set-up below was used to prepare nitric acid.



(i) Give the name of liquid R. **(1mk)**

……

……

(ii) Write an equation for the reaction which took place in the retort flask. **(1mk)**

……

……

(iii) Explain the following:-

(a) Nitric acid is not stored in clear / transparent glass. **(2mks)**

……

……

(b) The reaction between copper metal with 50% nitric acid (one volume of acid added to an equal volume of water) in an open test tube produces brown fumes. **(2mks)**

……

……

3. Chlorine is a member of group VII.

(a) What is the family name of group VII elements? **(1mk)**

……

(b) Explain why the reactivity of Iodine is lower than that of Bromine. **(2mks)**

……

……

……

……

(c) Chlorine gas used for industrial purposes is obtained by electrolysis of brine.

(i) Name **two** other products of this electrolysis. **(2mks)**

……

……

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

……

……

(d) Sodium chlorate ($NaClO_3$) is used as a herbicide. It is formed according to the following equation:

$6NaOH_{(aq)} + 3Cl_{2(g)} \longrightarrow NaClO_{3(aq)} + 5NaCl_{(g)} + 3H2O_{(l)}$

Sodium chloride is less soluble than sodium chlorate and crystallizes out first. Sodium chlorate is obtained from the remaining solution by crystallization of saturated solution.

(i) State **one** condition necessary for this reaction. **(1mk)**

(ii) Calculate the maximum mass of sodium chlorate in kilograms that can be formed from $206m^3$ of chlorine gas. (1 mole of gas = $24dm^3$, Na = 23.0, Cl = 16.0).

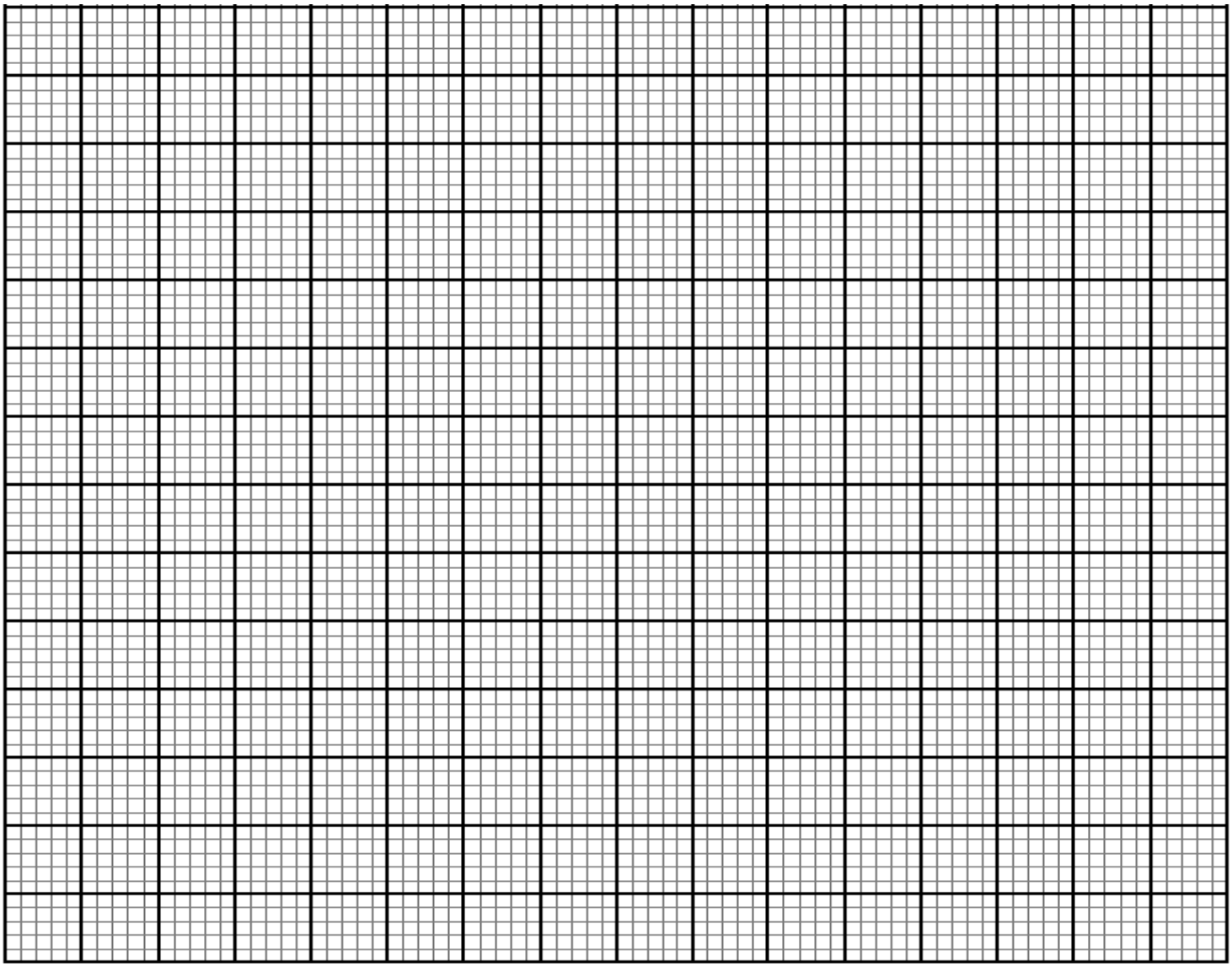
(3mks)

(e) Name **two** other uses of chlorine. **(2mks)**

4. (a) The table below contains information from the measurements made of the radioactivity in counts per minutes from a radioisotope iodine – 128.

Counts per min	240	204	180	156	138	122	108
Time (min)	0	5	10	15	20	25	30

(i) Plot a graph of counts per minute against time. **(3mks)**



(ii) Use the graph to determine the half-life of iodine – 128. **(1mk)**

(iii) What is the counts rate after 22 minutes? **(1mk)**

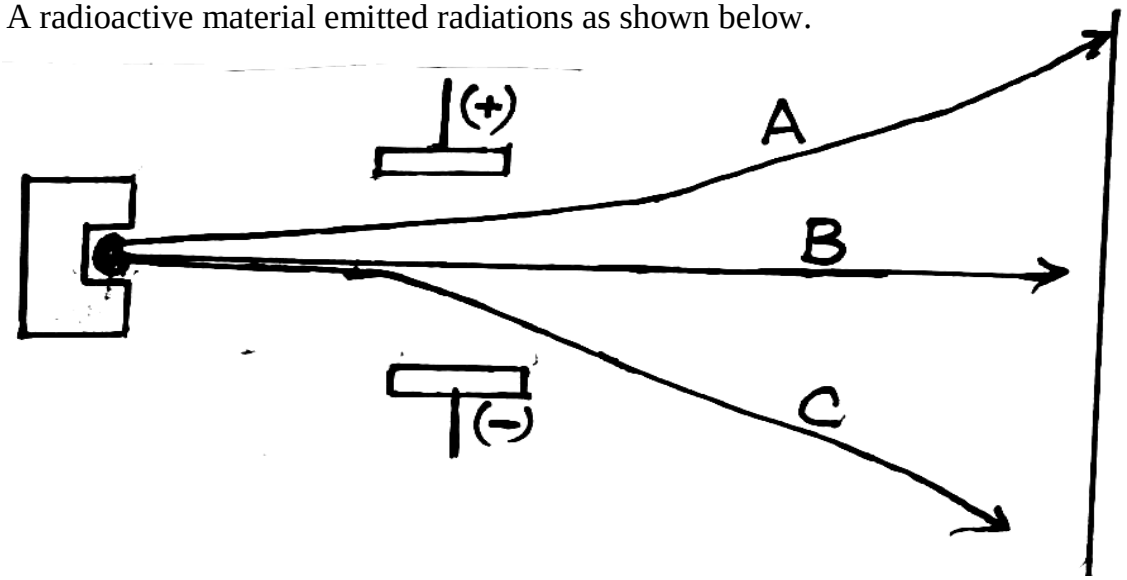
(iv) After how many minutes were the counts rate 160 counts per minute? **(1mk)**

(b) If isotope $^{232}_{90}Th$ decays to $^{216}_{83}Bi$ as a result of X alpha-particles and Y-beta particles emission

(i) Find the numerical value of X and Y. **(2mks)**

(ii) Write the nuclear equation. **(1mk)**

(c) A radioactive material emitted radiations as shown below.



(i) Identify: A **(1½mks)**

B

C

(ii) Which radiation: **(1½mks)**

i. Has no mass?

ii. Has the lowest ionizing power?

iii. Contains Helium particles?

5. The raw material for extraction of aluminum is bauxite.

(a) Name the method that is used to extract aluminium from bauxite. **(1mk)**

(b) Write the chemical formula for the major components of bauxite. **(1mk)**

(c) (i)Name the major impurities in bauxite. **(2mks)**

(ii) Explain how the impurities in bauxite are removed. **(1mk)**

(d) Crayolite is used in the extraction of aluminium from bauxite. State its function. **(1mk)**

(e) Describe how carbon (IV) oxide is formed during the extraction of aluminium. **(2mks)**

(f) Aluminum is a reactive metal yet utensils made from aluminium do not corrode easily. Explain this observation. **(2mks)**

6. Standard electrode potentials for half cell reactions are shown below.

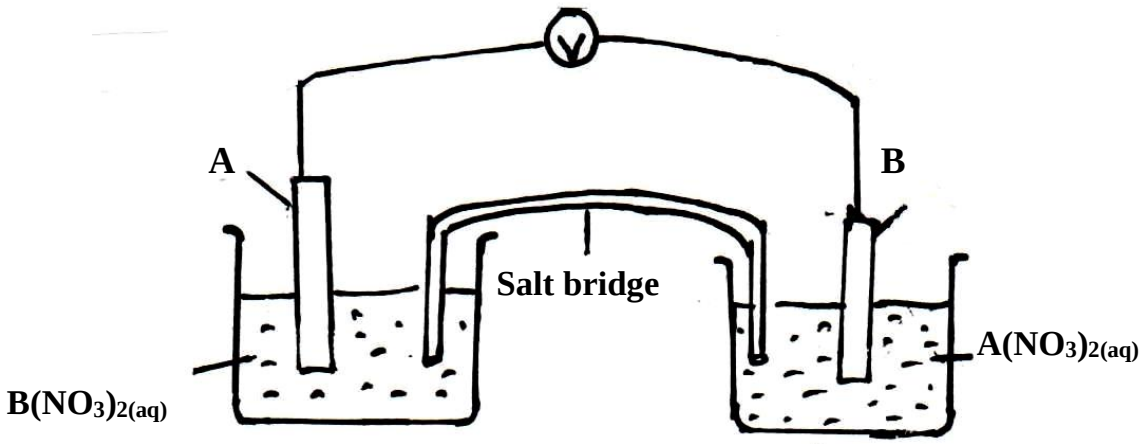
$A^{2+}_{(aq)} + 2e \longrightarrow A_{(s)}$ - 0.76V

$B^{2+}_{(aq)} + 2e \longrightarrow B_{(s)}$ - 0.13V

$C^{+}_{(aq)} + e \longrightarrow C_{(s)}$ +0.80V

$D^{2+}_{(aq)} + 2e \longrightarrow D_{(s)}$ +0.34V

The cell below was set-up using A and B electrodes.



(a) (i) Give the half-cell equations for each half cell. **(1mk)**

(ii) Write the overall cell equation. **(1mk)**

(iii) Calculate the e.m.f. of the cell above. **(1mk)**

(iv) Describe how the salt bridge helps in maintaining the change balance in each half cell when the cell is in operation. **(2mks)**

(v) It is not advisable to use potassium chloride salt bridge when Lead (II) nitrate solution is used as an electrolyte in the above set-up. Explain. **(2mks)**

(b) Sodium hydroxide is a chemical that can be prepared industrially in a mercury cell.

(i) Give the name of the main raw material used. **(½mk)**

(ii) In the cell, graphite is used as anode electrode. Name another substance that can be used in place of graphite (carbon). (½mk)

(iii) Give **two** uses of sodium hydroxide. **(2mks)**

(iv) Give **two** reasons why mercury is recycled. **(2mks)**

(v) Write the equation in which sodium hydroxide is produced. **(1mk)**

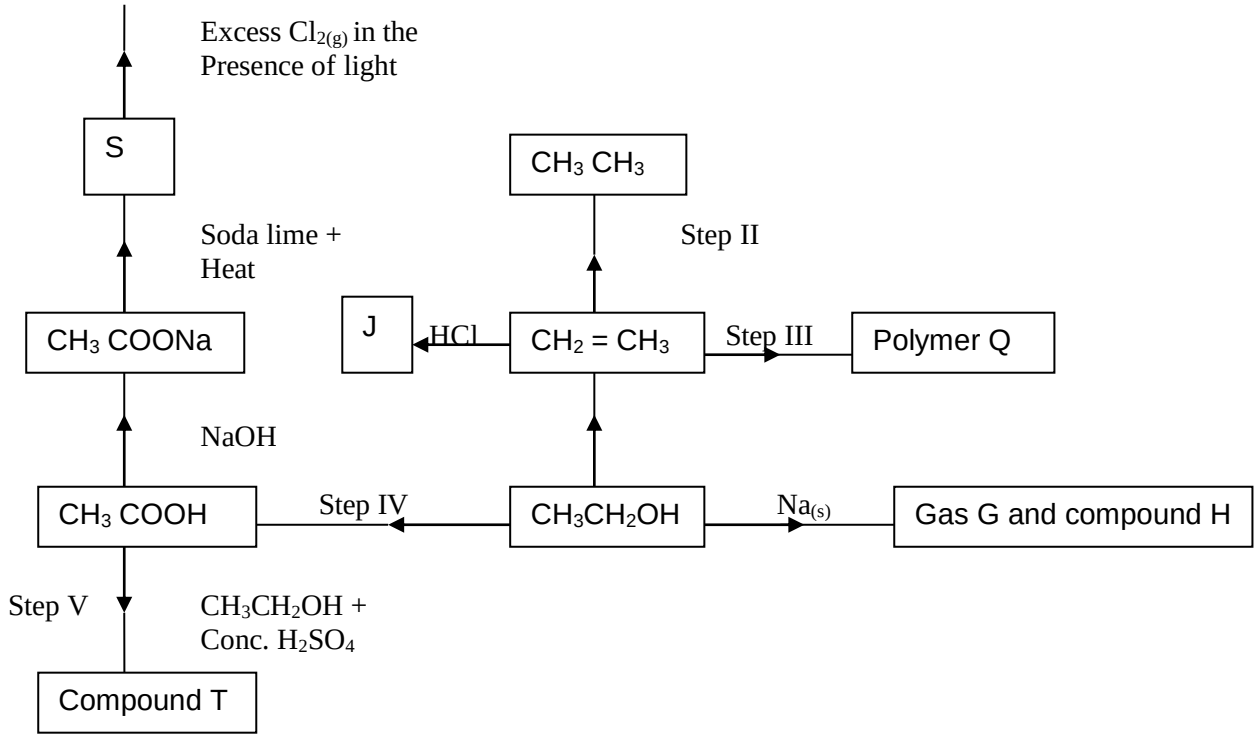
(vi) If the volume of hydrogen produced in the mercury cell is 100 litres. Calculate the mass of sodium hydroxide formed at room temperature.

(H = 1.0, Na = 23.0, O = 16.0 MGV = 24 litres) **(2mks)**

7. (a) Name **two** advantages of synthetic fibre over natural fibre. **(2mks)**

(c) The scheme below shows reactions starting with ethanol. Study it and answer the questions that follow.

R



(i) Name gas G. **(1mk)**

(ii) Write the structural formulae and names of:

(a) T **(1mk)**

(b) S **(1mk)**

(iii) Name the homologous series to which T belongs. **(1mk)**

(iv) Write down the structural formula of compound R. **(1mk)**

(v) Name the compound R. **(1mk)**

SUKELLEMO JOINT MOCKS

KCSE 2021/22 TRIALS

(SERIES 001)

NAME……

SCHOOL…… **INDEX NO**……

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CHEMISTRY

233/3

PRACTICAL

CONFIDENTIAL TO SCHOOLS

Each candidate will require

1. *Solution A 100cm^3*
2. *Solution B 150 cm^3*
3. *Solution C 100cm^3*
4. *Burette*
5. *25ml pipette*
6. *2 conical flasks*
7. *Retort stand*
8. *Filter funnel*
9. *Pipette filler*
10. *100ml of distilled water*
11. *Thermometer*
12. *1 Spatula – full of solid D*
13. *About 10ml liquid E*

14. *4g solid F (weighed exactly)*

15. *2 boiling tubes*

16. *Six test tubes in a rack*

17. *Test tube holder*

18. *Metallic spatula*

ACCESS TO

- 1M NaOH
- 1M NH_4OH
- 0.1M NaCl

Acidified $K_2Cr_2O_7$

- $KMnO_4$- use some amount of solution B
- Source of heating

NOTES

1. **Solid A**

   Dissolve 7.0g Ferrous Sulphate ($FeSO_4.7H_2O$) in 50ml of $1MH_2SO_4$, dilute to $1dm^3$ with water. (Should be prepared in the morning of the exam day)

2. **Solution B**

   Dissolve 0.8g of $KMnO_4$ in $50cm^3$ of $1MH_2SO_4$. Dilute to 1 dm^3 with water.

3. **Solution C**

   Measure $3cm^3$ of 20vol. H_2O_2

   Dissolve in $1dm^3$ of solution.

4. **1M H_2SO_4**

   Measure $55cm^3$ of conc. H_2SO_4 add to about $200cm^3$ of water, stir, dilute to 1 dm^3

5. **Solid D**

   Aluminium Nitrate

6. Solid F

Potassium Chlorate ($KClO_3$)

7. Acidified $K_2Cr_2O_7$

Dissolve 0.3g of $K_2Cr_2O_7$ in $50cm^3$ of $1MH_2SO_4$. Dilute to 1 dm^3 with water.

8. Liquid E

Ethanol.

SUKELLEMO JOINT MOCKS

KCSE 2021/22 TRIALS

(SERIES 001)

NAME……

SCHOOL…… **INDEX NO**……

SIGN…… **ADM NO** ……

233/3

CHEMISTRY

PRACTICAL
PAPER 3
TIME: 2¼ HOURS.

INSTRUCTIONS TO CANDIDATES.

- *Write your name and index number in the spaces provided above.*
- *Sign and write the date of exam in the spaces above.*
- *Answer **ALL** the questions in the spaces provided.*
- *You are not allowed to start working with the apparatus for the first 15 minutes of the 2¼ hours allowed time for the paper.*

FOR EXAMINER'S USE ONLY.

Question	Maximum score	Candidate's score
1	13	
2	14	
3	13	
Total score	40	

1. You are provided with;

- Solution A containing 6.95g of Iron II Sulphate heptahydrate R.F.M = 278 in 250cm^3 of solution
- Solution B of potassium manganate (VII)
- Solution C of hydrogen peroxide.

You are required to

(a) Standardize the potassium manganate (VII) solution C

(b) Determine the concentration of hydrogen peroxide solution C.

PROCEDURE I

Pipette 25cm^3 of solution A into a conical flask.

Fill the burette with solution B. Titrate this solution against solution A until the first permanent pink colour appears. Record your results in table I and repeat the procedure to fill the table 1 below.

Table 1

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

(4 marks)

(i) Calculate the average volume of solution B used **(1 marks)**

……

……

……

……

(ii) Given that the equation for the reaction is

$Mno^-_{4(aq)} + 5Fe^{2+}_{(aq)} + 8H^+_{(aq)} \longrightarrow Mn^{2+}_{(aq)} + 5Fe^{3+}_{(aq)} + 4H_2O_{(l)}$

Calculate

a) The number of moles of Iron II sulphate solution A used **(1mark)**

……

……

……

b) The number of moles of solution B that reacted. **(1mark)**

……

……

……

c) The concentration of the potassium manganate (VII) solution B in moles per litre. **(1mark)**

……

……

……

PROCEDURE II

Pipette 25cm^3 of hydrogen peroxide, solution C into a conical flask. Fill the burette with solution B. Titrate this solution against solution C until the first permanent pink colour appears. Record results in table II.

TABLE II

Titre number	I	II	III
Final burette reading cm^3			
Initial burette reading cm^3			
Volume solution B used cm^3			

(4marks)

(i) Work out average volume of potassium manganate (VII) solution B used. **(1mark)**

……

……

……

(ii) Given that the equation for the reaction is

$2MnO^-_{4\,(ag)} + 5H_2O_{(aq)} + 6H^+_{(aq)} \longrightarrow 2Mn^{2+}_{(aq)} + 8H_2O_{(l)\,(aq)} + 5O_{2(aq)}$

Calculate

a) The number of moles of Potassium Manganate (VII) solution B that reacted. **(1mark)**

……

……

……

b) The number of moles of hydrogen peroxide solution C that reacted. **(1mark)**

……

……

……

c) The concentration of hydrogen peroxide solution C in moles per dm^3($mol\ dm^{-3}$) **(1mk)**

……

……

……

2. You are provided with 4g of Solid F.

You are required to determine the solubility of solid F at different temperatures.

PROCEDURE

a) Carefully transfer all solid F in a clean boiling test tube and using a burette, add $15cm^3$ of distilled water. Heat the mixture while stirring with a thermometer to about 85^0C. when all the solid has dissolved, allow the solution to cool while stirring with the thermometer. Note the temperature at which the crystals of solid F first appear. Record this temperature in Table III.

b) Transfer $5cm^3$ of distilled water to the contents in the boiling tube. Warm the mixture while stirring with the thermometer until the solid dissolve. Allow the mixture to cool while stirring. Note and record the temperature at which crystals first appear.

c) Repeat procedure (b) two or more times and record the temperatures in table III.

d) Complete table III by calculating the solubility of solid F at the different temperatures.

TABLE III

Volume of water in the boiling tube (cm^3)	Temperature at which crystals of solid F first appear.	Solubility of solid F in g / 100g of water.
15		
20		
25		
35		
40		

(6marks)

(i) On the grid provided plot a graph of solubility of solid F (vertical axis) against temperature (horizontal axis). **(3marks)**

(ii) Using your graph, determine the temperature at which 15g of solid F, would dissolve in

100cm^3 of water. **(1mark)**

……

……

……

……

……

3. You are provided with solid D. carry out the following tests and write down all the observations and inferences.

a) Place half spatula end full of solid D in a dry test tube. Heat gently then strongly until there is no further change.

Observations	**inferences**
(1mark)	(1mark)

b) Place the remaining solid D in a test tube, add about 10cm^3 of distilled water and shake vigorously. Divide the mixture into four portions.

i. To the 1st portion, add 2M sodium hydroxide solution drop wise until in excess.

Observations	**inferences**
(1mark)	(1mark)

ii. To the 2nd portion, add ammonia solution drop wise till in excess.

Observations	**inferences**
(1mark)	(1mark)

iii. To the fourth portion add 4 drops of sodium chloride.

Observations	**inferences**

(1mark)	(1mark)

II. You are provided with liquid E, Carry out the following tests on it.

a) Place about one spatula end full of liquid E on a metallic spatula and ignite it in a Bunsen burner flame.

Observations	**inferences**
(1mark)	(1mark)

b) To 2cm^3 of liquid E add 3 drops of acidified $KMnO_4$. Solution B.

Observations	inferences
(1mark)	(1mark)

c) To 2cm^3 of liquid E add 3 drops of acidified $K_2Cr_2O_7$.

Observations	**Inferences**
(1mark)	(1mark)

SUKELLEMO JOINT MOCKS

KCSE 2021/22 TRIALS

(SERIES 001)

NAME……

SCHOOL…… **INDEX NO**……

SIGN…… **ADM NO** ……

232/1

PHYSICS

PAPER 1

TIME: 2 HOURS

INSTRUCTIONS TO CANDIDATES:

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

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

(c) *This paper consists two sections A and B.*

(d) *Answer all questions in Section A and B in the spaces provided.*

(e) *Mathematical tables and electronic calculators may be used.*

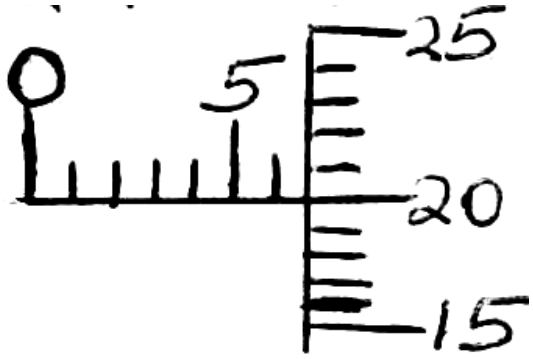
FOR EXAMINER'S USE ONLY

SECTION	QUESTION	MAX. SCORE	CANDIDATE SCORE
A	1 - 12	25	
B	13	12	
	14	11	
	15	12	
	16	13	
	17	07	
TOTAL SCORE		**80**	

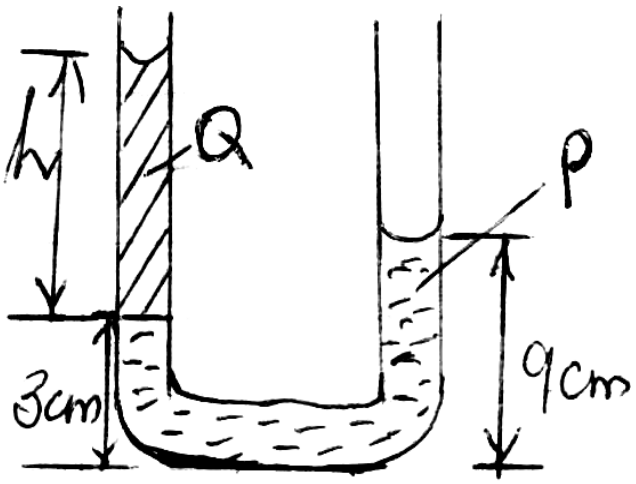
SECTION A (25 MARKS)

Answer ALL questions in this section in the spaces provided

1. The figure below shows a micrometer screw gauge that has a zero error of +0.02. State the actual reading of the micrometer screw gauge. **(1mk)**



2. In the figure below, the U-tube contains two immiscible liquids P and Q. If the density of Q is 900kg/m^3 and that of P is 1200kg/m^3, calculate the height of liquid Q. **(3mks)**



3. A body is acted upon by a force of I0N towards the right hand side and 6N towards the left hand side. What is the resultant force? **(2mks)**

4. The difference between the ice point and steam point on a liquid thermometer is 30cm. What temperature is recorded when the mercury thread is 12cm. **(2mks)**

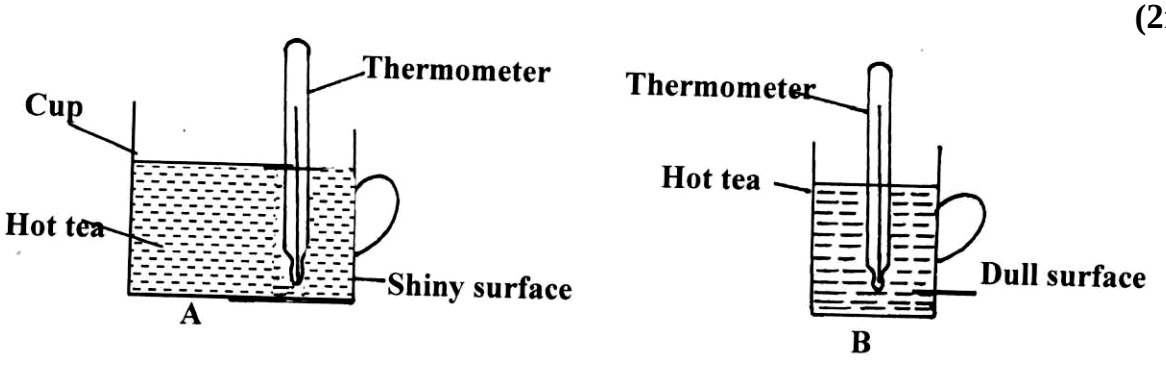
5. Water flows through a horizontal pipe of cross-sectional area of $40cm^2$. If the speed at the constriction is $4ms^{-1}$, calculate the mass flux (density of water = $1000kg/m^3$) **(3mks)**

6. In terms of intermolecular forces, explain the difference between liquid and gaseous state.

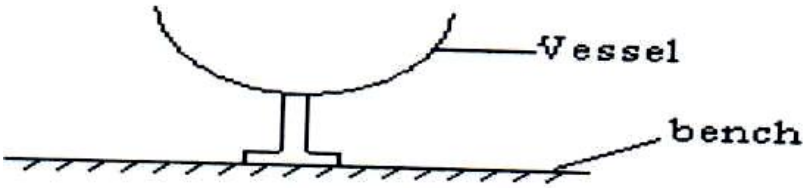
(2mks)

7. The diagram below shows two similar cups of tea containing equal volumes of hot tea at the same level. It was observed that the rate of cooling was the same in the two cups. Explain.

(2mks)



8. The figure below shows a vessel resting on a horizontal bench.



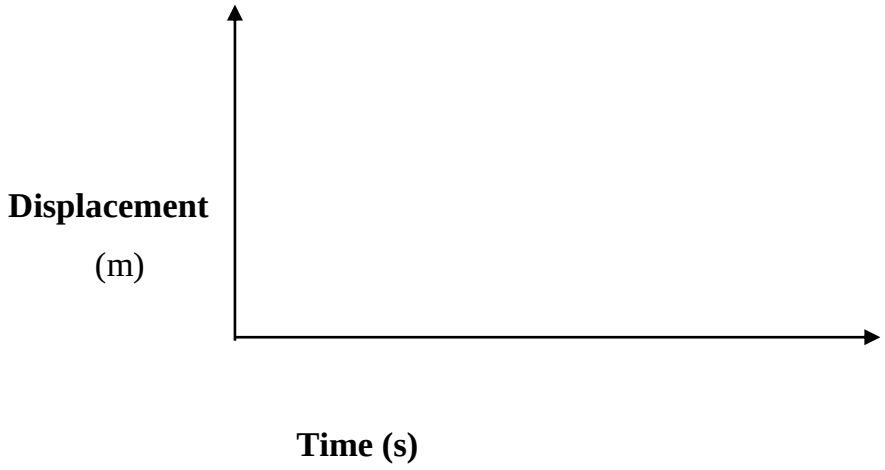
State and explain the effect on the stability of the vessel when it is filled with water. **(2mks)**

9. What does it mean to say the density of water is $1g/cm^3$? **(1mk)**

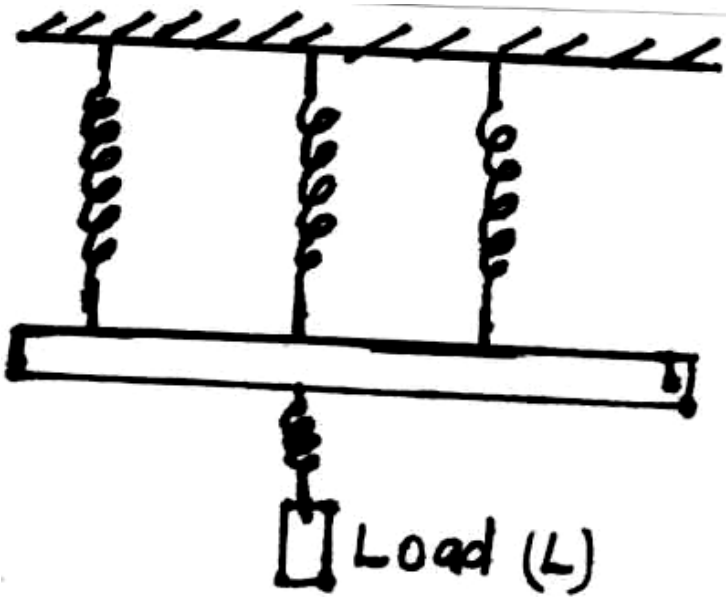
10. State any **<u>two</u>** possible ways of increasing velocity ratio of wheel and axle. **(2mks)**

11. (a) Under what conditions can a feather and a stone released from the same height land on the ground at the same time? **(1mk)**

(b) On the axis below, sketch displacement time graph for an accelerating body. **(1mk)**



12. The figure below shows four equivalent springs with negligible weight, the weight of the rod R is 20N. Given that the spring constant is 5N/m. Calculate the load L which causes an extension of 28m to the system. **(3mks)**



SECTION B (55 MARKS)

Answer ALL questions in this section in the spaces provided

13. (i) A stone thrown vertically upwards from the base of a mountain with an initial velocity of 100m/s.The stone just stopped as the apex and came back. Another boy projected a stone horizontally from the top of the mountain. Calculate:-

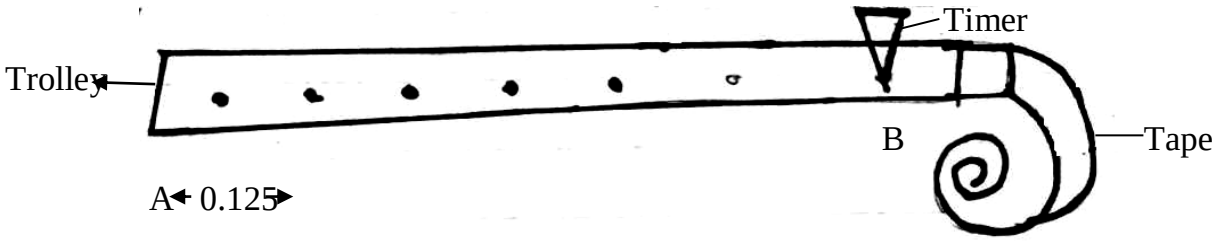
(a) Height of the mountain. **(2mks)**

(b) Time taken for the stone to follow the trajectory. **(2mks)**

(c) The range if the horizontal velocity is 20m/s, **(2mks)**

(d) Calculate the impulse of force produced when a table is pulled for 3s by a constant force of 10N towards the right and then for 2s by a constant force of 20N towards the left. **(2mks)**

(e) The figure below shows a tape from a trolley accelerating at $5m/s^2$ and the timer is vibrating at 100Hz.



Calculate:

(i) Change in velocity from A to B. **(2mks)**

(ii) The final velocity of the trolley. **(2mks)**

14. (a) Two gear-wheels have 80 teeth and 20 teeth and they lock with each other. They are

fastened on axles of equal diameter such that equal weight of 150N attached to the string around the axle will just raise 450N on the other axles.

Calculate:

(i) The mechanical advantage. **(2mks)**

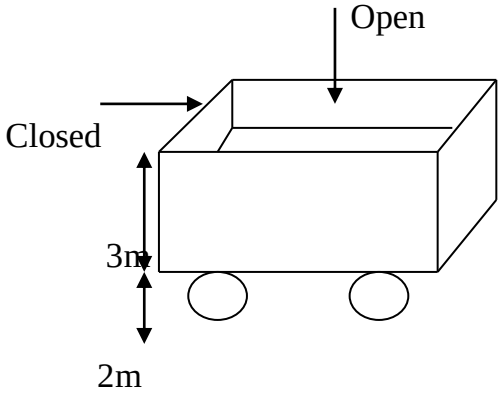
(ii) The velocity ratio. **(2mks)**

(iii) The efficiency of this machine. **(2mks)**

(b) (i) A Loudspeaker is a transducer. Explain. **(1mk)**

(ii) Explain the energy change that occur when a man climbs the mountain. **(1mk)**

(c) Calculate the total power in lifting 0.2kg of metal cane containing $2000cm^3$ of ice onto a lorry as shown below within 4s. (SIQ = $0.9g/cm^3$) **(3mks)**



15. (a) What is meant by specific latent heat of Vaporization? **(1mk)**

(a) In an experiment to determine the specific latent heat of vaporization of water, steam at 100^0C was passed into water contained in a well lagged copper calorimeter.

The following measurements were made:-

Mass of calorimeter	=	50g
Initial mass of water	=	70g
Initial temperature of water	=	5^0C
Final mass of water + Calorimeter + condensed steam	=	123g
Final temperature of mixture	=	30^0C
Specific heat capacity of water	=	$4200JKg^{-1}k^{-1}$
Specific heat capacity of copper	=	$390\ JKg^{-1}k^{-1}$

I. Determine the:-

(i) Mass of condensed steam **(2mks)**

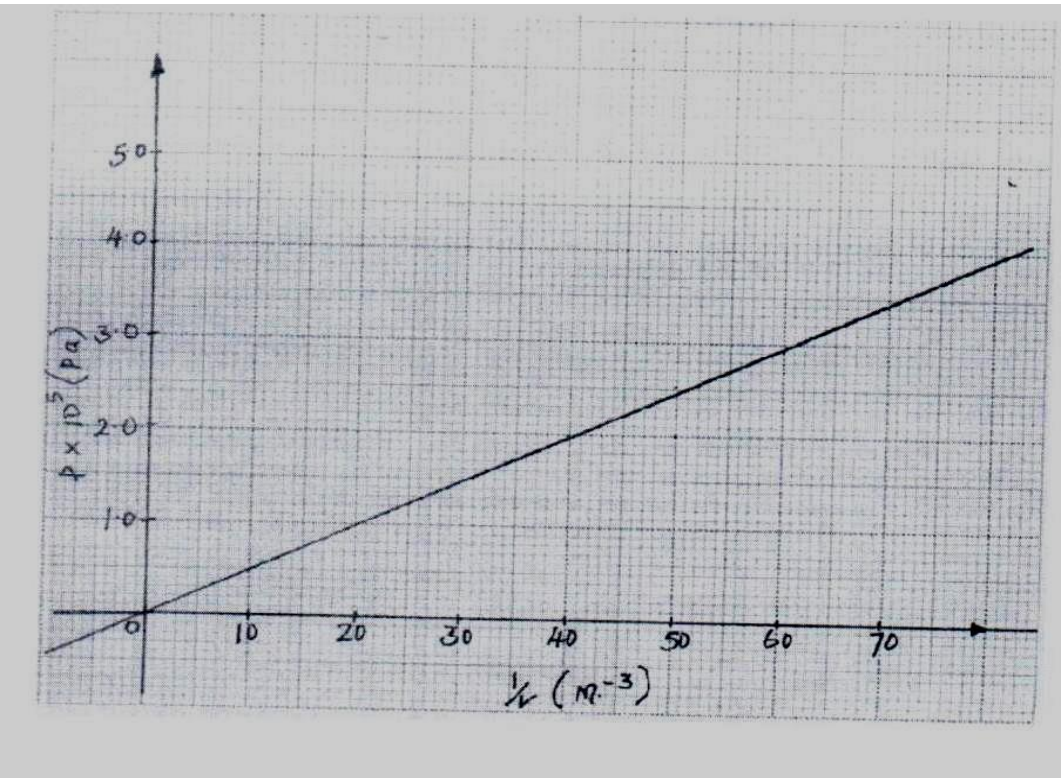
(ii) Heat gained by water and calorimeter. **(2mks)**

II. Given that L is the specific latent of heat of vaporization of steam:

(i) Write an expression for the heat given out by steam. **(1mk)**

(ii) Determine the value of L. **(2mks)**

(b) The pressure P1 of a fixed mass of gas at constant temperature, T = 300K is varied continuously as depicted in the graph below.



From the graph:

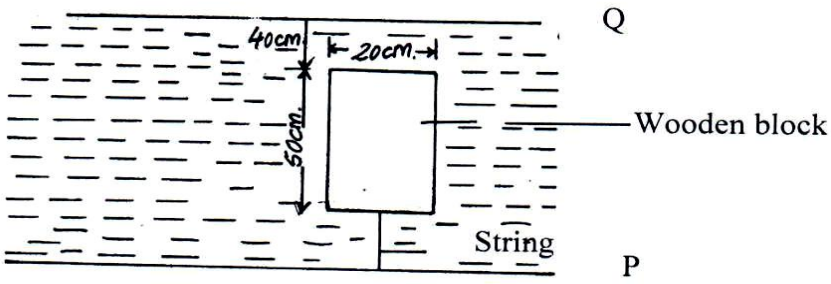
(i) Determine the volume of the gas when the pressure read 2.5×10^5Pa. **(2mks)**

(ii) Given that pV = 2RT where R is a constant, use the graph to determine R. **(2mks)**

16. (a) State the law of floatation. **(1mk)**

(b) A block of wood of mass 80kg floats in water with 0.6 of its volume in water. Calculate the number of rods each 20g that can be placed on the block so that its top is level with the surface of water. **(4mks)**

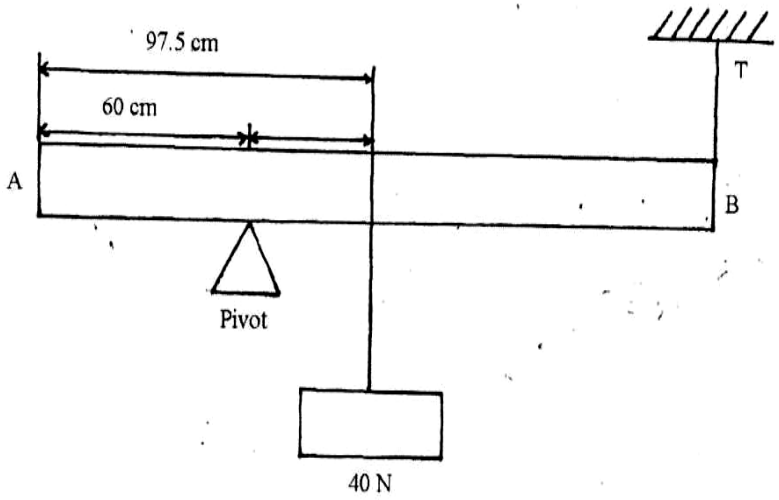
(c) The diagram in figure 9 below shows a wooden block of dimensions 50cm by 40cm by 20cm held in position by a string attached to the bottom of a swimming pool. The density of the block is 600kgm^{-3}.



(i) State the **<u>three</u>** forces acting on the block and write an equation linking them when the block is stationary. **(2mks)**

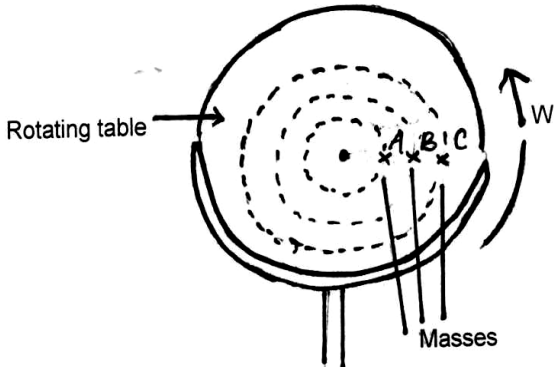
(ii) Calculate the tension on the string. **(3mks)**

(d) The figure below shows a metal rod AB of length 2m horizontally balanced while supported by a pivot and a string.



Determine the mass of the metal rod if the tension is 15N. **(3mks)**

17. (a) The figure below shows asses A, B and C placed at different points on a rotating table. The angular velocity W, of the table can be varied



(i) State **<u>two</u>** factors that determine whether a particular mass slides off the table or not. **(2mks)**

(ii) It is found that the masses slide off at angular velocities W_A, W_B and W_C respectively. Arrange the values of W_A, W_B and W_C in decreasing order. **(1mk)**

(b) A block of mass 200g is placed on a frictionless rotating table while fixed to the centre of the table by a thin thread. The distance from the centre of the table to the block is 15cm. If the maximum tension the thread can withstand is 5.6N, determine the maximum angular velocity the table can attain before the thread cuts. (4mks)

SUKELLEMO JOINT MOCKS

KCSE 2021/22 TRIALS

(SERIES 001)

NAME……

SCHOOL…… **INDEX NO**……

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232/2

PHYSICS

PAPER 2

TIME: 2 HOURS

INSTRUCTIONS TO CANDIDATES:

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

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

(c) *This paper consists two sections A and B.*

(d) *Answer all questions in Section A and B in the spaces provided below all questions.*

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

Take g = 10Nkg^{-1}

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SECTION	QUESTION	MAX. SCORE	CANDIDATE SCORE
A	1 - 13	25	
B	14	10	
	15	10	
	16	07	
	17	10	
	18	09	
	19	09	
TOTAL SCORE		**80**	

SECTION A (25 MARKS)

Answer ALL questions in this section in the spaces provided

1. The figure 1 shows a wire in a magnetic field. A current is switched on to flow through the wire in the direction shown. State the direction of motion of the wire. **(1mk)**

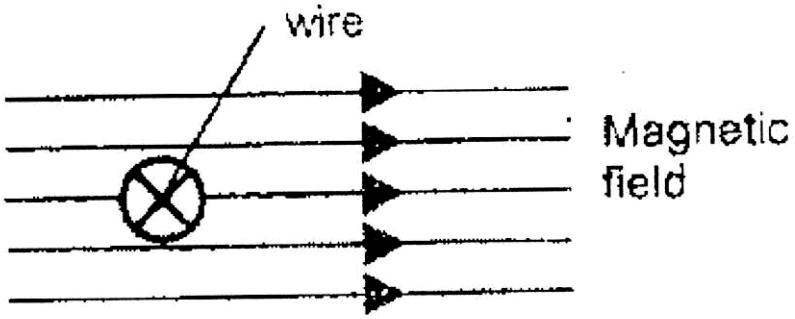


Figure 1.

2. In a textile industry, the machines experience electrostatics forces at certain points. Suggest **one** method of reducing these forces. **(1mk)**

3. When the device X is connected in the circuit below, the voltage across it is 0.14V.

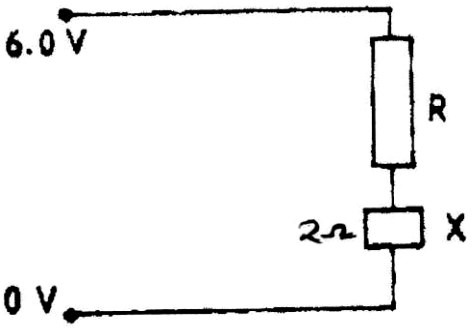


Fig. 2

Calculate the value of the resistance R. **(2mks)**

4. Four bars of metal W, X, Y and Z are tested for magnetism. X attracts both W and Y but not

Z. Z does not attract W, X or Y. W and Y sometime attract one another and sometimes repel one another. What conclusion can you draw about? **(2mks)**

(a) Bar W

(b) Bar X

5. (a) An observer watching a fireworks displays sees the light from an explosion and hears the sound 4 seconds later. How far was the explosion from the observer? (Speed of sound in air 330m/s). **(3mks)**

(b) A vertical object is placed at the focal point F of a diverging lens as shown in figure 3.

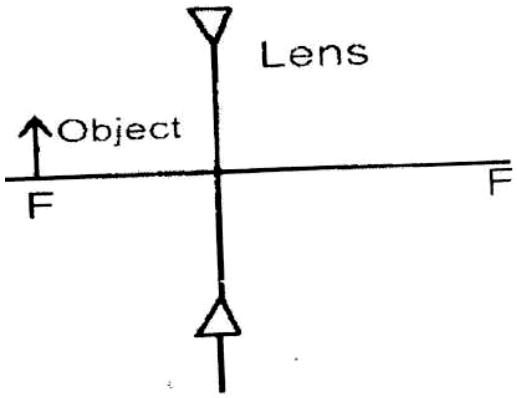


Fig. 3

Sketch a ray diagram to show the image of the object. **(2mks)**

6. If the focal length of the lens above is 10cm. Calculate its power. **(2mks)**

7. At what part of the cathode ray tube would the time base be connected? **(1mk)**

8. A heater of resistance R_1 is rated P watts, V volts while another of resistance R_2 is rated 2P WATTS, $^{V}/_{2}$ volts. Determine $^{R1}/_{R2.}$ **(2mks)**

9. The figure below shows an experimental arrangement. S1 and S2 are narrow slits.

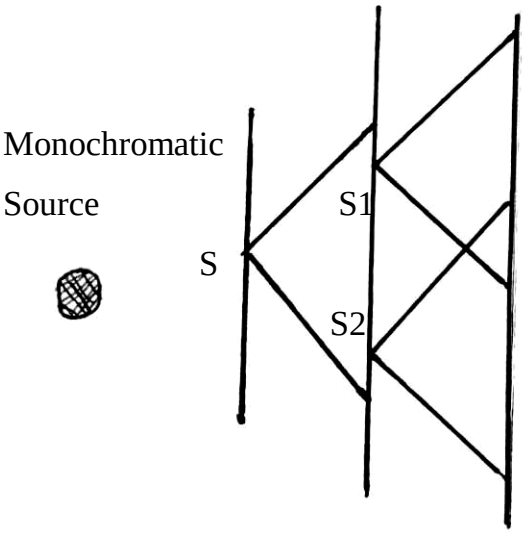


Fig. 4

Double Slit **Screen**

State what is observed on the screen when the source is: (3mks)

(i) Monochromatic

(ii) White light

<u>Use the diagram below to answer question 10.</u>

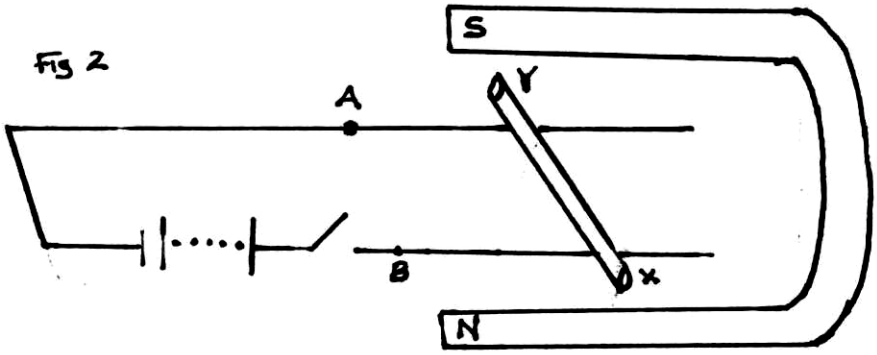


Fig. 5

10. An un-insulated copper wire XY lies over the fixed wire A and B connected to a battery. When the key in the circuit is closed, the rod XY moves. In which direction does the wire XY experience the force? (Indicate using an arrow) **(1mk)**

11. When is the force on the wire XY greatest? **(1mk)**

12. State and explain the effect of reducing the EHT in an X-ray tube on the X-rays produced.

(1mk)

13. The graph below shows the variation of capacitance of a capacitor with voltage supplied across it.

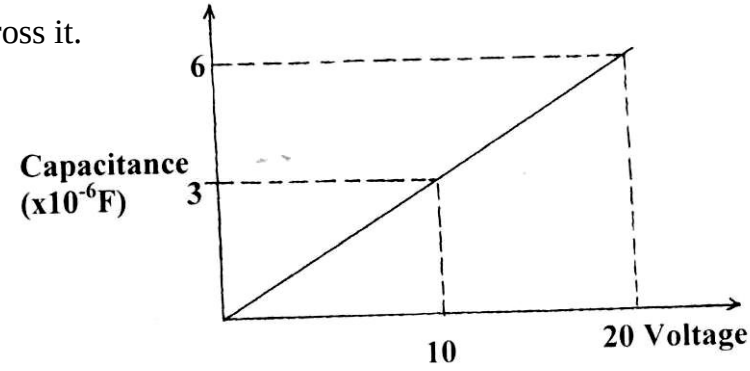


Fig. 6

Use the graph to determine the quantity of charge stored in the capacitor. **(3mks)**

SECTION B (55 MARKS)

Answer ALL questions in this section in the spaces provided

14. (a) (i) State the meaning of the statement diode characteristic. **(1mk)**

Sketch a circuit diagram that can be used to investigate p-n junction diode characteristics. **(2mks)**

(a) Define the term acceptor atom as applied in semiconductor. **(1mk)**

(b) Study figure 7 below and use it to answer questions that follow.

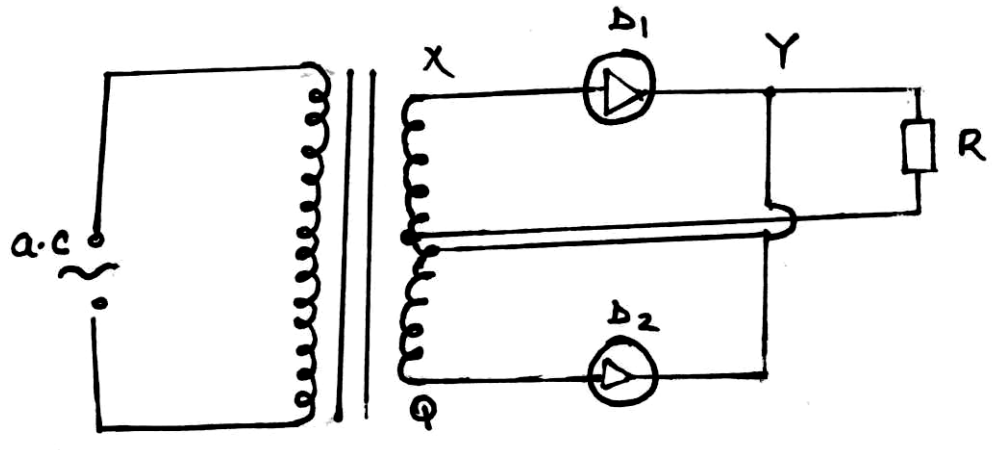


Fig. 7

(i) Briefly explain how the circuit works to produce a rectified alternating current.**(3mk)**

(ii) Draw on the diagram to show the position of the capacitor. **(1mk)**

(iii) State the functions of the capacitor in the circuit. **(1mk)**

(iv) Sketch the graph of the output as seen on a CRO screen. **(1mk)**

15. Figure 8 below shows an experimental set up in a vacuum for investigating the effect of a magnetic field on the radiation emitted by a radio-active source.

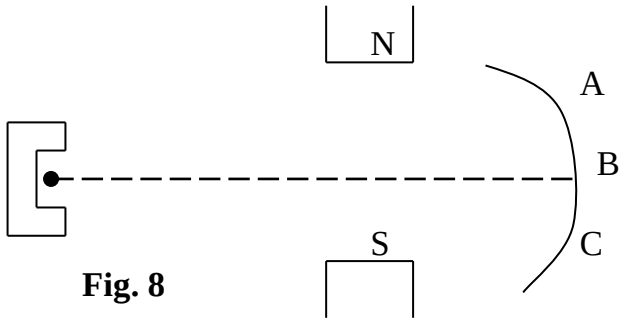


Fig. 8

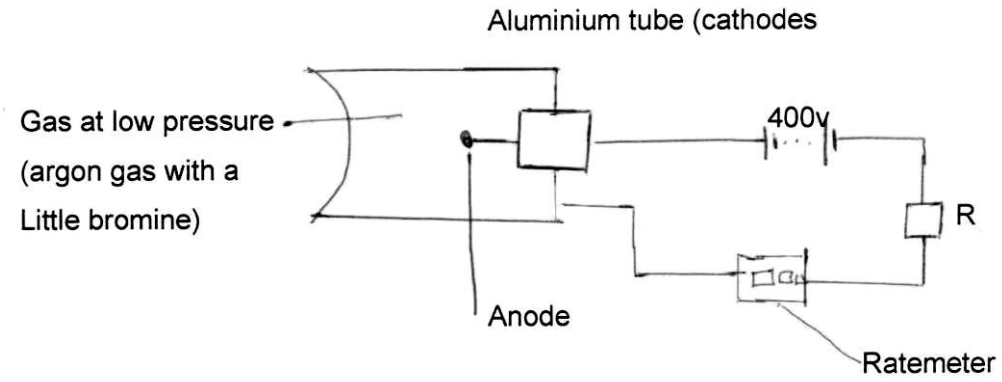
The background radiation at the place is 5 counts per minute. The detectors are placed a positions A, B and C respectively. Results obtained are shown in the table below.

Positions	A	B	C
Counts / min	480	5	400

Use the table to explain which of the three types of radiations are emitted from the source.

(2mks)

(b) Figure 9 below shows the features of a Geiger-Muller (G.M) Tube used for detecting radiation.



(i) State the use of Argon gas and Bromine. **(1mk)**

Argon gas

Bromine

(ii) Explain how radiation from the source is detected by the tube. **(4mks)**

(iii) State **one** use of radio activity in medicine. **(1mk)**

(c) The box contains names of seven parts of electromagnetic spedrium.

Radio waves	Microwaves	Infra-red	Visible light	Ultra violet	X-rays	Gamma rays

(i) State the order in which they have been written. **(1mk)**

(ii) The parts are all transverse waves. State **one** other property which they all have in common. **(1mk)**

16. A photocell has a cathode made of caesium metal when a monochromatic radiation is shone on the cathode photoelectrons are emitted. A graph of kinetic energy against frequency is drawn as shown in figure 10.

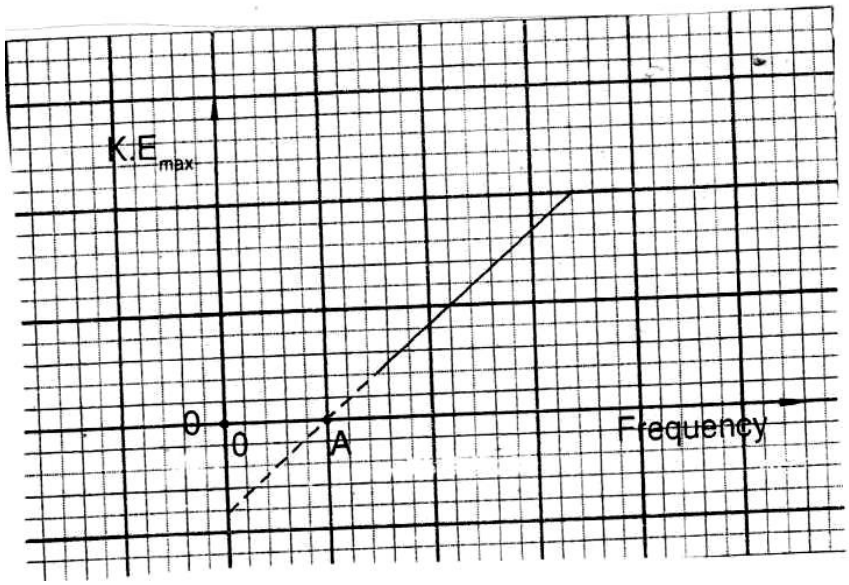


Fig. 10

(a) Use the graph to answer the questions below.

What is the unit of the slope? **(1mk)**

What physical quantity is represented by point A? **(1mk)**

Lithium metal has a higher work function than caesium. On the same axes, sketch the graph of lithium. **(1mk)**

What does the term Monochromatic mean? **(1mk)**

(b) The maximum Kinetic energy of the electrons emitted from a metallic surface is 1.6×10^{-19}J when the incident radiation is 7.5×10^{14}Hz. Calculate the minimum frequency of radiation for which electrons will be emitted.

(A planck's constant = 6.6×10^{-34}Js) **(3mks)**

17. (a) Refraction is the bending of light as it travels from one media to another. State the cause of the bending. **(1mk)**

(b) The figure 11 below shows two adjacent solids of materials Diamond and Ruby.

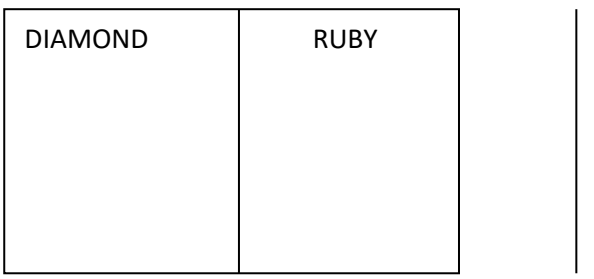


Fig. 11

Wide Screen

The refractive index of Diamond is 2.4 and that of Ruby is 1.75.

(i) Find the refractive index of Ruby with respect to diamond. **(3mks)**

(ii) Draw an accurate ray from diamond such that no light is incident on the screen.

(3mks)

(c) The figure 12 below shows white light incident on a rain drop.

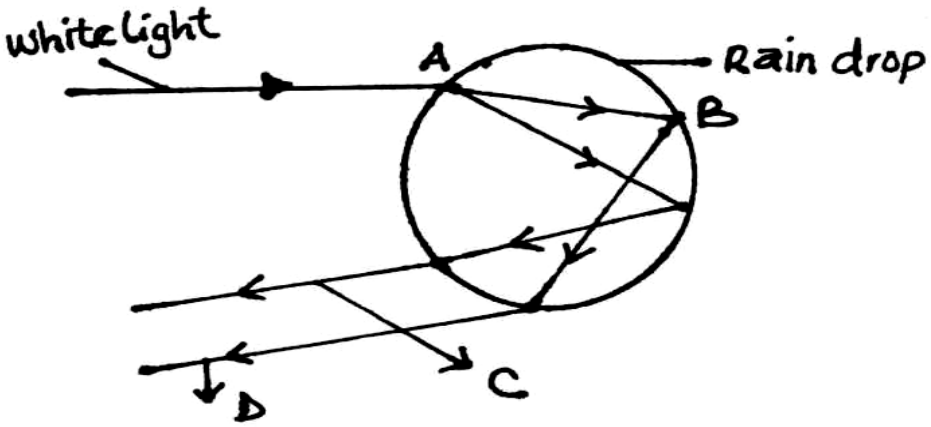


Fig. 12

(i) State what happens at A and B. **(1mk)**

(ii) State the colour of rays C and D. **(2mks)**

18. (a) The figure 13 shows shadow formation using an extended source of light.

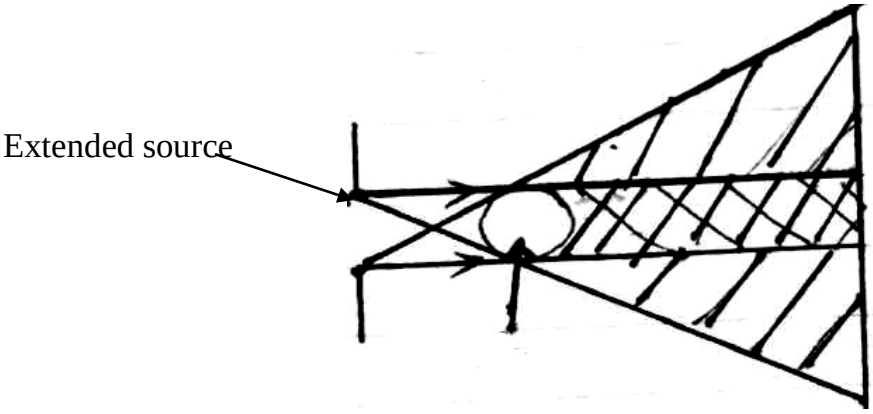


Fig. 13

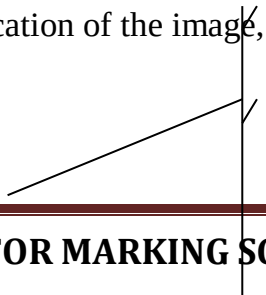
State the effect on the umbra as the object is moved away from the screen when:

(i) Diameter of the hole is the same as the diameter of the object. **(1mk)**

(ii) The diameter of the object is smaller than the diameter of the hole. **(1mk)**

(iii) The diameter of the object is greater than the diameter of the hole. **(1mk)**

(b) The figure 14 shows an object infront of a plane mirror. Complete the diagram to show the location of the image,



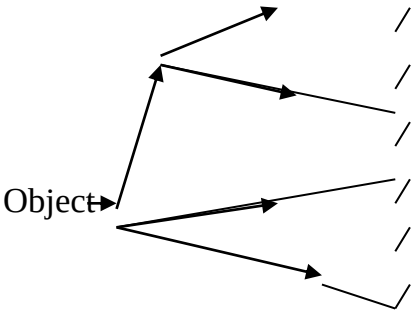
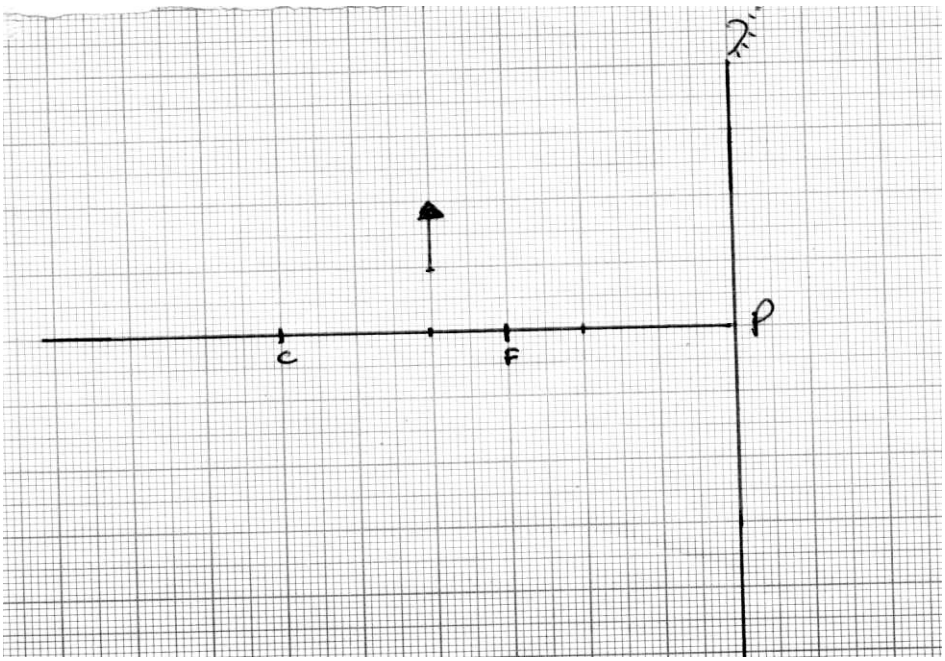


Fig. 14

(c) The graph below shows an object O placed in front of a concave mirror of focal length 30cm.



Construct ray diagrams to show the position of the object. **(3mks)**

(d) Give **<u>one</u>** feature that makes Parabolic Mirrors suitable for use as car head lights.**(1mk)**

19. (a) Appliances which draw current from a ring's main circuit have a third cable connected to the earth. Give a reason why? **(1mk)**

(b) In a lighting circuit the wires used are relatively thinner than those of a cooker circuit. Give an explanation for this. **(1mk)**

(c) A transformer with 6000 turns in the primary circuit and 300 turns in the secondary circuit has its primary circuit connected to a 400V a.c. source. A heater connected to the secondary circuit produces heat at the rate of 600W. Assuming that the transformer is 100% efficient determine:-

The voltage in the secondary circuit. **(3mks)**

The current in the primary circuit. **(2mks)**

The current in the secondary circuit. **(2mks)**

SUKELLEMO JOINT MOCKS

KCSE 2021/22 TRIALS

(SERIES 001)

SCHOOL……

SIGN…… ADM NO ……

232/3

PHYSICS

PAPER 3

CONFIDENTIAL

QUESTION 1

Each candidate should have:-

a) *A retort stand, clamp and boss*

b) *A spiral spring*

c) *A stop watch*

d) *Three 100g masses*

e) *A 250ml glass beaker*

f) *A Bunsen burner*

g) *A thermometer (-10 to 110^{0}C)*

h) *A tripod stand and wire gauze*

i) *A measuring cylinder 100mll*

j) *A source of heat*

k) *Some water in a container about 500ml*

QUESTION 2

Each candidate is required to have the following apparatus:

a) A voltmeter (0 – 5V)

b) A candle

c) A white screen

d) Two new dry cells

e) Six connecting wires, each with a crocodile clip at one end.

f) A switch.

g) A lens and a lens holder. NB: Focal length = 20cm.

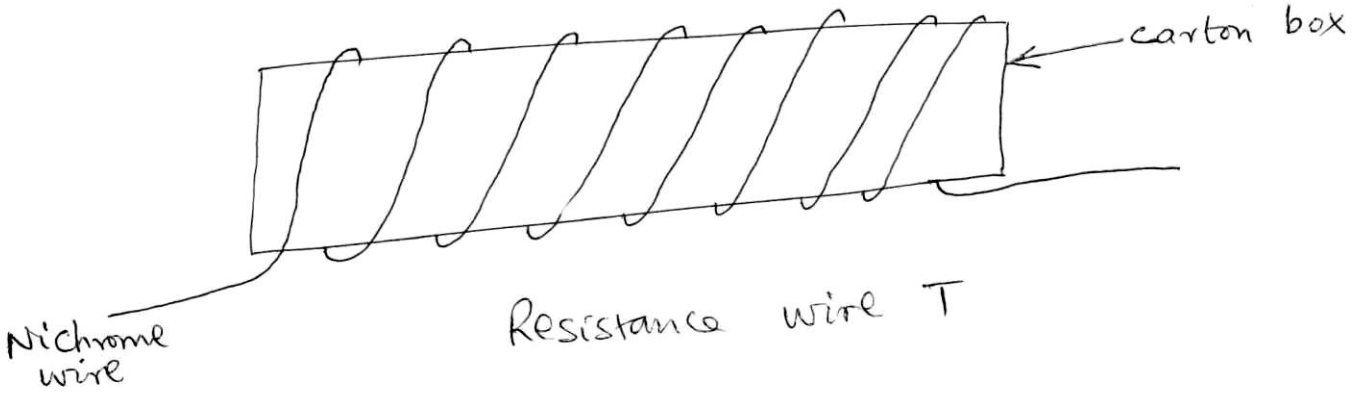
h) A metre rule.

i) A resistance wire labelled R mounted on a metre rule.

The physics teacher is required to mount a nichrome wire SWG 28 on a metre rule and label the wire R. The diameter of the wire is 0.36mm.

j) A resistance wire labelled T.

The Physics teacher is required to mount a nichrome wire SWG 28 on a small piece of carbon box and label it T.
The diameter of the wire is 0.36mm and its length is 60cm.



SUKELLEMO JOINT MOCKS

KCSE 2021/22 TRIALS

(SERIES 001)

NAME……

SCHOOL…… **INDEX NO**……

SIGN…… **ADM NO** ……

232/3

PHYSICS

PAPER 3

TIME: 2 ½ HOURS

INSTRUCTIONS TO CANDIDATES

(a) Write your Name and Index Number in the spaces provided above.

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

(c) You are supposed to spend the first 15 minutes of the 2½ hours allowed for this paper reading the whole paper carefully before commencing your work.

FOR EXAMINER'S USE ONLY

Question 1	b	c	d	e	f	g	h	TOTAL
Max. Score	3	2	6	5	1	1	2	20
Candidate's Score								

Question 2	e	f	g	h	i	j	k	l	m	TOTAL
Max. Score	8	5	1	1	1	1	1	2	1	20
Candidate's Score										

GRAND TOTAL

1. **Question one**

This question has two parts A and B. Answer both parts.

PART A

You are provided with the following:-

- A retort stand, clamp and boss.
- A spiral spring.
- A stop watch.
- Three 100g masses.

Proceed as follows:

(a) Suspend a 100g mass at the end of the spring as shown in figure 1.

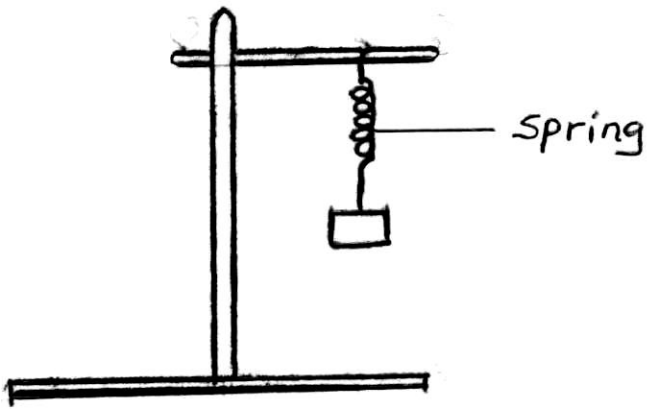


Fig. 1

Now give the mass a small vertical displacement and release so that it performs vertical oscillations. Time ten oscillations and determine the period T. Enter your results in table 1.

(b) Repeat the experiment for the other values of mass and complete the table.

Table 1

Mass m (g)	100	200	300
Time for 10 oscillations (s)			
Periodic time T(s)			

(3mks)

(c) Given that $T = \pi\sqrt{\frac{m}{K}}$, where k is the spring constant, find the average value k for the spring. **(2mks)**

PART B

You are provided with the following:-

- A 250ml glass beaker
- A Bunsen burner
- A Thermometer
- A Stop watch
- A Tripod stand and a Wire gauze
- A measuring cylinder 100ml
- Water

Set the apparatus as shown in figure 2 below.

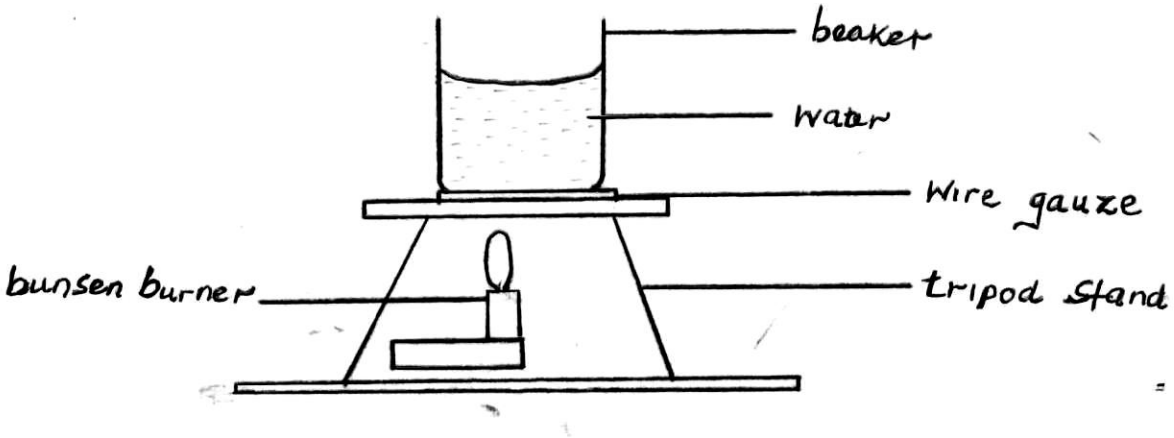


Fig. 2

(d) Measure 100cm^3 of water and pour it into the beaker. Take the initial temperature of the water.

T_0 = ……^{0}C (1mk)

Now heat the water to a temperature of 80^{0}C. switch off the gas tap and place a thermometer into the beaker and start the stop watch when the temperature is 65^{0}C.

Take the temperature T^{0}C of water ever two minutes. Record your results in the table 2 below.

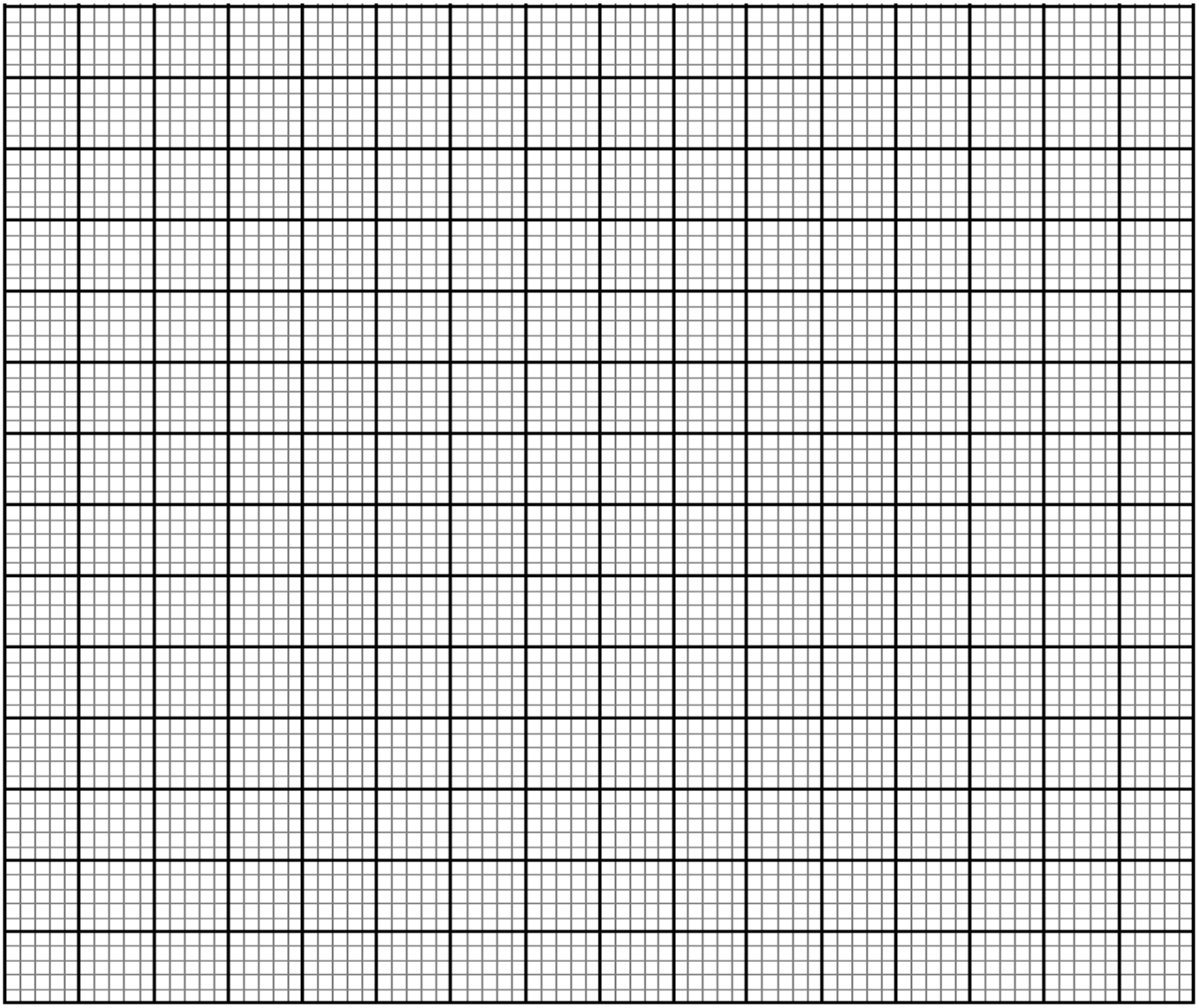
Table 2

Time, t(min)	2	4	6	8	10	12	14
Temperature (T) ^{0}C							
(T - T_0)							
Log (T - T_0)							

(5mks)

(a) Plot a graph of Log (T - T_0) against Time (t). (5mks)

(b) Find the value of P of log (T - T_0) when t = 0. **(1mk)**



(c) Determine N, where N is the antilog of P. **(1mk)**

(d) Calculate the temperature of the surrounding T_R using the expression $N = 65 - T_R$ **(2mks)**

2. Question 2

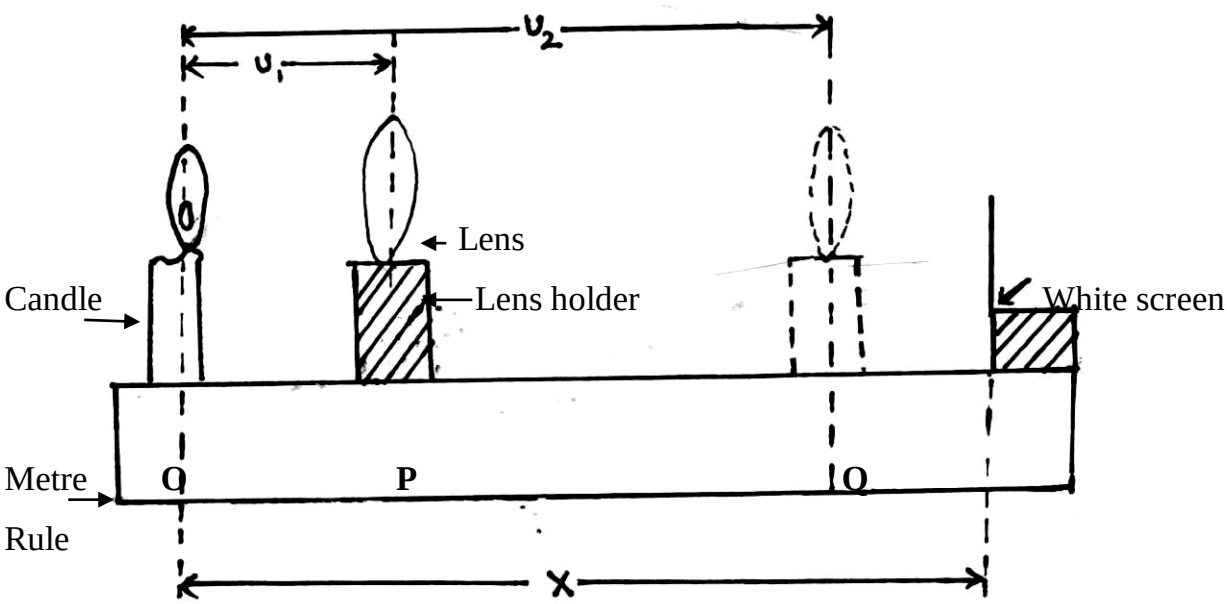
Part A

You are provided with the following:-

- A lens and a lens holder.
- A candle.
- A white screen.

Proceed as follows:

Set the apparatus as shown below.



Place the white screen at a distance X = 100cm from the candle. Let the lens be at position P, adjacent to the lit candle.

Move the lens towards the screen until an enlarged image of the candle is formed on the screen. Measure and record the distance u_1.

Move the lens to a second position Q where the image of the candle is sharp but diminished on the screen.

Measure and record the distance u_2.

Hence determine the value of $d = u_2 - u_1$.

Repeat the procedure in (c) and (d) for either values of x = 95, 90, 85, 80cm. Complete table 2 shown below.

Table 2

x (cm)	100	95	90	85	80
u_1(cm)					
U_2(cm)					
$d = u_2 - u_1$(cm)					
$y = {}^{d2}/_{x}$(cm) (2d.p)					

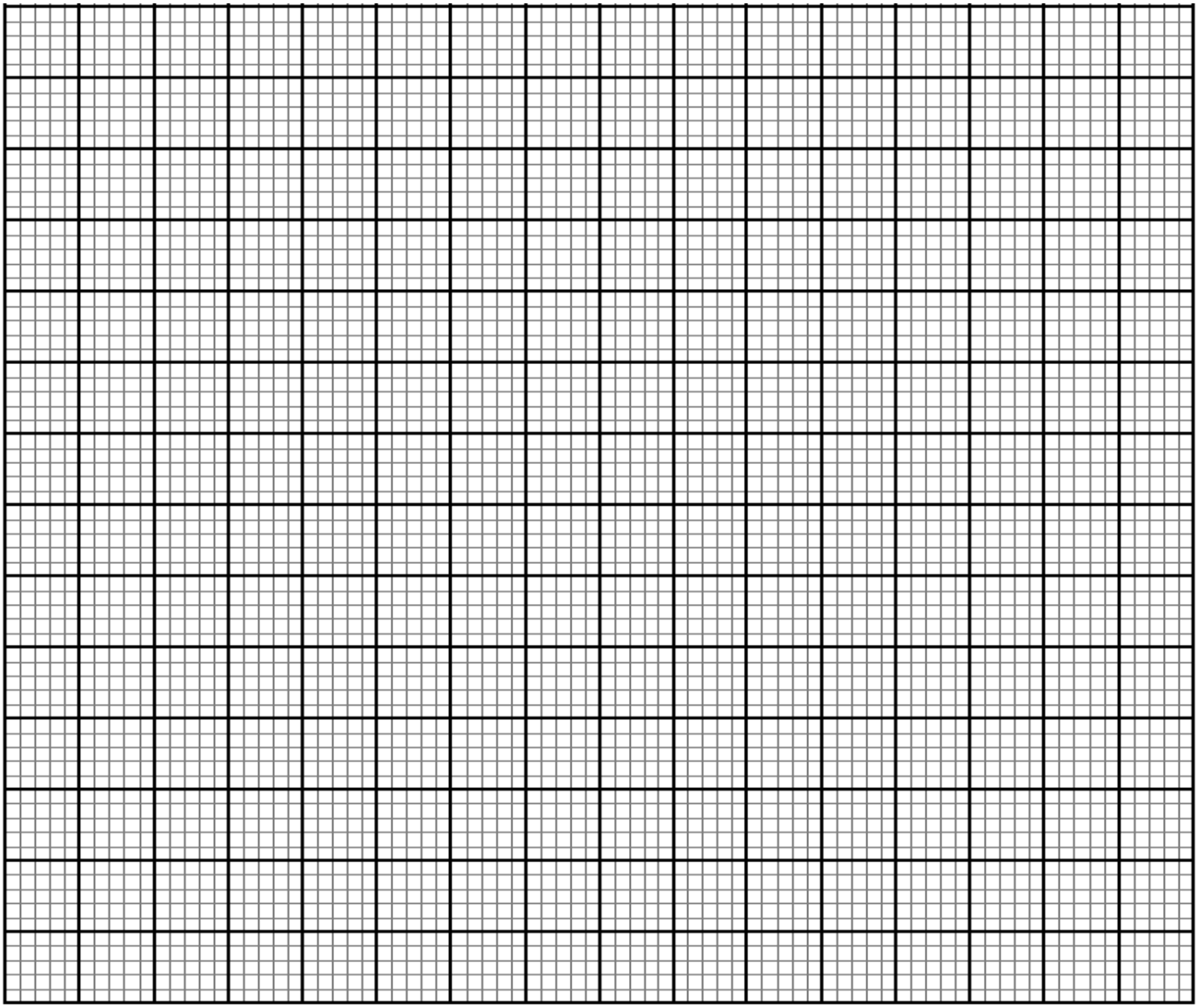
(8mks)

On the grid provided, plot a graph of y against x. **(5mks)**

Determine the value of $x = x_0$, when $y = 0$. **(1mk)**

x_0 = ... cm

⇨ Given that $k = \frac{x_o}{4}$, determine the value of k. **(1mk)**



PART B

You are provided with the following:-

- *A voltmeter*
- *A resistance wire labelled R mounted on a metre rule.*
- *A metre rule.*
- *A resistance wire labelled T mounted on a small piece of carton.*
- *Two dry cells and a cell holder.*
- *Six connecting wires, each with a crocodile clip at one end.*
- *A switch.*

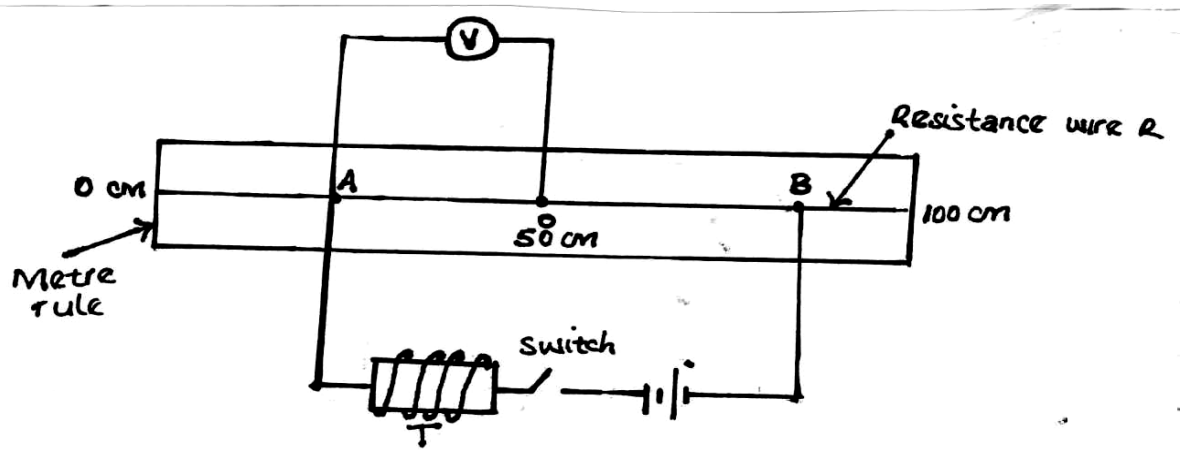
Proceed as follows;

⇨ Measure and record the e.m.f. E_0 of the cells connected in series,

E_0 = ____ v.

(1mk)

⇨ Connect the circuit as shown below. Point O on resistance wire P is at 50cm mark of the metre rule. A and B are points on resistance wire P such that AO = OB = X = 30cm.



⇨ Close the switch. Read and record the potential difference V across AO

V = …… Volts. (1mk)

The relationship between V and x is given by:

$$\frac{I}{V} = \frac{35}{x} + \frac{1}{y}$$

Determine the value of y. **(2mks)**

Use the e.m.f. E_0 to determine the constant k, given that:

$$k = \frac{8}{35E_0}$$ **(1mk)**

SUKELLEMO JOINT MOCKS

KCSE 2021/22 TRIALS

(SERIES 001)

NAME……

SCHOOL…… **INDEX NO**……

SIGN…… **ADM NO** ……

443/1

AGRICULTURE

Paper 1

Time: 2 hours

INSTUCTIONS TO CANDIDATES

- *Write your name and index number in the spaces provided*
- *This paper consists of three sections **A,B** and **C.***
- *Answer all the questions in sections **A** and **B** and any other two in section **C***
- *All answers must be written in the spaces provided in this booklet.*

FOR EXAMINERS USE ONLY

SECTION	QUESTIONS	MAXIMUM SCORE	CANDIDATES SCORE
A	1-17	30	
B	18-21	20	
C	22-24	40	
	TOTAL SCORE	**90**	

SECTION A: 30 MARKS

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

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2. Give **four** factors that would determine the stage at which a crop is harvested. **(2marks)**

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3. Give three reasons for early seedbed preparation. **(1½marks)**

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4. State **four** disadvantages of organic mulches. **(2 marks)**

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5. Outline four functions of magnesium in crops . **(2 marks)**

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6. .State four objectives o f land tenure reform . **(2marks)**

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7. .State two disadvantages of late defoliation in pasture management . **(1mark)**

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8. .Define the following terms as used in economics .

(a) National income **(1mark)**

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(b) Per capita income **(1mark)**

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9.Give four benefits of a good soil structure in crop production . **(2marks)**

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10. Name **four** farm records that should be kept by a poultry farmer. **(2marks)**

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11. Give three factors that should be considered when choosing the type of labour to use on the farm. **(1½ marks)**

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12. State four ways in which burning of vegetation may lead to lose of soil fertility **(2 maks)**

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13. State ***four*** symptoms of viral diseases in crops. **(2marks)**

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14. State ***three*** methods of classifying herbicides. **(1½marks)**

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15. Give ***four*** methods of applying fertilizers to crops. **(2marks)**

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16. State **three** advantages of drip irrigation **(1½ marks)**

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17. Outline **two** ways of controlling damping off diseases on vegetable seedlings in a nursery **(1mark)**

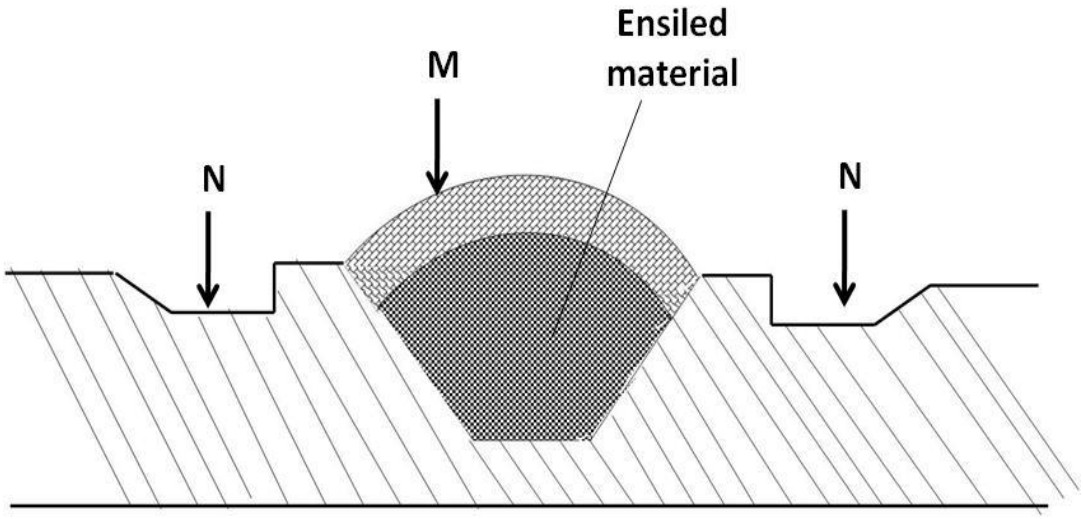
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SECTION B(20 MARKS)

Answer all the questions in this section in the spaces provided

18. The diagram below shows a silo. Study it carefully and answer the questions that follow.



a) Identify the type of silo shown on the diagram. **(1mark)**

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b) State the use of the part labeled M and N **(2marks)**

M .....

N .....

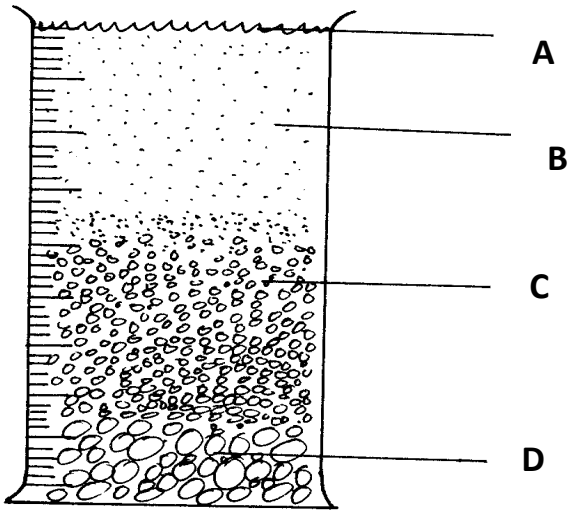
c) Give **two** ways of ensuring that anaerobic conditions are achieved during silage making process. **(2marks)**

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19. Form two student put some soil sample in a measuring cylinder, added some water and sodium carbonate and then covered the cylinder with the hand and shook the cylinder for about two minutes. He left the cylinder on the bench for one hour. The result was as shown below.



(i). **Name** the layers marked a,b,c, and d. **(2marks)**

a ……

b ……

c ……

d……

(ii) What was the function of sodium carbonate in this experiment? **(1mark)**

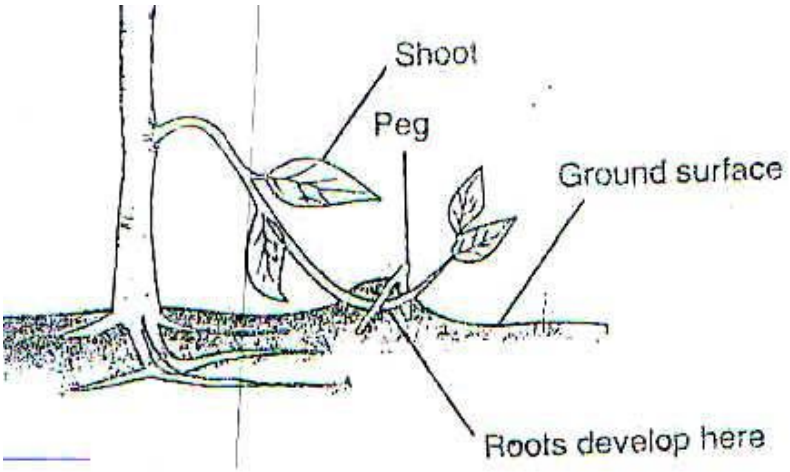
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(iii). What was the aim of this experiment ? **(1mark)**

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20. Study the diagram below of crop propagation and answer the following questions



a) Identify the propagation method **(1mark)**

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b) State two factors that encourage root formation in the above method of propagation **(2marks)**

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c). Name two crops that can be propagated using the above method **(2marks)**

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21. (a) Describe the procedure which should be followed in spraying a crop in tomatoes using a fungicide in powder form, water and a knapsack sprayer. **(3marks)**

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(b) Name one fungal disease of tomatoes that can be controlled using the above procedure. **(1marks)**

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c) State four safety measures that should be taken while spraying the crop with the fungicide. **(4marks)**

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SECTION C (40 MARKS)

Answer any TWO questions from this section in the spaces provided after question.

22. (a) Explain **five** factors that should be considered when siting a vegetable nursery. **(5marks)**

(b) Explain six factors that should be considered when selecting seeds for planting. **(6marks)**

(c) Explain the different ways in which each of the following environmental factors Influence crop production:

(i) Temperature; **(4marks)**

(ii) Wind. **(5marks)**

23. (a) Explain the benefits of land consolidation. **(6marks)**

b) Briefly explain **six** factors influencing mass wasting**.** **(6marks)**

c) Explain **four** ways of improving labour productivity **(8marks)**

24 (a) Explain five factors that determine the spacing to be used in crops. **(10marks**)

(b) Describe seven nursery practices carried out while seedlings are still growing**.(7marks**)

(c) Outline three precautions taken in harvesting tea. **(3marks)**

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SUKELLEMO JOINT MOCKS

KCSE 2021/22 TRIALS

(SERIES 001)

NAME……

SCHOOL…… **INDEX NO**……

SIGN…… **ADM NO** ……

443/2

AGRICULTURE

Paper 2

Time: 2hours

INSTUCTIONS TO CANDIDATES

- *Write your name and index number in the spaces provided*
- *This paper consists of three sections **A,B** and **C.***
- *Answer all the questions in sections **A** and **B** and any other two in section **C***
- *All answers must be written in the spaces provided in this booklet.*

FOR EXAMINERS USE ONLY

SECTION	QUESTIONS	MAXIMUM SCORE	CANDIDATES SCORE
A	1-19	30	
B	20-23	20	
C	24-26	40	
	TOTALSCORE	**90**	

SECTION A (30 MARKS)

ANSWER ALL QUESTIONS IN THE SPACES PROVIDED

1. List two cattle diseases caused by viruses. **(1mark)**

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2. State one use for each of the following tools

a) Spoke shave

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b) Plumb bob

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3. List two distinguishing external characteristics of California breed of rabbit. **(1mark)**

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4. State four reasons for culling a breeding boar . **(2marks)**

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5. State any two disadvantages that may arise from inbreeding in livestock. **(1mark)**

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6. State two reasons for seasoning timber before use . **(1mark)**

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7. a) Differentiate between a roughage and a concentrate feed in animal nutrition.**(1mark)**

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b)State four desirable qualities of a livestock ration. **(2marks)**

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8. State three factors that may influence the amount of water intake by a farm animal .

(1 ½ marks)

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9. State three advantages of keeping a herd of dairy cattle healthy. **(1½ marks)**

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10. Give three reasons for dehorning cattle. **(1½ marks)**

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11. Give two methods of extracting honey from honey combs **(1mark)**

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12. a) Give four reasons for candling eggs in poultry production. **(2marks)**

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b) Give four maintenance practices that should be carried out on the mould board plough**.(2marks)**

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13. a) List four harmful effects of internal parasites in livestock. **(2marks)**

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(b) (i) Give two reasons for washing the udder with warm water before milking .**(1mark)**

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(ii) Name three dairy goats kept in Kenya . **(1½ marks)**

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14. Name **two** diseases that affect female animals only **(1mark)**

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15. What is the function of a spillway in a fish pond **(½ mark)**

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16. Name three types of lubrication systems used in tractors . **(1½ marks)**

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17. Give the functions of the following parts of an ox-plough

a) Land side …… **(½mark)**

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b) Draft rod ……**(½ mark)**

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18. Give three structural requirements for a grain silo. **(1½ marks)**

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19 State three advantages of natural feeding in calf rearing. **(1½ marks)**

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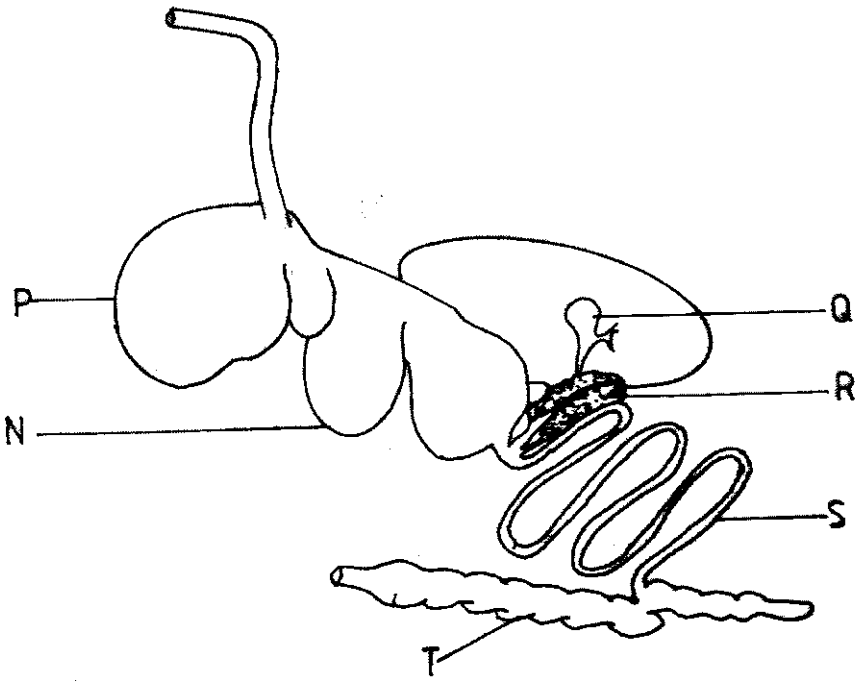
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SECTION B (20 MARKS)

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

20. The diagram below shows the digestive system of cattle. Study it and answer the questions that follow.



a). Name the parts labelled N, P and Q.

N ..... (1 mark)

P ..... (1 mark)

b). State one function for each of the parts labelled **S** and **T**.

S..... (1 mark)

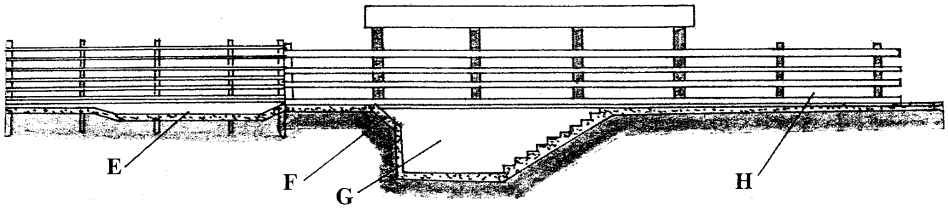
T ..... (1 mark)

c). Give one enzyme produced by each of the parts labelled **R** and **S.**

R ..... ($^1/_2$ marks)

S ..... ($^1/_2$ marks)

21. The illustration below shows a cross section of a cattle dip.



a) Name the parts labelled E and G.

E……

(1mark)

G……

(1mark)

b) State one use for each of the parts labelled E, F and H. (3marks)

E…….

F…….

H…….

22. The following diagrams show animals with deficiency symptoms of some minerals. Study the diagrams carefully and answer the questions that follow.





(a) State the nutrients lacking in the diet of each animal shown above.

Animal **G** ……. (1mark)

Animal **H**……. (1mark)

(b) Name the disease whose symptoms are shown by the animal labeled G above. (1 mark)

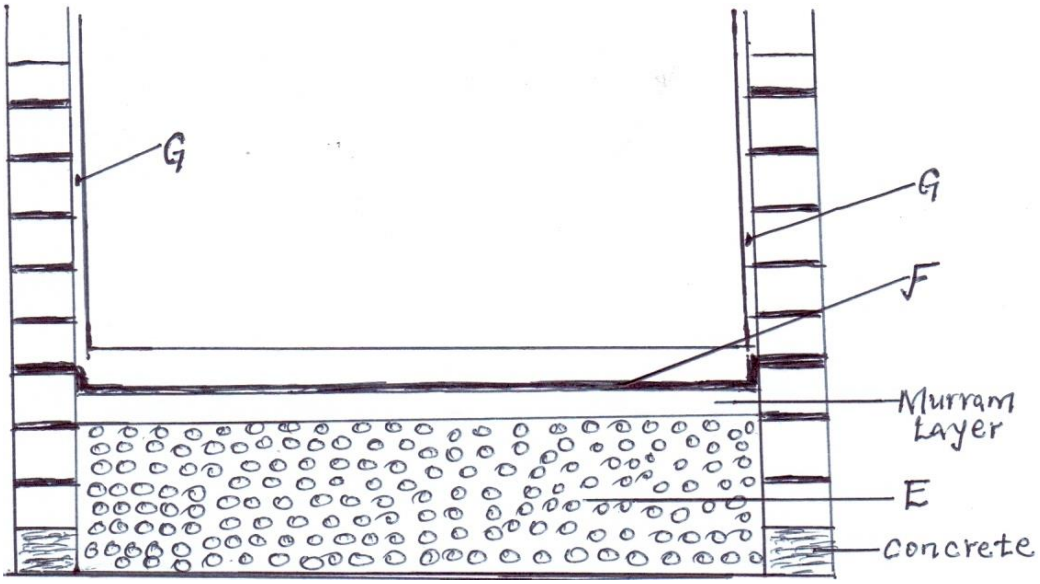
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(c) Give **two** reasons why the disease named in (b) above should not be controlled by giving medicine through the mouth. **(2marks)**

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23.The diagram below represents a foundation of a farm structure .Study it and answer questions that follow .



(a) Identify the parts labeled E and F .

E…… **(1mark)**

F…… **(1mark)**

(b)State two uses of part labeled F in a foundation structure . (2marks)

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(c) What ingredients are used to complete part G **(1mark)**

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SECTION C (40 MARKS)

Answer any two questions in this section in the spaces provided at the end of each question.

24. **(a)** Describe the uses of fences on the farm. **(10 marks)**

(b) Describe Newcastle disease under the following sub-headings

(i) causal organism; **(1 mark)**

(ii) signs of infection; **(7 mark)**

(iii) control measures. **(2 marks)**

25. a) Describe the rearing of lambs from lambing up to weaning time **(10 marks)**

b) Explain **five** causes of livestock diseases **(5 marks)**

c) State **five** differences between Ruminants and non Ruminants **(5 marks)**

26.a. State and explain **five** preventive measures of livestock diseases. **(10 Marks)**

b. Describe long term service carried out during tractor servicing. **(6 Marks)**

c. Outline four functions of the gearbox in a tractor. **(4 Marks)**

SUKELLEMO JOINT MOCKS

KCSE 2021/22 TRIALS

(SERIES 001)

NAME……

SCHOOL…… **INDEX NO**……

SIGN…… **ADM NO** ……

565/1

BUSINESS STUDIES

PAPER 1

TIME: 2 HOURS

INSTRUCTIONS TO CANDIDATES

- *Write your **name** and **index number** in the spaces provided above*
- ***Sign** and write the **date** of examination in the spaces provided.*
- *Answer **all** the questions .(25 questions).*
- *All answers should be written in the spaces provided in this booklet.*
- *Candidates should answer all questions in English*

For Examiners Use Only

Qn	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	19	20	21	22	23	24	25
Mks																								

TOTAL MARK

1. Outline **four** ways in which a good business structure is of benefit to a business organization **(4mks**

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2. Outline **four** difficulties that would be faced by an individual in the satisfaction of human Wants **(4mks)**

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3. The following is a table of activities. Name the utility that is created by each activity. **4mks)**

Activity	Utility
i) Making Chairs from timber	
ii) Shopkeepers selling sugar to consumers	
iii) Pharmacist delivering milk to a hospital	
iv) Delivering milk to consumers early in the morning	

4.Using a diagram, illustrate how a decrease in demand occurs while holding all factors constant apart from price. **(4mks)**

5. State **four** circumstances under which it may be appropriate to use personal selling as a form of product promotion. **(4mks)**

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6. K Ltd a manufacturing firm has been performing poorly in the recent past. Highlight four measures that they can take to improve their profitability. **(4mks)**

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7. State **four** functions of commercial attaches. **(4mks)**

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8. Give **four** reasons why some traders prefer to operate supermarket business **(4mks**

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9. State **four** reasons why short message service (SMS) is replacing letters as a way of communication **(4mks)**

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10. Describe **four** channels used when importing commodities. **(4mks**

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11. Outline four emerging trends in office management. **(4mks)**

i)……

ii)……

iii)……..

iv)……..

12. Give **four** benefits that are likely to result from a modern railway network in the country **(4mks**

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13. Outline **four** features of monopolistic competition **(4mks)**

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14. State **four** merits of storing goods in a public warehouse **(4mks)**

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15. The following account balances were extracted from the books of migingo traders on 30th April 2002

Machinery	460000	Stock	20,000
Debtors	50,400	Cash in hand	35,000
Creditors	38,200	Bank overdraft	65,900

Determine capital as at 30th April 2012 **(4mks)**

16. The table below shows descriptions of different types of partners. Identify type of partners that match the description

Description	Type of partner
(a) Do not contribute capitals (b) Those whose private properties can be used to pay business costs (c) Do not participate actively in management (d) Are above 18 years of age	

17. On 31st December 2013 Kiu Traders had made a turnover of Sh.80, 000 for the fear and had a closing stock of SH.10, 000. If the business was working at a margin of 20%, draw its trading account for the period ending 31st, December 2013 **(4mks)**

18. Outline four source documents used in recording transaction. **(4mks)**

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19. On 1st March 2006 the cash book of Kericho traders showed cash and bank balances of sh. 15000 and sh 147000 respectively. The following transactions took place during the month

May 3 cash sales sh 120, 000

May 11 paid sh. 7,500 cash in respect to wages

May 16 received a cheque of sh. 250,000 from a debtor

May 26 withdrew sh. 25,000 from bank for office use.

May 29 paid sh. 97,000 cash to creditor

Prepare a two column cash book **(4mks)**

20. Explain the following terms as used in insurance

a)Surrendervalue……

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b)Beneficiaries……....

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c) Re – insurance……

d) Cover note……

…… **(4mks)**

21. Match the following description of errors with the type of errors made when keeping books of accounts **(4mks)**

Description	Error type
(a) Occurs where errors is both the debit and credit balances are of equal amounts	
(b) Occurs where a transaction is not recorded at all in the books	
(c) Occurs when entries are made in the wrong class of accounts	
(d) Occurs where both the debit and credit entries are made using similar but erroneous figures	

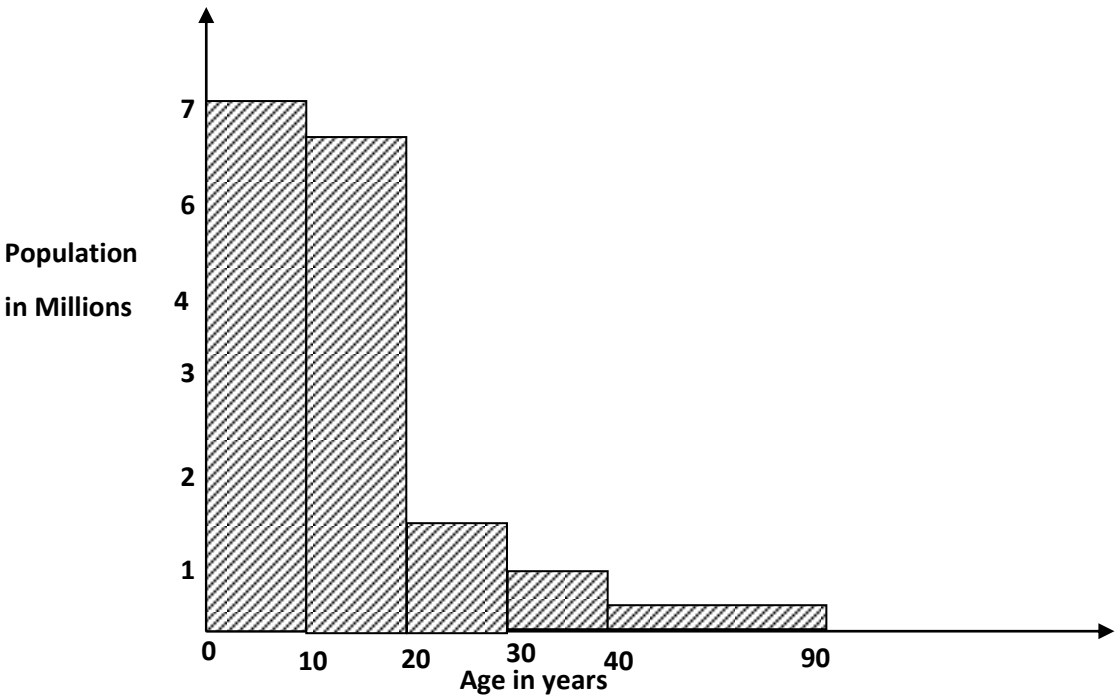
22. Give **three** reasons why the per capita income of a country may not change **(3mks)**

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23. The diagram below shows a population pyramid for a certain country



Give **four** challenges facing this country **(4mks)**

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24. Show the accounts to be debited or credited for the following transactions **(4mks)**

Transaction	**debited**	**credited**
(a) Paid wages in cash		
(b) Took business cash for private use		
(c) Purchased office equipment on credit from Sao Ltd		
(d) Paid telephone bill by cheque		

25. Give four reasons for the increased use of mobiles phones in banking. **(4mks)**

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SUKELLEMO JOINT MOCKS

KCSE 2021/22 TRIALS

(SERIES 001)

NAME……

SCHOOL…… **INDEX NO**……

SIGN…… **ADM NO** ……

565/2

BUSINESS STUDIES

Paper 2

Time: 2 ½ Hours

FOR EXAMINERS' USE ONLY

*Answer **ANY FIVE** questions. All questions carry equal marks.*

Questions	a	B	Totals
1			
2			
3			
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1. a) Explain **five** methods used by central bank to increase money supply in the economy. **(10mks)**

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b) Explain **five** principles of insurance**.** **(10mks)**

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2. a) Explain **five** negative effects of inflation. **(10mks)**

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b) The following trial balance was extracted from the books of Carson Traders on 31 December 2005 after preparing the trading account.

	Dr	**Cr**
Capital		130,000
Drawings	27,000	
Debtors and creditors	25,350	
22, 500		
Stock 31 Dec. 2005	25,000	
Wages and salaries	31,650	
Gross Profit		58,920
Discount	3,540	3,300
Advertising	3,130	
Bad debts	1,100	
General expenses	5,100	
Rates	2,750	
Cash in land	800	
Cash at bank	3,300	

Motor vehicles at cost	11,000	
Premises.	75, 000	
	214,720	214

720

The following additional information is provided.

(a) Wages due shs. 5,400

(b) Rates paid in advance shs 650

(c) Motor vehicles to be depreciated 20% on cost.

You are required to prepare

(i) Profit and loss account for the year ended 31 Dec. 2005 (6mks)

(ii) Balance sheets as at 31st Dec. 2005 (4mks)

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3 a) Discuss any **five** documents used in recording transactions in books of original entry

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b) Discuss five factors that may influence entrepreneurial practices positively in the country. **(10mks)**

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4 a) Explain **five** benefits of matatu reforms in transport sector. (10mks)

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b) Using a well labeled diagram, explain shift in demand and supply curve respectively

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5 a) Muema is planning to construct a warehouse for renting. Explain **five** measures that he may take to ensure its smooth operation. **(10 Marks**

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b) Outline **five** measures that the Kenya government may take to reduce unemployment**.(10 Mks)**

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6 a) Explain **five** methods used to distribute imported manufactured goods. **(10mks)**

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b) The following transactions relates to Konate Traders for the month of December 2010.

Dec 1st Started a business with sh. 200,000 in the Bank account.

2nd Bought furniture for sh, 50,000 and paid by cheque

3rd Sold goods on credit to Tila shs, 20,000; Katu 10,000

4th Bought goods on credit from Kahama sh 30,000; Kanga shs. 40,000

5th Returned faulty goods to Kahama sh 5,000

6th Paid Kahama on account by cheque less 10% cash discount.

7th Received faulty goods from Katu shs. 2000

8th Received payment due from Tila and Katu by cheque less 5% cash discount.

9th Cash sales shs. 100,000

10th Paid for wages shs. 20,000 by cash and electricity shs.10,000 by cheque.

11th Deposited all the cash in hand into the bank account.

Required:

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

SUKELLEMO JOINT MOCKS

KCSE 2021/22 TRIALS

(SERIES 001)

NAME……

SCHOOL…… **INDEX NO**……

SIGN…… **ADM NO** ……

101/1

ENGLISH

Paper 1

(Functional Skills)

2 hours

Instructions to candidates

1. *Write our name and index number in the spaces provided above.*
2. *Sign and write the date of examination in the spaces provided above.*
3. *Answer **all** the questions in this question paper.*
4. *All your answer must be written in the spaces provided in this paper.*
5. *Candidates should check the question paper to ascertain that all the pages are printed as indicated and that no questions are missing.*

For Examiner's Use Only

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

FUNCTIONAL WRITING (20MKS)

1. You are the manager of **Quick Safaris Transport Company.** Of late you've realized that the workers, mainly drivers and conductors have lost discipline, and this has made the company incur a lot of loss.

a) Write an internal memo to them, warning them of dire consequences if they do not change their behaviour and attitude.

Some of the areas you wish to address are:

i. Punctuality
ii. Foul language
iii. Lack of courtesy
iv. Policy bribery
v. Any other relevant area from your observation

(13 marks)

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b) Design a Card inviting the workers to a motivational talk with an aim of changing their behaviour and attitude. **(7 marks)**

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2. Read the passage below and fill in each blank space with an appropriate word. (10MKS)

Poaching is increasing *(1)* _____ a menance, not just in Kenya, (2) _____ also in other parts of the continent, (3) _____ a grave danger to the survival of various animal species particularly the elephant. Whereas, there have been *(4)* _____ to raise awareness about the danger posed by the menance, not enough has been done to *(5)*_____ it out and punish offenders.

As it is, poaching is becoming a crisis, threatening species like elephants, which are hunted *(6)* _____ for their ivory, rhinos which are targeted because of their horns and other game like lions.

The Kenya Wildlife Service has been doing well to combat *(7)* _____ but it appears that more is needed if the criminals*(8)* _____ to be stopped. If the killers have more sophisticated weaponry, then KWS must *(9)* _____ its game or call *(10)* _____ the military to assist.

Oral Skills

(30 marks)

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

Her lip suckle the nipples
Milk bubbles, foams and ripples
Little hands up in the air
Catch on the mother's hair
Sweet sensation rises in pressure
Tiny legs kick with pleasure
Sleep comes gently and strong
Sleep whispers softly and long.

(Emusara Ossie Enekase)

i. Identify any two pairs of rhyming words in the poem. **(1mk)**

ii. Identify one major sound pattern in the poem**.** **(1mk)**

iii. Give two examples of the above sound pattern**.** **(2mks)**

iv. How would you perform the last two lines of the poem? **(3mks)**

b) Suppose you were asked to make a speech at a friend's graduation party. What would you do to capture the audience's attention? **(5 mks)**

c) Challenger: Two Europeans peeping through the window.

Response : Mucus

i. Classify the above genre**.** **(1mk)**

ii. Identify and illustrate the most outstading stylistic device used in the above genre. **(1mk)**

iii. Give two functions of the above genre**.** **(2mks)**

i)…….

ii)……

d) In the words below, underline the part that should be stressed.

i. Suc.cess
ii. ad.vice
iii. Chal.lenge
iv. ob.serve **(4mk)**

e) Give a word with a similar pronounciation **(4mks)**

i. Muscle
ii. Worn
iii. Come
iv. Which

f) The following is a conversation between a father and his daughter. Identify six shortcomings in the father's listening skills.
(6mks)

DAUGHTER: *(Shortly after having arrived home from school)* Good afternoon, Daddy.

FATHER: *(Sitting complacently in the sofa, reading a newspaper. Looking up…….)*

Good afternoon.*(Resumes reading).*

DAUGHTER:*(Holding out her school report form)* Daddy, I'm excited. My classteacher said

I was the best improved. I was…

FATHER: Oh, you were? Me, I used to be number one. I was absolutely unbeatable.

DAUGHTER:Chemistry has been a particular headache(*now looking at the report form which she*

thought her father would wan see), but this time…

FATHER: *(Stretching his arms, looking preoccupied)*

Chemistry for me was particularly easy.

I never scored anything less than 90%.

DAUGHTER: Dad, I was going to tell you that this time…

FATHER: *(Absent-mindedly)* By the way, where is your mum?

DAUGHTER: Mum is in the garden pickng vegetables. But Dad,you are not listening to my story.

I was telling you about Chemistry.

FATHER: You mean you have a story about Chemistry? Chemistry is not about stories. It is hard

science.

DAUGHTER: It's about my improvement…

FATHER: (*Laughing)*Me, it wasn't a matter of improvement. I was always at the top of the class.

DAUGHTER: Daddy, I give up. You are not listening.

FATHER: *(looking surprised)* Listening? I heard you: you were talking about improvement in

Chemistry, weren't you?

DAUGHTER: Anyway, Dad. Thank you for paying attention. Enjoy your newspaper.

FATHER: Oh, yes I'm reading an interesting story about politics.

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SUKELLEMO JOINT MOCKS

KCSE 2021/22 TRIALS

(SERIES 001)

NAME……

SCHOOL…… **INDEX NO**……

SIGN…… **ADM NO** ……

101/2

ENGLISH

Paper 2

(Comprehension, Literary appreciation, Grammar)

2 ½ Hours.

Instructions to Students

1. *Write your Name, Admission Number and Class in the spaces provided above.*
2. *Answer **all** the questions in this question paper.*
3. *All your answers **must** be written in the spaces provided in this question paper.*
4. *Candidates should check the paper to **ascertain** that **all the pages** are **printed** as indicated and that no questions are missing.*

For Examiner's Use Only

Question	Maximum Score	Candidate's Score
1	**20**	
2	**25**	
3	**20**	
4	**15**	
Total	**80**	

Question 1: Reading Comprehension

Read the following passage and then attempt the questions that follow

As the biometric registration for the National Integrated Identity Management System prominently referred to as HudumaNamba is being rolled out, there is, justifiably, growing whimpers of scepticism among Kenyans. There has been a lot of speculation, rightfully so, because in this day and age of data piracy, people need assurances that the data collected under the HudumaNamba will not be used for **nefarious**activities.

These doubts have created room for the spread of misinformation and extensively contributed to the **registration apathy** witnessed since its commencement. It is therefore incumbent to clearly explain to Kenyans what, precisely, HudumaNamba is and what it is not.

According to the UN's Sustainable Development Goal (SDG 16.9), everyone should obtain legal identity by 2030. The World Bank estimates that today, one in six people are unable to prove their identity because there is a dearth of information about their background. In this era of globalisation, integrated information is critical to identification. With that in mind, a snippet of information from the Swedish replica of HudumaNamba gives hope for what the government must do to boost public confidence about the overriding unique value proposition of NIIMS.

A Swedish friend was carrying around an electronic card with a personal number and I got inquisitive. He first mentioned to me that the personal number is called *Personnummer* in Swedish. He expounded that some of the details contained in the chip include family members, spouses, employment status, employer's name, health insurance number, residential area and his exact location of his home.

With such information, the Swedish government, being a welfare state, is able to plan and provide social services easily. Unemployed adults can be mapped out for their monthly **stipend**; governments can know where more schools, hospitals, colleges and industries are needed; number of vulnerable people in need of social support and it can track down suspected criminals thus enhancing security.

Furthermore, the security of the data is strong. The first few *Personnummer* digits are accessed by anyone (they are merely the person's birthdate) while the remaining digits are only accessible by a specific legally mandated government department.

Clearly, NIIMS is quite similar, from face value and intention, to the Swedish one. What is now needed is strategic dissemination of information to reach out to a majority of Kenyans to

enhance public knowledge about HudumaNamba and its attendant benefits.

For efficient public service delivery, integration of data is imperative in planning, resource allocation and reducing unnecessary red tape. For instance, it is easy for the government to know the number of employed and unemployed people in order to develop a strategy for placement and absorbing them.

Again, centralised data provides a neatly weaved base of facts and figures that can be easily harnessed to provide information about the public sector, its performances and project/services prioritization. This will further inform rational budgetary allocation and logical channeling of resources to productive but needful public sectors.

Another advantage of HudumaNamba is that it will cure the skewed issuance of Identity Cards, especially during the electioneering periods where devious politicians can sometimes disenfranchise voters by withholding of IDs. This is made possible because any Kenyan above the age of six years is entitled to HudumaNamba. When they get to 18, the ball will be on their court to either register as a voter or not thus enhancing their civic rights. The HudumaNamba comes in handy in sealing the loophole of intentional voter disenfranchisement.

Kenya has been on the receiving end of organised terror attacks. This has posed an existential threat to our peace and security. But with HudumaNamba, pieces of information about individuals can be put together. Hence, it will be quite easy to compare the biometric data given vis-a-vis suspects of organised crimes.

Ultimately, the reservations Kenyans have should be fully addressed owing to the history of our country that has been characterised by unlawful profiling. HudumaNamba will streamline service delivery and reduce the number of documents one needs to access government services.

(Daily Nation, 30th April, 2019)

Question

a) Why has there been growing whimpers and skepticism among Kenyans on registration of Huduma Namba.? **(2mks)**

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b) What in the opinion of the writer can stop HudumaNamba registration apathy? **2mks.**

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c) In note form, outline the benefits of the Swedish *personnummer.* **4mks**

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d) What step should the government take to enhance knowledge about the HudumaNamba and its benefits?

2mks

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e) How according to the writer is the HudumaNamba going to solve voter disenfranchisement?

2mks

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f) What is the attitude of the writer towards HudumaNamba registration? **2mks**

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g) HudumaNamba will streamline service delivery. Add a question tag. **1mk**

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h) Comment on the tone the passage ends in. **2mks**

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i) Explain the meaning of the following words and phrases as used in the passage. 3mks

i. registration apathy

……..

ii. nefarious……

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iii. stipend…….....

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Question 2:

Read the following passage carefully and answer the questions that follow.

Mrs. Linde: No, indeed; I only feel my life unspeakably empty. No one to live for anymore. (Gets up restlessly) That is why I could not stand the life in my little **backwater** any longer. I hope it may be easier here to find something which will busy me and occupy my thoughts. If only I could have the good luck to get some regular work – office work of some kind –

Nora: But Christine, that is so frightfully tiring, and you look tired out now. You had far better go away to some watering-place.

Mrs. Linde: (walking to the window) I have no father to give me money for a journey, Nora.

Nora: (rising) Oh, don't be angry with me!

Mrs. Linde: It is you that must not be angry with me, dear. The worst of a position like mine is that it makes one so bitter. No one to work for, and yet obliged to be always on the lookout for chances. One must live, and so one becomes selfish. When you told me of the happy turn your fortunes have taken – you will hardly believe it – I was delighted not so much on your account as on my own.

Nora: How do you mean? – Oh, I understand. You mean that perhaps Torvald could get you something to do.

Mrs. Linde: Yes, that was what I was thinking of.

Nora: He must, Christine. Just leave it to me; I will broach the subject very cleverly – will think of something that will please him very much. It will make me so happy to be of some use to you.

Mrs. Linde: How kind you are, Nora, to be so anxious to help me! It is doubly kind of you, for you know so little of the burdens and troubles of life.

Nora: I --? I know so little of them?

Mrs. Linde: (smiling) My dear! small household cares and that sort of thing! You are a child, Nora.

Nora: (tosses her head and crosses the stage) You ought not to be so superior.

Mrs. Linde: No?

Nora: You are just like the others. They all think that I am incapable of anything serious.

Mrs. Linde: Come, come –

Nora: That I have gone through nothing in this world of cares.

Mrs. Linde: But my dear Nora, you have just told me all your troubles.

Nora: Pooh! – those were **trifles**. (lowering her voice) I have not told you the important thing.

Questions

1. Mrs. Linde says, "I only feel my life unspeakably empty," Briefly explain what happens to her before this excerpt regarding this statement. **4mks**

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2. Identify and explain any major theme brought out in this excerpt. **2mks**

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3. Identity and illustrate any character trait brought out in this excerpt regarding. **4mks**

a. Nora

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b. Helmer

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4. Identify and illustrate any two forms of style in the extract. **4mks**

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5. Nora says that she has not told Mrs. Linde 'the important thing'. Briefly explain what this is. **3mks**

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6. From this excerpt, Nora promises to get Mrs. Linde a job. From elsewhere in the text, how does this decision affect Nora? **3mks**

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7. You are just like the others. (Add a question tag) **1mk**

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8. "I have no father to give me money for a journey, Nora." ***2mks***

What is ironical about this statement?

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9. Explain the meaning of the following words as used in the extract. **2mks**

a. backwaters

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b. trifles

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Question 3:

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

IF

If you can keep your head when all about you
Are losing theirs and blaming it on you,
If you can trust yourself when all men doubt you,
But can make allowance for their doubting too;
If you can wait and not be tired of waiting,
Or be lied about, don't deal in lies,
Or being hated don't give way to hating,
And yet don't look too good, nor talk too wise.

If you can dream and not make dreams your master;
If you can think and not make thoughts your aim
If you can meet with Triumph and Disaster
And treat those two imposters just the same;
If you can bear to hear the truth you've spoken
Twisted by knaves to make a trap for fools,
Or watch the things you gave your life to, broken,
And stoop and build 'em up with worn out tools:

If you can make one heap of all your winnings
And risk it on one turn of pitch- and –toss,
And lose and start again at your beginnings
And never breath a word about your loss;
If you can force your heart and nerve and sinew
To serve your turn after they are gone,
And so hold on when there is nothing in you
Except the will which says to them: "Hold on!"

If you can talk with crowds and keep your virtue,
Or walk with kings – nor lose the common touch,
If neither foes nor loving friends can hurt you,
If all men count with you, but none too much;
If you can fill the unforgiving minute
With sixty seconds' worth of distance run

Yours is the earth and everything that's in it,

And- which is more-you'll be a Man, my son!

Rudyard Kipling

Questions

(i) Identify the persona of the poem. **2mks**

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(ii) How does the persona suppose our view of life should be? **2mks**

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(iii) In stanza two, the words 'Triumphant and Disaster 'are capitalized. Give a reason for the capitalization. **2mks**

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(iv) With illustrations, identify two features of style used in the poem. **4mks**

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(v) What is the dominant tone of the poem? **2mks**

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(vi) With close reference to stanza three line 1-4, comment on the attitude of the persona towards losing. **2mks**

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(vii) Explain the meaning of the following lines. **3mks**

(a) And stoop and build 'em up

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(b) And never breath a word

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(c) Walk with kings

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(viii) What 4 things according to the persona does it take for one to be a 'Man'? **4mks**

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Question 4: Grammar

(a) ***Rewrite the following sentences according to the instructions given.*** **(3mks)**

(i) If Ochieng had asked, I would have been able to assist. (Begin: Had…….)

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(ii) If I were the minister for National Security, I would ensure tighter security checks at the borders. (Begin: Were I…)

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(iii) The games teacher found out how fast Onesmus was when he started the race. (Begin: It was not...)

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(b) Fill the blanks with the correct form of the words in brackets. ***2mks***

(i) Their bodies had suffered …… as a result of malnutrition. (Contort)

(ii) The manager made several ……on the original invoice. (delete)

(c) Use the correct form of adverb from the words in brackets to complete the sentence. 2mks

(i) The excitement went _____, their neighbours filed a complaint. (board)

(ii) The remark that came from _____ angered the adjudicators. (stage)

(d) Complete these sentences using the correct order of the words in the brackets.

2mks

(i) He gave his wife an expensive ring in a

…… box.

(metal, square, jewelry, small)

(ii) The Kenyan ……. (military, combined,

powerful) forces soon overwhelmed the Somali terrorists.

(e) Fill the blanks with the correct preposition. ***4mks***

(i) All his colleagues condoled……. him……. his bereavement.

(ii) Could we meet …….church ……. exactly nine tonight.

(f) Explain the difference in meaning in the following pairs of sentences. ***2mks***

(i) I am sorry for disturbing you.

(ii) I am sorry to disturb you.

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SUKELLEMO JOINT MOCKS

KCSE 2021/22 TRIALS

(SERIES 001)

NAME……

SCHOOL…… **INDEX NO**……

SIGN…… **ADM NO** ……

101/3

ENGLISH

Paper 3

(Creative Composition and Essays Based on Set Texts)

2 ½ hrs

INTRUCTIONS TO CANDIDATES

(a) Answer three questions only
(b) Question 1 and 2 are compulsory.
(c) In question three answer 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) This paper consists of two printed pages.
(g) Candidates should check the question paper to ascertain that no questions are missing.
(h) Candidates must answer the questions in English.

FOR EXAMINER'S USE ONLY

QUESTION	MAXIMUM SCORE	CANDIDATE'S SCORE
1	20	
2	20	
3	20	
	TOTAL SCORE	

ANSWER THREE QUESTIONS ONLY

1. IMAGINATIVE COMPOSITION (COMPULSORY) (20 marks)

Either

(a) Write a composition ending in the following words …….. "If I was given another chance I would do things in a different way".

Or

(b) Write a story to illustrate the saying. "Once bitten twice shy".

2. COMPULSORY SET TEXT.

Henry Ole Kulet, BLOSSOMS OF THE Savannah (20marks)

"For Oloisudori and Olarinkoi there is no lesser evil." With illustrations from Henry Ole Kulet's, BLOSSOMS OF THE SAVANNAH write an essay illustrating the truth of this statement.

3. THE OPTIONAL SET TEXTS (20marks)

Answer any of the following three questions.

Either

(a) The short story

Chris Wanjala (Ed) Memories we lost

"A strong desire to accumulate more wealth can lead one to making imprudent decisions" Using the short story ***HOW MUCH LAND DOES MAN NEED*** by Leo Tolstoy, write an essay to justify the above proposition.

Or

(b) Drama

David Mulwa, Inheritance

With illustrations from David Mulwa's INHERITANCE write an essay showing how Neo-slavery manifests itself in African countries.

Or

(c) The Novel

John Steinbeck, The Pearl

"Fortune can sometimes lead us to calamities and bad omens." Discuss this statement with reference to THE PEARL by John Steinbeck.

SUKELLEMO JOINT MOCKS

KCSE 2021/22 TRIALS

(SERIES 001)

NAME……

SCHOOL…… **INDEX NO**……

SIGN…… **ADM NO** ……

102/1

KISWAHILI

KARATASI 1

INSHA.

SAA 1 ¾

MAAGIZO

Andika insha mbili

Swali la kwanza ni la lazima

Kisha chagua insha nyingine moja kutoka kwa hizo tatu zilizo bakia.

Kila insha isipungue maneno 400.

KWA MATUMIZI YA MTAHINI PEKEE

SWALI	JUMLA ALAMA	TUZO
	20	
	20	
JUMLA	**40**	

MASWALI

1. Wewe ni afisa anayeshughulikia maswala ya kijamii. Andika mazungumzo kati yako na mwanahabari kuhusu kuzorota kwa maadili katika jamii.

2. Eleza chanzo cha kukithiri kwa mauaji katika jamii.

3. Kuinamako ndiko kuinukako.

4. Andika kisa kinachomalizika kwa maneno yafuatayo.

…… Tangu siku hiyo niliapa sitasalimiana na dawa hizo za kulevya tena.

MWISHO

SUKELLEMO JOINT MOCKS

KCSE 2021/22 TRIALS

(SERIES 001)

NAME……

SCHOOL…… **INDEX NO**……

SIGN…… **ADM NO** ……

102/2

KISWAHILI

LUGHA

(Ufahamu, Ufupisho, Matumizi ya Lugha na Isimu Jamii)

KARATASI YA 2

MUDA: SAA 2½

MAAGIZO KWA MTAHINIWA

(a) *Jibu maswali yote.*

(b) *Majibu yote yaandikwe katika nafasi zilizoachwa katika kijitabu hiki cha maswali.*

(c) *Karatasi hii ina kurasa nane. Watahiniwa ni lazima waangalie kama kurasa zote za karatasi hii zimepigwa chapa sawasawa na kuwa maswali yote yamo*

KWA MATUMIZI YA MTAHINI PEKEE

SWALI	UPEO	ALAMA
1	15	
2	15	
3	40	
4	10	
JUMLA	80	

1. UFAHAMU (Alama 15).

Soma kifungu hiki kisha ujibu maswali.

Binadamu heshi kuwa na falsafa zinazojiri akilini mwake. Amejichanjia kijisayari chake na kufikirika mfano wa Mirihi katika falaki yake ya maisha. Ni sayari ndogo ambayo imejitenga na sayari nyingine kama vile kausi.

Mirihi kuna viumbe mauluti vyenye mitindo ya kustaajabisha. Tofauti na Kausi ambayo mabinti huwa na urembo wa kiasilia, wanamirihi ni "warembo" mithili ya walioanguliwa ja vifaranga. Viganja vyao na nyuso zao huwa zimekandwa kwa mafuta ya zebaki zikawa nyororo japo wengi huwa mithili ya suriama. Wasalaminiapo na wanakausi mikwaruzo yao huwachipua ngozi kwa kazi ya sulubu waifanyayo shambani. Fauka ya uchotara huo, wamefungasha kiasi huku wamejisetiri kwa vijisuruali na vijisketi ambavyo vimewabana kana kwamba vimeundwa kwa vitambaa vya mikononi na kutafuta misaada kutoka kwa majirani kuvivua na kuvivaa.

Wanakausi waliovalia nguo zinazowafika kwenye visigino, huchushwa mno na hivi vijiguo vinavyowasetiri hadi kwenye sisemi vilengesambwa, ukipenda magotini, bali kwenye mapaja. Ni kweli kwamba waso haya wana mji wao. Wanapondatia hasa kwenye hafla za maziko au arusi katika sayari ya Kausi Wanakausi hujibana pembeni kujionea malimwengu ulimwenguni. Minong'onezo ndio itajaa hewani "ni yakini Pemba ndiko kwenye nguo na wenda uchi wapo". Katika hafla hizo, wale mabinti wazuri wa Mirihi hubeba vibogoshi ambamo mara kwa mara hutoa vidubwasha vidogo vidogo na kuendelea kujipodoa huku shughuli zinapoendelea. Pengine huenda umesahau kuwa katika mipango na makadirio ya matumizi ya hafla hiyo marejeleo yanayokaririwa huwa "..... wajua watu wa Mirihi hawapendi....."

Mabinti wazuri wa Mirihi kila mmoja huwa amejibebea mwavuli na kujizuia mvua au jua huku amekumbatia maji ya chupa ya kutoka kwenye sayari ya Mirihi.

Wanakausi walalahoi huwa wakikata kiu yao rahisi kutoka kwenye mapipa yaliyojazwa maji au kwenye mifereji waliyobahatika kuwekewa na wizara ya maji, kwa kutumia viganja vya mikono. Mabwana wa Mirihi hawana haja na miavuli, wao huwa watu wenye zao. Huvalia kofia nene zinazoonekana kama somberero. Watembeapo huning'iniza funguo za magari ya kifahari katika mkono wa kushoto na simu ya rununu katika mkono wa kulia.

Hapa na pale watakuwa wakiwasiliana kwa simu zao na pia kupiga gumzo na maghulumu wa Kausi ambao kwa kawaida watakuwa wakiwarai Wanamihiri, "Utaniacha hivyo"

Baada ya hafla, mlo ambao huwa Wanamirihi hupakuliwa huku Mabwanamirihi wakidakia

wasichelewe, mabintimirihi wakinyofoa kwa mikono au kung'ofoa kwa midomo yao myekundu na Wanakausi wakichungulia kwa mbali wakisubiri nafasi yao itimie.

Ghafla mawingu yataanza kutanda upande wa mashariki na mambo sasa yatachukua mkondo mpya. Wanamirihi mchakamchaka huengaenga, mbio kwenye magari yao. Lakini kuna wale ambao hawana magari ya kukimbilia. Kawaida yao huwaita Wanamirihi wenzao faraghani "Baba fulani umejaza?".

Wengine ubaki kusema, "Uenda basi letu likaniacha, tutaonana nikija wikendi."

Hali iwapo mwanana, Wanakausi wakakuwa sasa ndio wakati wa kujitambulisha na wengine kuyajaza magari ya Wanamirihi ya kifahari, kwa maembe, avocado, ndizi na makochokocho ya vitu vya shambani. Baada ya miezi kadha,Wanakausi wachache watawazuru Wanamirihi kuwapa shukurani katika kijisayari chao cha Mirihi.

Hapo sasa watafumbua jibu la kitendawili watakapokumbana na Bintimirihi amebeba kijikaratasi cha nailoni kimejazwa embe dodo moja, sukumawiki bila kusahau kisehemu cha nyama alichopimiwa cha shilingi kumi. Kwa kuwa atapata malazi kwake atamshauri, ".....pengine unionyeshe bucheri tununue nyama.... tupitie dukani tununue ....." hapo kwake Malaika atakuwa ameshuka kutoka Kausi hadi Mirihi.

Lakini wengine ni wale ambao pindi tu utakapowasalimia watakukwa na "zamu ya usiku siku hiyo." Wanaovalia somberero watamlaki mwanakausi kwa mlahaka wa kifalme ili akastaajabie vitu kama **Majirafu,** mazulia, makochi, taja nitaje.

Yule wa awali atalala usiku huo usingizi mnono usio wa bugudha na kwenye kochi huku akihimiria kurauka mapema asikutwe na waliolala nyuma ya pazia. Hisia za Mwanakausi zitamrudisha katika tamthilia ya WoleSoyinka "Masaibu ya ndugu Jero kuwa "vidole vyote havikuumwa sawa." Mirihi ni sayari iliyo sheheni watu na viatu, kumbe Kausi ni shamba la paukwa pakawa la Edeni. Tafakari haya.

Maswali.

a) Andika anwani mwafaka ya taarifa hii. (alama 2)

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b) Eleza tofauti kati ya wanawake wa Mirihi na wale wa Kausi. **(alama 2)**

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c) "Mabwana wa Mirihi ni watu wenye zao". Thibitisha. **(alama 3)**

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d) Ni dhahiri kuwa Mirihi ni Sayari yenye watu na viatu. Nini maana ya viatu. Je, kuna viatu hapa? Thibitisha. **(alama 3).**

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e) Mwandishi anamaanisha nini anaposema " utaniacha hivyo?" **(alama 2)**

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……

f) Eleza maana ya: **(alama 2).**

i. Jirafu

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ii. Vibogoshi.

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UFUPISHO.

Soma makala yafuatayo kisha ujibu maswali:

Mitihani imetumiwa siku nyingi kama kigezo cha kupima werevu wa mwanafunzi katika kutekeleza majukumu ya kiakili yenye kuhitaji stadi mbalimbali. Hii ni njia ya kuaminika na ni rahisi ambayo imetumiwa miaka mingi na watahini kukadiria uwezo wa mtu. Lakini wale wanaopinga mitihani wanasema kuwa mitihani haipimi kwa njia inayoaminika uwezo wa kiakili wa mwanafunzi, badala yake, mitihani inakadiri tu uwezo wa mwanafunzi wa kukadiria mambo kama kasuku kwa muda mfupi uliojaa vitisho na shinikizo.

Wasioithamini mitihani pia wanadai kuwa mitihani humpa mtahiniwa wasiwasi mwingi. Hii ni kwa sababu hadhi na umuhimu wa mitihani imekuzwa sana miongoni mwa watahiniwa na jamii zima kwa jumla. Mitihani ndio kigezo pekee kinachokadiria kufaulu au kutofaulu Kwa mwanafunzi. Mustakabali wa mwanafunzi kuamuliwa na mtihani. Watahini hawajali Sana masuala mengine ambayo yanaweza kuhathiri jinsi mwanafunzi anavyoweza kuufanya mtihani. Kwa mfano, mtahiniwa anaweza, kuwa mgonjwa, au pengine hakulala vizuri siku iliyotangulia mtihani. Haya yote ni masuala yanayoweza kumfanya mtahiniwa kutofanya vizuri katika mtihani.

Elimu nzuri humfundisha mwanafunzi kutumia akili. Lakini mfumo wa elimu unaopendelea mitihani haufanyi hivyo. Mfumo wa aina hiyo husisitiza kufundisha yale yale yanayopatikana katika mwongozo uliotolewa tu. Mwanafunzi hapewi motisha ili kusoma kwa mapana na marefu ili kupanua akili yake. Badala yake mwanafunzi hufungiwa kwenye uwanja finyu ambamo haruhusiwi kutoka. Mwalimu naye kadhalika hana uhuru wa kumfundisha mwanafunzi kile anachofikiria kuwa muhimu katika maisha. Badala yake jukumu kubwa analoachiwa mwalimu huwa ni kumpa mwanafunzi mbinu za kukujibu maswali na kupita mtihani.

Ingawa wanaoitetea mitihani hudai kuwa matokeo ya mitihani ni ya kuaminika kwa sababu husahihishwa na watu wasiowajua watahiniwa, lakini ni vizuri pia kukumbuka kuwa watahini ni binadamu tu. Binadamu huchoka, huhisi njaa na zaidi ya yote anaweza kufanya makosa. Licha ya hayo yote, watahini hutakiwa kusahihisha rundo kubwa la karatasi, kwa muda mfupi. Mjadala uliopo kati ya wanaopendelea mitihani na wale wasiopendelea watukumbusha kuwa kuna haja kubwa ya kuendelea kuboresha mfumo wa mitihani ili uweze kukadiria kwa yakini uwezo wa kiakili wa mtahiniwa.

Maswali.

a) Fupisha aya ya kwanza na ya pili. **(maneno 60)** **(alama 9)**

Matayarisho.

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Jibu.

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b) Fupisha aya ya tatu na ya nne. (maneno 50) **(alama 6)**

Matayarisho.

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Jibu.

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3. MATUMIZI YA LUGHA. **(Alama40)**

a) Bainisha aina ya vivumishi katika sentensi hii.

Kazi hii itaondoa matatizo mengi. **(alama 2)**

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b) Andika kwa ukubwa. (alama 2)

i. Neno hilo halimo katika kitabu **(alama 2)**

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ii. Pakua ugali katika sahani

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c) Changanua sentensi hii ukitumia visanduku.

Twiga hukimbia mbio ingawa ni mrefu. **(alama 3)**

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d) Eleza dhima ya kila mofimu katika neno: (alama 3)

Waliofiana.

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e) Eleza maana ya maneno yaliyopigiwa mstari. **(alama 2)**

Vibofu vya vipofu wale ni vibovu kwani vinatoa mkojo wenye vipovu vya rangi

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f) Bainisha matumizi ya 'ni' katika sentensi . **(alama 2)**

Mkamateni Kanini ambaye ni mwanafunzi wangu niliyempeleka shuleni.

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g) Tambulisha na ueleze aina ya vitenzi katika sentensi ifuatayo: **(alama 2)**

Maua atakuwa akicheza uwanjani.

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h) Tambulisha aina za yambwa katika sentensi ifuatayo**.** ***(alama 2)***

Mwathe alimsomea Katua barua.

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i) Unda nomino mbili mbili kutokana na vitenzi vifuatafyo. **(alama 2)**

i. Jaribu

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.....

ii. Jua

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j) Eleza matumizi ya viambishi vilivyopigiwa kistari **(alama 3)**

i) Kaketi chini

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ii) Nikisoma kwa bidii nitapita mtihani

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iii) Mulinge acheza mpira vizuri.

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k) Sauti /e/ na /u/ hutamkwa vipi? **(alama 2)**

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i) Tunga sentensi moja ukitumia -a- ya uhusiano kuonyesha umilikaji **(Alama 2)**

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m) Tunga sentensi ukitumia 'mume' kama kielezi. **(alama 2)**

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n) Andika katika usemi halisi sentensi ifuatayo. **(alama 2)**

Mshauri aliwasisitizia watoto kuwa kulikuwa na umuhimu kuwatii wazazi wao kwani hili linaongeza siku zao duniani.

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o) Yakinisha sentensi hii katika nafsi ya pili umoja . **(alama 2)**

Tusipoelewana na walimu hatutapata amani siku zote shuleni.

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p) Andika kwa wingi. **(alama 3)**

Mwenye nguvu achimbe nguzo ya ua.

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q) Andika upya sentensi ifuatayo ukifuata maagizo. **(alama 2)**

Nimemleta paka ili aue panya wote wanaotusumbua hapa kwetu nyumbani.

(Anza…….Panya……)

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r) Tumia mzizi -zee katika sentensi kama **(alama2)**

i)

Nomino……

ii)

Kivumishi……

4. (ISIMUJAMII) (alama 10)

a) Katika jamii huwa wakati mwingine kuna matumizi ya lugha isiyo ya kistaarabu. Taja mifano mitano ya lugha sampuli hiyo **(alama 5)**

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b) Taja mambo matano yanayoathiri jinsi tunavyoweza kutumia lugha katika jamii. (alama 5)

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SUKELLEMO JOINT MOCKS

KCSE 2021/22 TRIALS

(SERIES 001)

NAME……

SCHOOL…… **INDEX NO**……

SIGN…… **ADM NO** ……

102/3

KISWAHILI

Fasihi

Saa 2 ½

Maagizo

- *Jibu maswali manne pekee katika karatasi hii*
- *Kila swali lina alama ishirini*
- *Usijibu maswali mawili kutoka sehemu moja*
- *Hati yako iwe ya kuonekana vyema*
- *Dumisha usafi katika karatasi hii*

Kwa matumizi ya mtahini pekee

SWALI (SEHEMU)	ALAMA	TUZO
	20	
	20	
	20	
	20	
	80	

SEHEMU A: USHAIRI (ALAMA 20)

Soma shairi lifuatalo kisha ujibu maswali.

Swali 1. LAZIMA

1. Mkatanimkatika, harithihatorithiwa
Sinaninalolishika, walaninalochukuwa
Mlimwengukanipoka, hata tone la muruwa!
Mrithininiwanangu?

2. Sinango'ombesinambuzi,sinakondesinabuwa
Sinahatamakaazi, mupasayokuyajuwa
Sinamazurimakuzi, jinsinilivyoachiwa
Mrithininiwanangu?

3. Sinakazisinabazi, ilawingiwashakawa
Sinachembeyamajazi, mnonikukamuliwa
Nakwa'cheniupagazi, mgumukwenuku'tuwa
Mrithininiwanangu?

4. Sinasikuachajina, mkatahatasifiwa
Hatanifanye la mana, mnonikulaumiwa
Poleniwanangusana, sinakwenu cha kutowa
Mrithininiwanangu?

5. Sinaleosinajana, sinakeshokutwaliwa
Sinazizisinashina, walatawikuchipuwa
Sinawanangu mi sana, la kwacha nakuraduwa
Mrithininiwanangu?

6. Sina utu sinahaki, milayangumeuliwa
Nyumayanguilidhiki, nambeleimekaliwa
N'nawananamikiki, hadin'tapofukiwa

Mrithininiwanangu?

7. Sinai la keshokwenu,wenyewekuiongowa
Muwanekwanyingi,mbinumwendepasikupuwa
Leo siyo, keshoyenu, kamamutajikamuwa
Mrithininiwanangu?
(Kina cha maishaA.S.Mohammed)

MASWALI

a) Eleza hali ya mzungumzaji katika shairi hili **(alama 4)**

b) Eleza dhamira kuu ya mshairi kulitunga shairi hili **(alama 2)**

c) Ni nani anayezungumziwa na nafsi neni katika shairi hili? **(alama 2)**

d) Eleza toni ya shairi hili **(alama 2)**

e) Fafanua mbinu tatu za lugha zilizotumiwa katika shairi hili **(alama 3)**

f) Tambua bahari ya shairi hili ukizingatia. **(alama4)**

a. Mizani
b. Vina

g) Andika ubeti wa mwisho kwa lugha ya nathari/tutumbi. **(alama 3)**

SEHEMU B: RIWAYA: CHOZI LA HERI - Assumpta K. Matei

Jibuswali la 2 au 3

2. 'Haya ni matokeo yaubahimu wa binadamu'

a) Tia maneno haya kwenye muktadha wake **(alama 4)**

b) Eleza masifsa sita za msemaji wakau lihii **(alama 6)**

c) Kwa hojakumi, Jadili ubahimu mwingine unaotendwa na binadamu riwayani**(Alama 10)**

3. 'Baba umewahi kumwona mtoto wa miaka hamsini ambaye hajasota ;sikwambii kusima madede?"

Jadili ukweli wa kauli iliyopigiwa mstari katika kauli hapo juu.Tumia hoja ishirini **(Alama 20**)

SEHEMU C: TAMTHILIA: KIGOGO- Pauline Kea

Jibuswali la 4 au 5

4. "Na hiyo sauti ya Jabali imekuwa adha. Inanikamaroho….."

(a) Eleza muktadha wa dondoo hili **(Alama 4)**

(b) Tambua mbinu mbili za lugha zilizotumika dondooni. **(Alama 2)**

(c) Kwa hoja kumi na nne fafanua matendo mengine yanayomkama roho msemaji (Alama 14)

5. Eleza athari zozote kumi za tamaa na ubinafsi kwa kurejelea tamthilia ya kigogo**.(Al 20)**

SEHEMU D: HADITHI FUPI : TUMBO LISILOSHIBA NA HADITHI NYINGINE

Jibuswali la 6 au 7.

6. Jadili maudhui ya elimu katika diwani ya Tumbo Lisiloshiba ukizingatia hadithi zifuatazo **(alama 20)**

a) Mapenzi ya kifaurongo
b) Shogake dada anandevu
c) Mame Bakari
d) Mwalimu mstaafu
e) Mtihani wa maisha

AU

7. SHIBE INATUMALIZA – Salma Omar Hamad

1. "…madonda ya tumbo obesiti, nikulatu ! "

a) Eleza muktadha wa dondoo hili **(alama 4)**

b)Taja na ueleze sifa mbili za msemewa **(alama 4)**

c)Taja na utoe mifano miwili ya mbinu za lugha zinazojitokeza kwenye dondoo **(alama 2)**

d)Jadili maudhui matano yanayojitokeza katika hadithi husika. **(alama 10)**

SEHEMU E: FASIHI SIMULIZI (ALAMA 20)

a) Eleza maana ya vipera vifuatavyo vya fasihi simulizi. **(alama. 8)**

i. Misimu

ii. Ngomezi

iii. Miviga

iv. Maapizo

b) i. Fafanua dhima **sita** za miviga katika jamii yako. **(alama. 6)**

ii. Tambulisha sifa zozote **sita** za misimu. **(alama. 6)**

MWISHO

SUKELLEMO JOINT MOCKS

KCSE 2021/22 TRIALS

(SERIES 001)

NAME……

SCHOOL…… **INDEX NO**……

SIGN…… **ADM NO** ……

311/1

HISTORY AND GOVERNMENT

PAPER 1

TIME: 2 ½ HRS

Kenya certificate of Secondary Education

INSTRUCTIONS

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

b) *Answer all the questions in section A, three questions from section B and two questions from section C.*

c) *Answers to all questions must be written in the ruled papers provided.*

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

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

SECTION A (25 Marks)

Answer ALL questions in this section.

1. Give ***two*** shortcomings of relying on oral traditions as a source of historical information. **(2 marks)**

2. Give the name of the historical site where the remains of Kenyapithecus (*Ramapithecus*) were first discovered. **(1 mark)**

3. Give ***two*** natural calamities that influenced the migration of the Eastern Cushites into Kenya. **(2 marks)**

4. State the ***main*** significance of circumcision in some traditional Kenyan societies. **(1 mark)**

5. Mention ***three*** factors that facilitated the coming and settlement of the Arabs to the East African Coast. **(3 marks)**

6. State ***two*** circumstances under which the Government of Kenya may revoke citizenship acquired through registration. **(2 marks)**

7. State the ***main*** reason why National Integration is important in Kenya. **(1 mark)**

8. Identify ***two*** characteristics of a written constitution. **(2 marks)**

9. Identify ***two*** groups of rights entitled to a child in Kenya. **(2 marks)**

10. State ***two*** terms of the Anglo-German Agreement of 1886. **(2 marks)**

11. Identify ***one*** duty of the British Governor in Kenya during the colonial period**.(1 mark)**

12. Name ***one*** political association formed in Kenya before 1939. **(1 mark)**

13. Give ***two*** reasons why the Kenya Parliament is regarded as supreme**.** **(2 marks)**

14. State ***one*** source of Nyayo Philosophy. **(1 mark)**

15. Identify ***one*** way in which the government promotes Kenyan culture. **(1 mark)**

16. Name ***one*** organ of the County Government. **(1 mark)**

17. Give **one** challenge facing the health sector in Kenya today. **(1mks)**

SECTION B (45 MARKS)

Answer any THREE questions from this section.

18. (a) Give any **three** example of the western Bantus that settled in Kenya by 1000AD **(3mks)**

(b) Explain the effects of River Lake Nilotes migration and settlement in Kenya up to 19th C **(12mks)**

19. a) State ***three*** functions of mission stations in Kenya in the 19th century. **(3 marks)**

b) Explain ***six*** factors that facilitated missionary activities in Kenya in the 19th century. **(12 marks)**

20 (a) Identity **three** methods used by the British to establish their rule in Kenya. (**3 marks)**

(b) Explain **six** results of the Nandi resistance against British occupation. **(12 marks)**

21. (a) Identify **three** types of landholding in Kenya. **(3 marks)**

(b) Explain **six** political challenges that have faced post-independent Kenya. **(12 marks)**

SECTION C (30 MARKS)

Answer any two questions from this section

22a) State **three** ways in which the constitution promotes national unity **(3marks)**

b) Explain the importance of National Integration in Kenya **(12marks)**

23 (a) Give **three** functions of a constitution. **(3marks)**

b) Describe the key stages in the constitution making process in Kenya. **(12marks)**

24 a) Identify **three** conditions one must fulfill to be declared as a winner in the presidential Election **(3mrks)**

(b) Explain ***six*** powers and function of the president in Kenya **(12 marks)**

SUKELLEMO JOINT MOCKS

KCSE 2021/22 TRIALS

(SERIES 001)

NAME……

SCHOOL…… **INDEX NO**……

SIGN…… **ADM NO** ……

311/2

HISTORY AND GOVERNMENT

PAPER 2

TIME: 2 ½ HRS

Kenya certificate of Secondary Education

INSTRUCTIONS TO CANDIDATES

a) *This paper consists of three sections A, B and C.*
b) *Answer all the questions in section A, three questions from section B and two questions from section C.*
c) *Answers to all questions must be written in the ruled papers provided.*
d) *Candidates should check the question paper to ascertain that all the pages are printed and that no questions are missing.*
e) *Candidates should answer the questions in English.*

SECTION A:(25MARKS)

Answer all the questions

1. Identify the theory explaining that the world and all that is in was created by a special supreme being. **(1mk)**
2. Name the group of old stone age man, who is associated with oldwan tools. **(1mk)**
3. Name **two** ancient writing in Mesopotamia and Egypt. **(2mks)**
4. Give **two** forms of traditional currency used in Africa. **(2mks)**
5. Give **two** forms of water transport used during ancient times. **(2mks)**
6. State **two** uses of horn blowing in traditional African societies. **(2mks)**
7. State **one** reason why African slaves were preferred during the Trans- Atlantic slave trade. **(1mk)**
8. Identify **two** chartered companies used to administer East Africa during the process of colonization. **(2mks)**
9. State **two** factors that facilitated scientific revolution in Europe from 14th century. **(2mks)**
10. Give **two** duties of the Katikiro in the Buganda community. **(2mks)**
11. State **one** main function of the royal fire in Mwene Mtapa Kingdom. **(1mk)**
12. Identify **one** way through which the Europeans maintained peace among themselves during the partition of Africa. **(1mk)**
13. Name two former Portuguese colonies in Africa. **2mks)**
14. Give one specialized UN agency which finances development programmes in developing Nations. **(1mk)**
15. State the main reason that lead to the end of World war II **(1mk)**
16. State the function of the OAU Liberation committee **(1mk)**
17. Give one military organization formed by power blocks during the cold war period. **(1mk)**

SECTION B: (45MARKS)

Answer any three questions from this section

18.a) Give three stages in the evolution of man after Homo Habilis. **(3mks)**

b) Explain six cultural practices of Homo-erectus during the old stone age period. **(12mks)**

19.a) Outline three advantages of road transport. **(3mks)**

b) Explain six effects of telecommunication in modern society. **(12mks)**

20.a) Give three systems of administration used by the colonists in Africa. **(3mks)**

b) Explain six results of the collaboration between the British and Lewanika. **(12mks)**

21.a) Give three methods used by Mozambican nationalists to struggle for Independence. **(3mks)**

b) Explain six challenges faced by FRELIMO in nationalist struggle. **(12mks)**

SECTION C: (30MARKS)

Answer any two questions from this section

22.a) Give three reasons why the British used direct rule to administer Zimbambwe. **(3mks)**

b) Explain six reasons for the failure of the policy of assimilation. **(12mks)**

23.a) Apart from Britain name three permanent member states of the UN security council.**(3mks)**

b) Explain six causes of the cold war after 1945. **(12mks)**

24.a) Give three organs of EAC 2001 **(3mks)**

b) Explain six achievements of EAC – 2001 **(12mks)**

SUKELLEMO JOINT MOCKS

KCSE 2021/22 TRIALS

(SERIES 001)

NAME……

SCHOOL…… **INDEX NO**……

SIGN…… **ADM NO** ……

313/1

CHRISTIAN RELIGIOUS EDUCATION

PAPER 1

TIME: 2½ HOURS

Kenya Certificate of Secondary Education

INSTRUCTIONS TO CANDIDATES:

(a) *This paper consists of **SIX** questions.*

(b) *Answer any **FIVE** questions in the answer booklet provided.*

Question	1	2	3	4	5	6	Total Score
Marks							

ANSWER ANY FIVE QUESTIONS

1. (a) Identify **seven** activities performed by God in the second Biblical creation accounts in Genesis 2:4 – 23. **(7mks)**

(b) Give **five** reasons why Biblical creation story has two accounts of the same event. **(5mks)**

(c) Explain **four** ways on how the use of the Bible has hindered the spread of the Good News in Kenya. **(8mks)**

2. (a) Describe the sealing of the Sinai covenant in Exodus 24:4-8. **(8mks)**

(b) Identify and explain the attributes of God as understood by the Israelites during the Exodus and when they were at Mt. Sinai. **(6mks)**

(c) State **six** values which a Christian learn from the call of Moses. **(6mks)**

3. (a) Explain **four** ways in which King Solomon fulfilled Samuel's prophecy against kingship in Israel. **(8mks)**

(b) Outline God's promises to King David through Prophet Nathan. **(6mks)**

(c) Give **six** ways in which Christians can deal with challenges they face in modern society. **(6mks)**

4. (a) Explain **four** characteristics of the day of Lord as prophesized by prophet Amos. **(8mks)**

(b) State **six** forms of punishment God would give Israel according to prophet Amos. **(6mks)**

(c) Show ways in which the church is carrying out its prophetic role in the society today. **(6mks)**

5. (a) Outline Jeremiah's teaching on judgement and punishment. **(8mks)**

(b) Explain symbolic acts related to judgement and punishment according to prophet Jeremiah. **(7mks)**

(c) Identify **five** reasons why Christians face the danger of being punished today. **(5mks)**

6. (a) Give the importance of marriage in Traditional African Societies. **(8mks)**

(b) Identify **seven** reasons why kinship system was highly valued in Traditional African societies. **(7mks)**

(c) State **five** factors that have weakened kinship system today. **(5mks)**

SUKELLEMO JOINT MOCKS

KCSE 2021/22 TRIALS

(SERIES 001)

NAME……

SCHOOL…… **INDEX NO**……

SIGN…… **ADM NO** ……

313/2

CHRISTIAN RELIGIOUS EDUCATION

PAPER 2

TIME: 2½ HOURS

Kenya Certificate of Secondary Education

INSTRUCTIONS TO CANDIDATES:

(a) *This paper consists of **SIX** questions.*

(b) *Answer any **FIVE** questions in the answer booklet provided.*

Question	1	2	3	4	5	6	TotalScore
Marks							

ANSWER ANY FIVE QUESTIONS

1. (a) Show how Jesus fulfilled Isaiah's prophecy of a suffering servant. **(6mks)**

(b) Explain what the Benedictus reveals about the nature of God. **(7mks)**

(c) Explain the importance of singing in a Christian service. **(7mks)**

2. (a) Give the qualities of true discipleship according to Jesus' teaching.

(Luke 6:20 – 49) **(7mks)**

(b) Narrate the healing of the Gerasene demonic. **(7mks)**

(c) Identify **six** ways through which Christians show concern to non-Christians. **(6mks)**

3. (a) Narrate the incident in which Jesus praised the widow who offered two copper coins in the temple in (Luke 21:1-4). **(5mks)**

(b) What is the significance of the Lord's Supper to Christians today? **(8mks)**

(c) How can Christians prepare themselves for the second coming of Christ? **(7mks)**

4. (a) Explain the Christian criteria for discerning the gifts of the Holy Spirit. **(5mks)**

(b) State the various gifts of the Holy Spirit. **(8mks)**

(c) What lessons do Christians learn from the activities of the early church? **(7mks)**

5. (a) Outline ways through which a marriage partner is chosen in traditional African communities. **(8mks)**

(b) Explain why divorce was rare in traditional African communities. **(6mks)**

(c) Identify the effects of divorce on children in Kenya today. **(6mks)**

6. (a) Describe how wealth was acquired in traditional African communities. **(5mks)**

(b) Explain how money economy has undermined the principles of Christian living. **(8mks)**

(c) Outline ways in which Christians in Kenya utilize their wealth. **(7mks)**

SUKELLEMO JOINT MOCKS

KCSE 2021/22 TRIALS

(SERIES 001)

NAME……

SCHOOL…… **INDEX NO**……

SIGN…… **ADM NO** ……

312/1

GEOGRAPHY

PAPER 1

TIME: $2^{3}/_{4}$ HOURS

INSTRUCTIONS TO CANDIDATES

- *This paper has two sections,* ***A*** *and* ***B.***
- *Answer question* ***6*** *and any other* ***TWO*** *questions.*

FOR EXAMINERS USE ONLY

SECTION	QUESTION	MARKS	SCORE
A	1-5	25	
B	6	25	
	7	25	
	8	25	
	9	25	
	10	25	
TOTAL MARKS		**100**	
TOTAL SCORE			

SECTION A

Answer all questions in this section

1. a) **Name** the biggest planet in the solar system. **(1mk)**

b) **State three** characteristics of the core. **(3mks)**

2. a**) Define** the following terms.

i. Dew point **(1mk)**

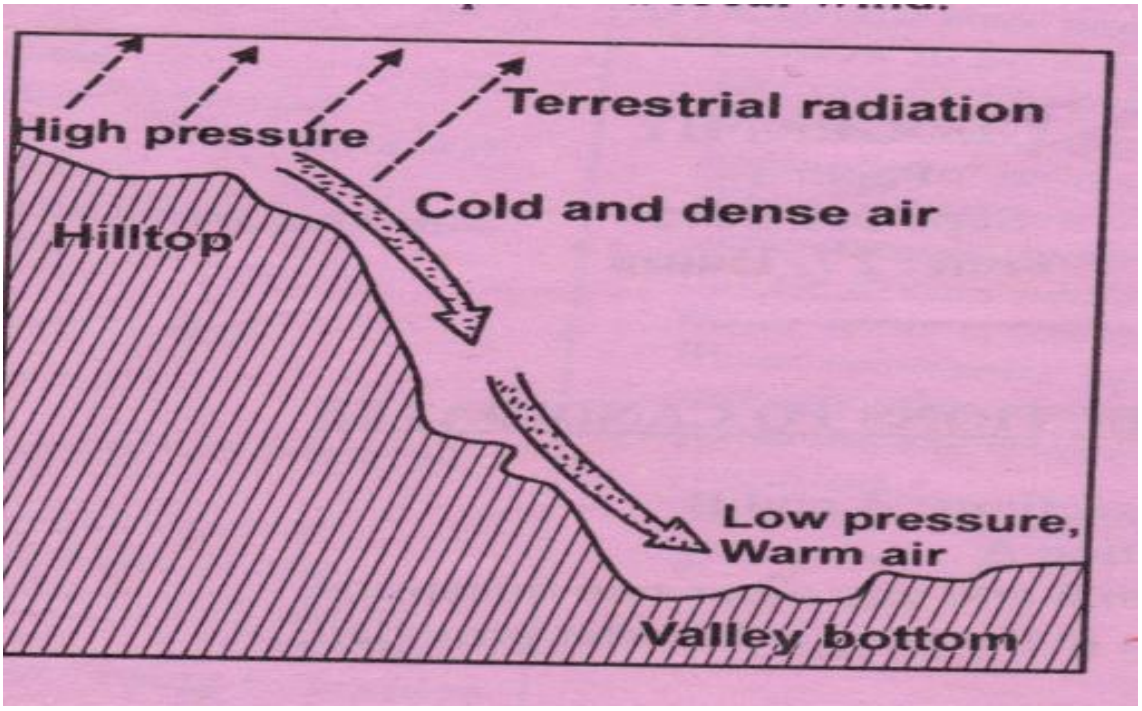
ii. Temperature inversion **(1mk)**

b) Identify **three** sources of carbon dioxide in the atmosphere. **(3marks)**

3. a) **State three** causes of earth movements. **(3mks)**

b) **Name two** main earthquake zones in the world. **(2mks)**

4. The diagram below shows a an example of a local wind



a) Identify the local wind **. (1mk)**

b) Describe how the wind is formed. **(4mks)**

5. Identify **two** sources of underground water. **(2mks)**

b) State **three** conditions that favour the formation of artesian walls. **(3mks)**

SECTION B

Answer question 6 and any other two questions from this section

6. Study the map of **Oyugis 1:50000 [sheet index 130/1]** provided and answer the following questions

a) i) Give the **four** figure grid reference of the trigonometrical station at Matieka **(2mks)**

ii) Identify **three** man made features in the grid square 7628. **(3mks)**

iii) Identify the adjoining sheet to the North –east of Oyugis **(1mk)**

b) Draw a rectangle measuring 12cm by 8cm to enclose the area between northings 23 and 25 and between eastings 70 and 73 **(2mks)**

On the rectangle, mark and label the following

i. River Nyamaura **(1mk)**

ii. All weather loose surface road **(1mk)**

iii. Bridge/bridges **(1mk**

iv. forest **(1mk)**

c) i) **Describe** the drainage of the area covered by the map. **(5mks)**

ii) **Describe** the relief of the area covered by the map. **(5mks)**

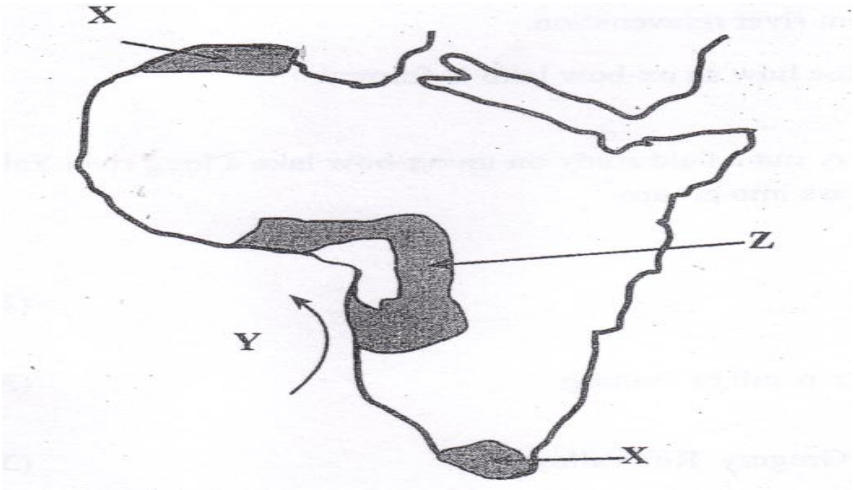
d) Identify **three** social functions found in the area covered by the map. **(3mks**

7. a) i) What is fog. **(2mks)**

ii) State **two** conditions necessary for the formation of fog. **(2mks)**

b) i) With the aid of a labeled diagram, **describe** how relief rainfall is formed. **(7mks)**

c) Use the map of Africa below to answer the questions that follows.



Name

i. Type of climate experienced in the region marked X. **(1mk)**

ii. The ocean current marked Y. **(1mk)**

iii. **Describe** the characteristics of the type of climate found in shaded area marked Z. **(4mks)**

d) Suppose your class carried out a field study on weather around the school environment

i. Explain **two** effects of wind on climate that they are likely to have identified. **(2mks)**

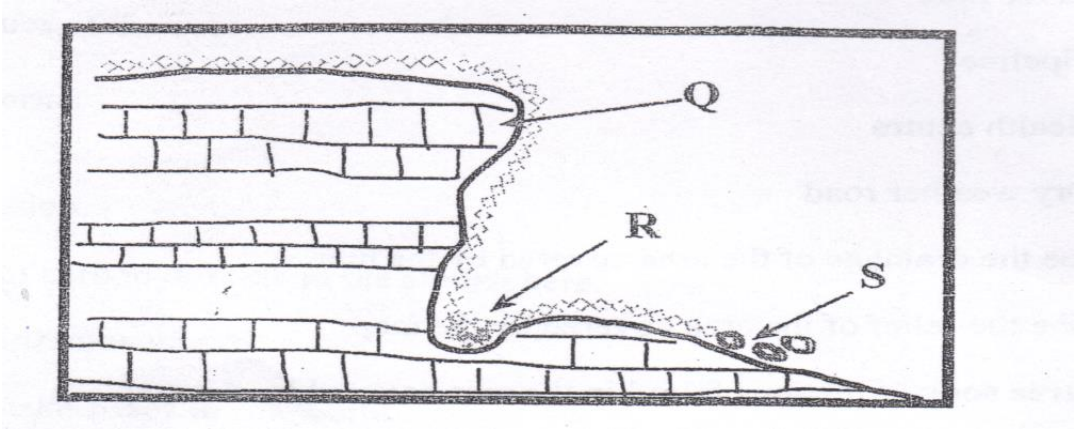
ii. Give **two** methods that you used to collect data in the field. **(2mks)**

iii. **Give two** follow up activities that you were involved in after the field study. **(2mks)**

8. a) i) Differentiate between a watershed and a confluence. **(2mks)**

ii) **Describe two** processes though which a river erodes its channel . **(4mks)**

b) The diagram below shows a water fall. Use it to answer question b (i)



i. **Name** the parts marked Q, R and S. **(3mks)**

Q – **(1mk)**

R – **(1mk)**

S – **(1mk)**

ii. Explain **two** causes of river rejuvenation. **(1mk)**

iii. Name **two** features resulting from river rejuvenation. **(2mks)**

c) Using well –labeled diagrams, **describe** how an ox-bow lake is formed. **(6mks)**

d) Your Geography class intends to carry out a field study on an ox-bow lake a long river Yala. Give four reasons for dividing the class into groups. **(4mks)**

9. a i) **Define** the term faulting. **(2mks)**

ii) Name **three** featured formed as a result of faulting. **(3mks)**

b) i) State **three** characteristics of the Gregory Rift Valley. **(3mks)**

ii) Give **three** theories that explain the origin of the Rift Valley. **(3mks)**

iii) Explain **four** ways in which faulting influence drainage. **(8mks)**

c) A form **4** geography class of Mwarano High School carried out a field study on the section of the Rift Valley in Kenya.

i. State **three** preparations they had before the study. **(3mks)**

ii. State **three** ways of data recording activities used during the study. **(3mks)**

10. a) i) **Define** the term soil. **(2mks)**

ii) Name **two** types of soil according to texture. **(2mks)**

b) Briefly **explain** how the following factors influence soil formation.

i. Climate **(4mks)**

ii. Living organisms. **(4mks)**

c) i) **Differentiate** between soil profile and soil catena. **(2mks)**

ii) List **three** processes which influence the development of soil profile. **(3mks)**

d**) Explain** how the following human activities lead to soil erosion.

i. Continuous ploughing **(2mks)**

ii. Cutting down trees. **(2mks)**

e) Identify **four** consequences caused by severe soil erosion in an area. **(4mks**

SUKELLEMO JOINT MOCKS

KCSE 2021/22 TRIALS

(SERIES 001)

NAME……

SCHOOL…… **INDEX NO**……

SIGN…… **ADM NO** ……

312/2

GEOGRAPHY

Paper 2

Time: 2 ¾ HOURS

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

INSTRUCTIONS TO CANDIDATES

- *This paper contains Two sections: A and B*
- *Answer ALL the question in section A.*
- *In section B answer question 6 and any other two questions from Section B*
- *Answers to be written in the answer booklet provided*

SECTION A

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

1. (a) State three ways in which minerals occur **(3 mks)**

(b) Name any two types of underground mining **(2 mks)**

2. (a) What is a forest **(1 mk)**

(b) State any two characteristics of the tropical hardwood forests. **(2 mks)**

(c) State two main species of softwood trees mainly grown in Canada. **(2 mks)**

3. (a) State one major characteristics of non-renewable energy sources**.** **(1mk)**

(b) Name any two non-renewable energy sources. **(2mks)**

(c) State any two effects of charcoal burning in the environment. **(2mks)**

4. (a) What is a trading bloc. **(2mks)**

(b) State any three factors influencing trade. **(3mks)**

5. (a) Name any two pre- historic sites that are popular with tourists in Kenya. **(2mks)**

(b) State the three agencies set up by the three governments of East Africa countries to manage the game parks and take care of the wildlife**.** **(3mks)**

SECTION B

Answer question (6) compulsory and any other two questions.

6. The table below shows the population for the three district of Trans–Nzoia County.

DISTRICT	2008	2009	2010	2011
TRANS-NZOIA WEST	150	175	180	200
TRANS-NZOIA EAST	25	30	25	28
KWANZA	10	20	30	32

Note

Population in

(a) (i) U sing the above information, construct a compound bar graph. Use a scale of 1cm Represent 25,000 people use the graph paper provided. **(9mks)**

(ii) Draw any two conclusions from the bar graph you have constructed **(2mks)**

(b) Explain three factors causing internal migration in Kenya. **(6mks)**

(c) (i) Explain three factors leading to slow population growth in some parts of East Africa. **(6mks)**

(ii) State any two importance of a high population in a country. **(2mks)**

7. (a) (i) Name 2 major towns found in the oil palm growing areas in Nigeria. **(2mks)**

(ii) Explain four physical features favouring oil palm growing in Nigeria. **(8mks)**

(b) Describe the steps involved in the processing of oil palm from the time is harvested. **(8mks)**

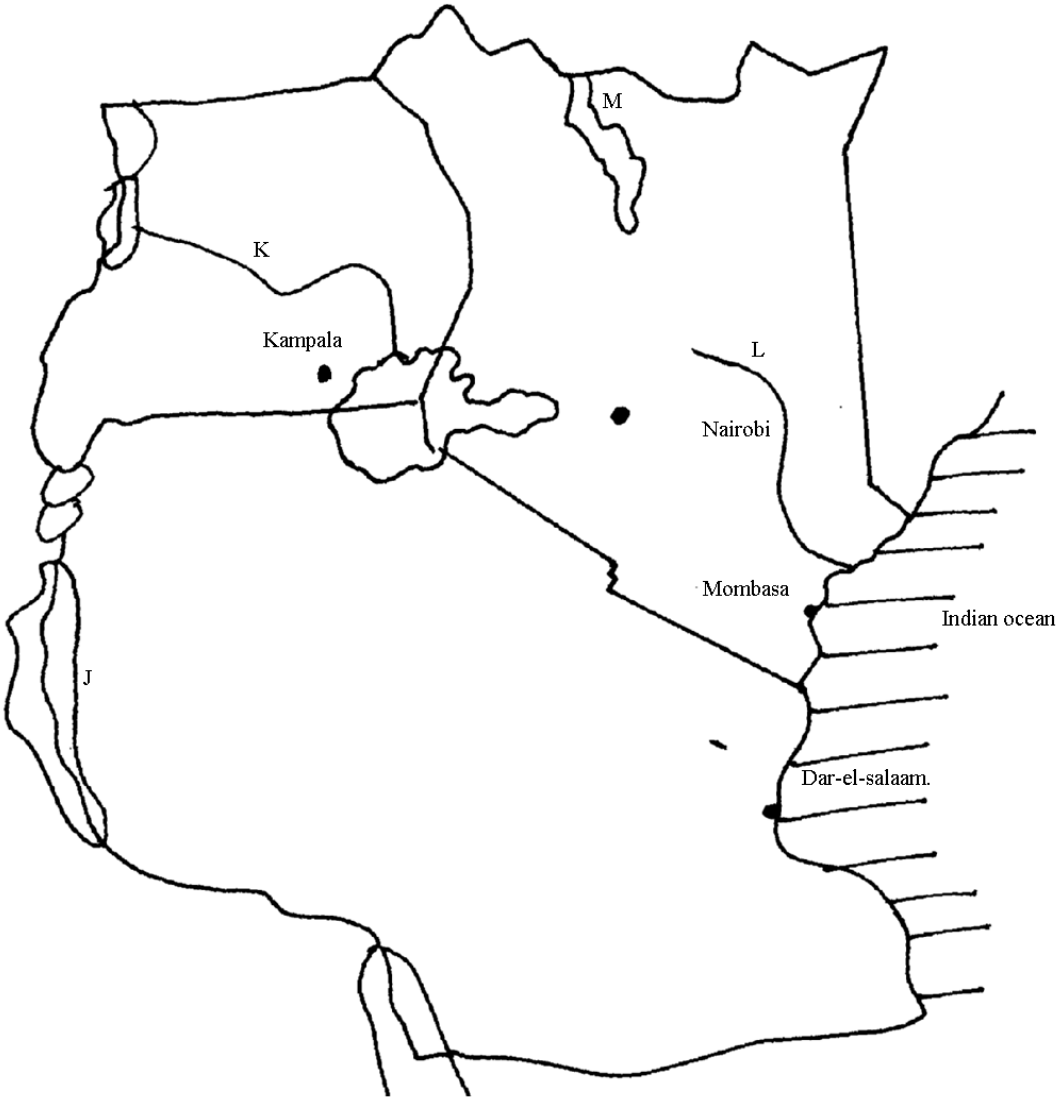
(c) (i) State four problems facing oil palm farmers in Nigeria. **(4mks)**

(ii) List three uses of oil palm. **(3mks)**

8. (a) (i) What are pelagic fish **(1mk)**

(ii) Give two examples of pelagic fish **(2mks)**

(b) The map below shows fishing grounds in East Africa. Use it to answer the questions that Follows



(i) Name the fishing grounds marked J, K, L and M. **(4mks)**

(ii) Explain the solutions to any four problems facing Inland fishing in East Africa. **(8mks)**

(c) Explain three factors why the Namibian Coast fishing ground is not well developed like other major fishing grounds in the world. **(6mks)**

(d) Compare fishing in Kenya and Japan under the following sub- headings.

(i) Market. **(2mks)**

(ii) Nature of landscape. **(2mks)**

9. **(a)** (i) Define land Rehabilitation **(2mks)**

(ii) State four benefits of land Rehabilitation in Kenya **(4mks)**

(b) (i) Explain four factors that led to the successful establishment of Pekerra irrigation scheme **(8mks)**

(ii) State three problems facing Pekerra irrigation scheme (**3mks)**

(iii) List four main crops grown in Pekerra irrigation scheme **(4mks**)

(c) State four advantages of irrigation farming to the economy of Kenya. **(4mks)**

10. . (a) i)Differentiate between market gardening and floriculture. **2mks**

(ii) State four features of horticulture. **4mks**

i) State three physical factors that favour development of horticulture in Kenya. **3mks**

ii) Explain why horticulture is more developed in Netherlands than in Kenya. **8mks**

c) State and explain four contributions of horticulture to the economy of Kenya. **8mks**

SUKELLEMO JOINT MOCKS

KCSE 2021/22 TRIALS

(SERIES 001)

NAME……

SCHOOL…… **INDEX NO**……

SIGN…… **ADM NO** ……

121/1

MATHEMATICS

PAPER 1

TIME: 2½ HOURS.

INSTRUCTIONS TO CANDIDATES

a) Write your ***name*** and ***index number*** in the spaces provided above.
b) Sign and write ***date*** of examination in the spaces provided above.
c) This paper consists of **two** sections; ***SectionI*** and ***Section II.***
d) Answer ***All*** *questions* in ***Section I*** and*only* ***Five****questions* from ***section II***
e) ***All*** answers and working ***must*** be written on the question paper in the spaces provided below each question.

For examiner's use only.

Section I

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

Section II

17	18	19	20	21	22	23	24	**Total**

GRAND TOTAL

SECTION 1 (50 MARKS)

1. Without using a calculator evaluate:-

$$\frac{-2(5+3)-9\div 3+5}{-3+-16\div -8\times 4}$$

(3 marks)

2. Wafulauses $^{1}/_{6}$ of his land for planting maize, $^{1}/_{12}$ for beans and $^{4}/_{9}$ of the remainder for grazing. He still has 10 hectares of unused land. Find the size of Wafula's land. **(4 mks)**

3. A straight line passing through point $(-3, -4)$is perpendicular to the line whose equation is 2y + 3x = 11 and intersects **x** axis and **y** axis at A and B respectively. Determine the equation of the second line and hence write down the co-ordinates of A and B.

(3 mks)

4. A bus left Kitale at 8.00 a.m. and travelled towards Lodwar at an average speed of 80 km/h. At 8.30 a.m a car left Lodwar towards Kitale at an average speed of 120km/h. Given that the distance between Kitale and Lodwar is 400km. Calculate the time the two vehicles met.

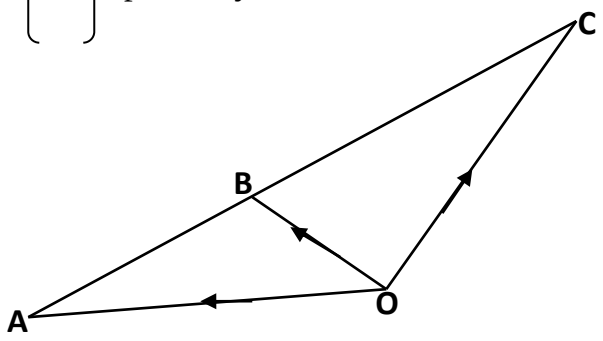
(3 mks)

5. The sum of four consecutive odd integers is greater than 24. Determine the first four such integers. **(3 mks)**

6. Wanyama on arrival in Kenya to play for Harambee Stars against Uganda Cranes converted 6000 Euros into Kenyan Shillings. During his stay in Kenya he spent Kshs. 260,000 and converted the remaining amount into US Dollars before travelling back to England. Using the exchange rates below, find how many US Dollars he got? **(4 mks)**

Currency	**Buying (Kshs.)**	**Selling (Kshs.)**
1 US Dollar	96.20	96.90
1 Euro	112.32	112.83

7. In the diagram below, the position vector of points A and B with respect to point O are $\begin{pmatrix} -6 \\ -2 \end{pmatrix}$ and $\begin{pmatrix} -3 \\ 0 \end{pmatrix}$ respectively.



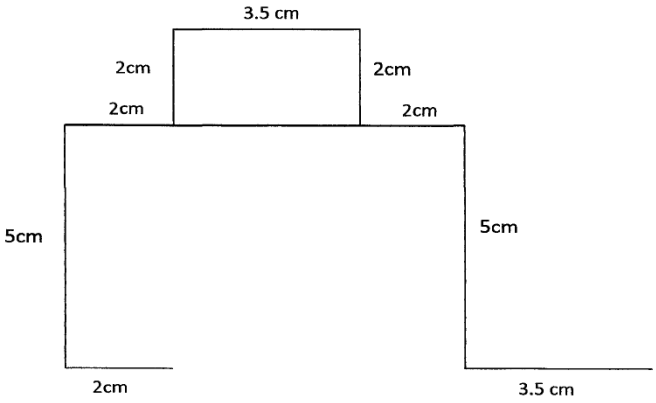
Given that B is a point on AC such that AB = ½ BC. Use vector method to determine the coordinates of C. **(3 mks)**

8. Simplify:-

$(8y)^{\frac{2}{3}} \times y^{1\frac{1}{3}} - 6 \div 2y^{-2}$

9. Complete the diagram below so as to make a net for a cuboid. Hence find the surface area of the

cuboid. (3 mks)



10. Using a ruler and a pair of compasses **only**, construct a rhombus PQRS such that PQ = 6 cm and angle PQR = 135^0 hence measure the shortest diagonal. **(3mks)**

11. Janice, a fruit vendor obtained a total of Kshs. 6144 from her sales of oranges on Saturday at Kshs. 8.00 each. She had bought 560 more oranges to add to what had remained on Friday where she had sold 240 more oranges than on Thursday. She had sold 750 oranges on Thursday. Calculate the total number of oranges Janice had bought on Thursday. **(4 mks)**

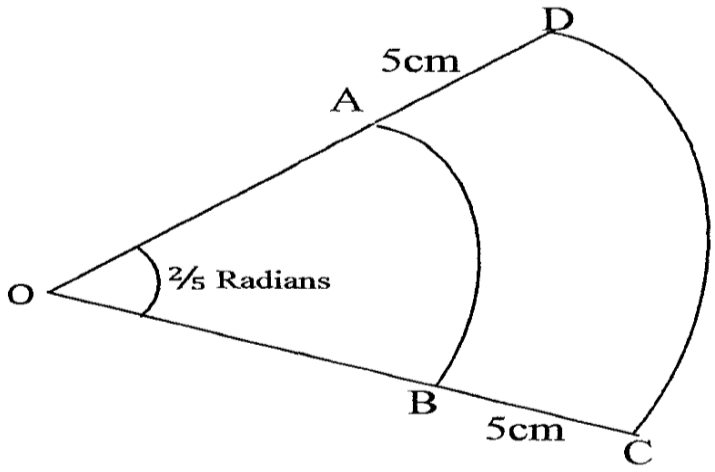
12. Factorise Completely:-

$x^4 - 2x^2y^2 + y^4$ **(2 mks)**

13. Solve for **y** given that **y** is acute and $\sin(3y - 50^0) - \cos(2y + 10^0) = 0$ **(3 mks)**

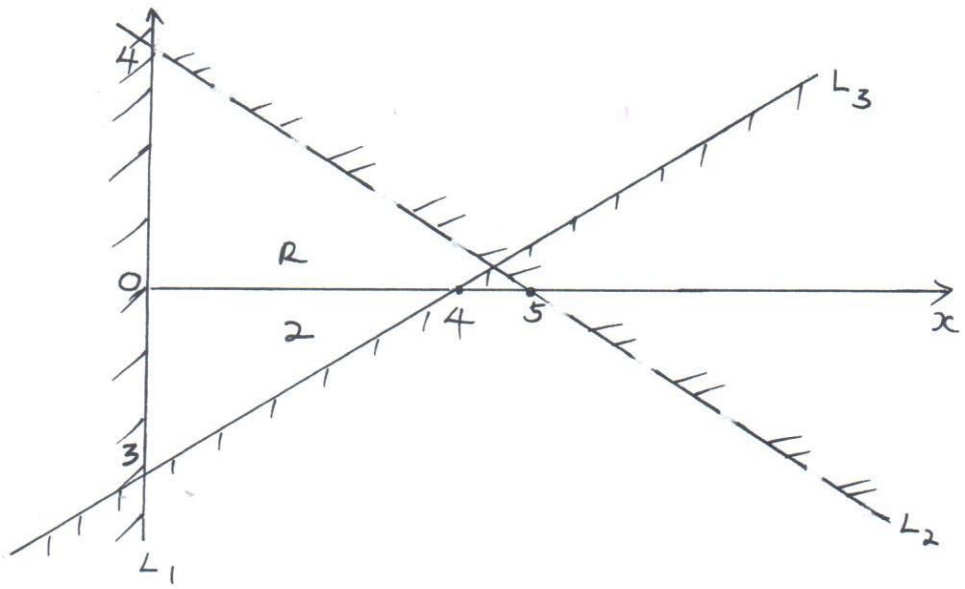
14. A solid consists of a cone and a hemisphere. The common diameter of the cone and the hemisphere is 12 cm and the slanting height of the cone is 10 cm. Calculate correct to two decimal places, the surface area ofthe solid. **(3 mks)**

15. The figure below shows two sectors in which AB and CD are arcs of concentric circles centre O. Angle AOB = $^2/_5$ radians and AD = BC = 5 cm.



Given that the perimeter of the shape ABCD is 24 cm, calculate the length of OA.**(3 mks)**

16. Find the inequalities that define the region R shown in the figure below. **(3 marks)**



SECTION II

Answer only five questions from this section

17. Nyongesa is a sales executive earning a salary of Kshs. 120,000 and a commission of 8% for the sales in excess of Kshs. 1,000,000. If in January he earned a total of Kshs. 480,000 in salaries and commission.

(a) Determine the amount of sales he made in the month of January. **(4 mks)**

(b) If the total sales in the month of February increased by 18% and in the month of March dropped by 30% respectively;Calculate**:-**

(i) Nyongesa's commission in the month of February. **(3 mks)**

(ii) His total earning in the month of March. **(3 mks)**

18. A sector of angle 108^0 is cut from a circle of radius 20 cm. It is folded to form a cone.

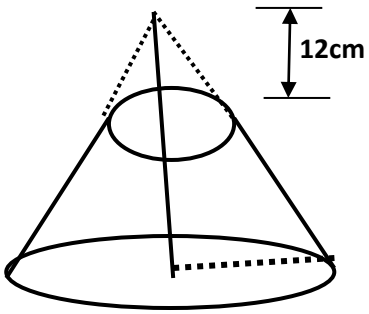
Calculate**:**

(a) The curved surface area of the cone. **(2 mks)**

(b) The base radius of the cone. **(2 mks)**

(c) The vertical height of the cone. **(2 mks)**

(d) If 12 cm of the cone is chopped off to form a frustrum as shown below.



Calculate the volume of the frustum formed. **(2 mks)**

19. a) Find A^{-1}, the inverse of matrix $A\begin{pmatrix}6 & 5\\ 4 & 7\end{pmatrix}$ **(2 mks)**

b) Ibanda sells white and brown loaves of bread in his kiosk. On a certain day he sold 6 white loaves of bread and 5 brown ones for a total of Kshs. 520. The next day he sold 4 white loaves and 7 brown ones for a total of Kshs. 530.

i. Form a matrix equation to represent the above information. **(1 mk)**

ii. Use matrix method to find the price of a white loaf of bread and that of a brown loaf of bread. **(3 mks)**

c) A school canteen bought 240 white loaves of bread and 100 brown loaves of bread. A discount of 10% was allowed on each white loaf whereas a discount of 13% was allowed on each brown loaf of bread. Calculate the percentage discount on the cost of all the loaves of bread bought. **(4 mks)**

20. A village Q is 7 km from village P on a bearing of 045^0. Village R is 5 km from village Q on a bearing of 120^0 and village S is 4 km from village R on a bearing of 270^0.

a) Taking a scale of 1 m to represent 1 Km, locate the three villages. **(3 mks)**

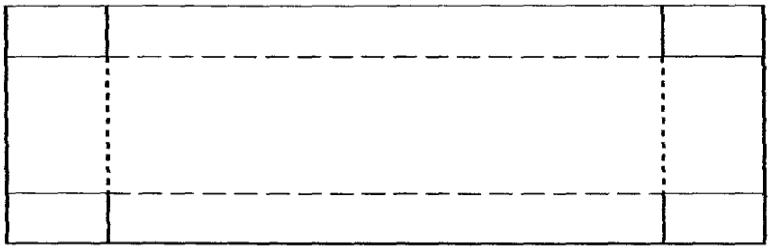
b) Use the scale drawing to find the:

i. Distance and bearing of the village R from village P. **(2 mks)**

ii. Distance and bearing of village P from village S. **(2 mks)**

iii. Area of the polygon PQRS to the nearest 4 significant figures. **(3 mks)**

21. The figure below shows a rectangular sheet of metal whose length is twice its width.



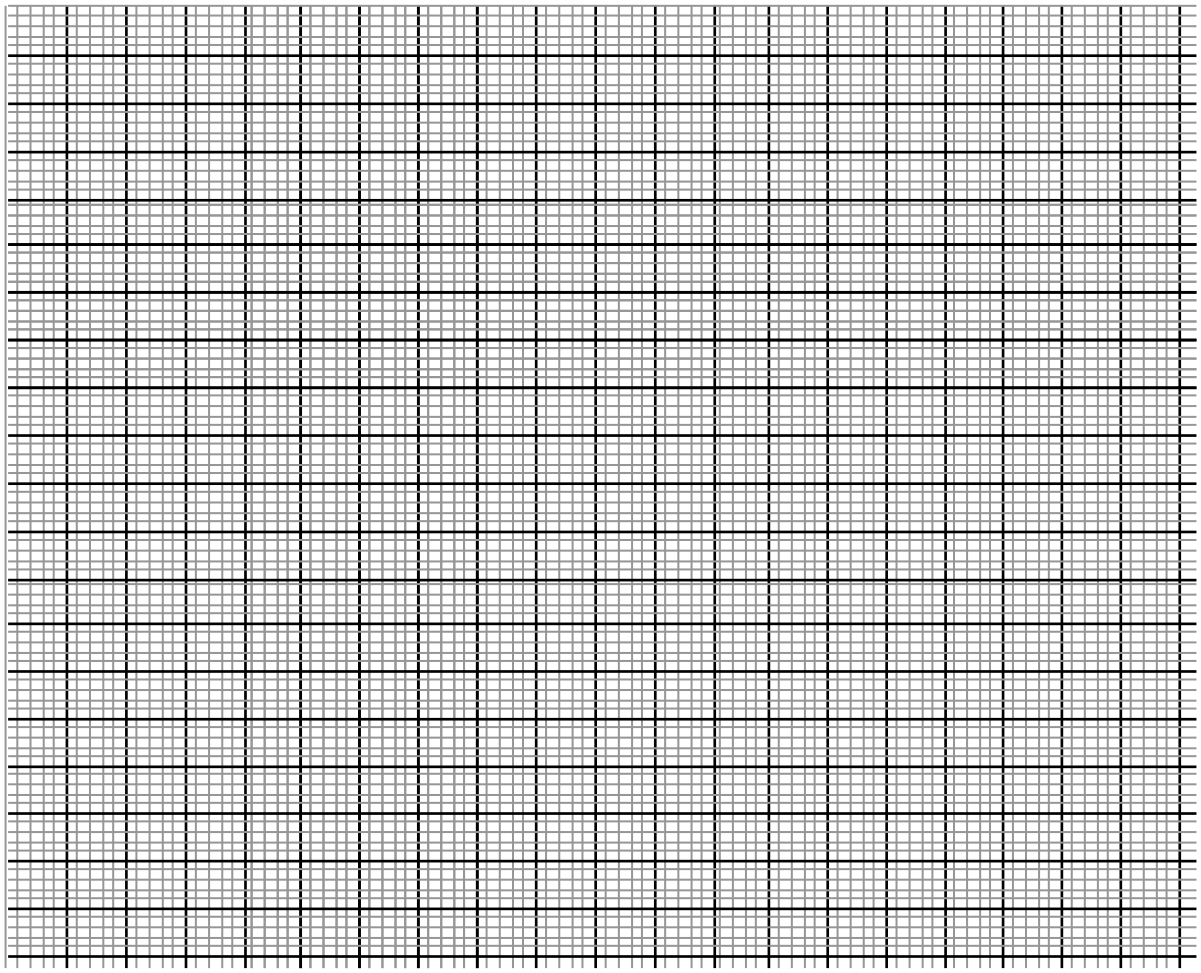
An open rectangular tank is made by cutting equal squares of length 60 cm from each of its four corners and folding along the dotted lines shown in the figure above. Given that the capacity of the tank so formed is 1920 litres and the width of the metal sheet used was x cm;

a) (i) Express the volume of the tank formed in terms of **x** cm. **(3 mks)**

(ii) Hence or otherwise obtain the length and width of the sheet of metal that was used. **(3 mks)**

b) If the cost of the metal sheet per m^2 is Kshs 1000 and labour cost for making the tank is 300 per hour. Find the selling price of the tank in order to make a 30% profit if it took 6 hours to make the tank. **(4 mks)**

22. (a) On the Cartesian plane below, draw the quadrilateral PQRS with vertices P(4,6), Q(6,3), R(4,4), and S(2,3) **(1 mk)**



(b) Draw P′Q′R′S′ the image of PQRS under the transformation defined by the translation vector $T = \begin{pmatrix} -7 \\ -6 \end{pmatrix}$. Write down the coordinates of P′Q′R′S′. **(2 mks)**

(c) P′′Q′′R′′S′′ is the image of P′Q′R′S′ when reflected in the line **y= 1**. On the same plane, draw P′′Q′′R′′S′′. **(2 mks)**

(d) Draw P′′′Q′′′R′′′S′′′ the image P′′Q′′R′′S′′ when reflected in the line **y – x = 0** **(2 mks)**

(e) Find by construction, the centre of the rotation that maps P′′′Q′′′R′′′S′′′ onto PQRS and hence determine the coordinates of the centre of the rotation and the angle of the rotation**(3 ms)**

23. Andai recorded data on observation of time spent by a local university's first year bachelor of Commerce students at library as follows;-

Time spent in minutes	11 – 20	21- 30	31 – 40	41 – 50	51 - 60
Cumulative frequency	70	170	370	470	500

Calculate:

a) The mean **(6 mks)**

b) The median **(4 mks)**

24. (a) After t seconds, a particle moving along a straight line has a velocity of Vm/s and an acceleration of $(5 - 2t)m/s^2$. the particles initial velocity is 2m/s.

(i) Express V in terms of t. **(3 marks)**

(ii) Determine the velocity of the particle at the beginning of the third second. **(2 marks)**

(b) Find the time taken by the particle to attain maximum velocity and the distance it covered to attain the maximum velocity. **(5 marks)**

SUKELLEMO JOINT MOCKS

KCSE 2021/22 TRIALS

(SERIES 001)

NAME……

SCHOOL…… **INDEX NO**……

SIGN…… **ADM NO** ……

121/2

MATHEMATICS

PAPER 2

TIME: 2½ HOURS.

INSTRUCTIONS TO CANDIDATES

f) Write your ***name*** and ***index number*** in the spaces provided above.
g) Sign and write ***date*** of examination in the spaces provided above.
h) This paper consists of **two** sections; ***SectionI*** and ***Section II.***
i) Answer ***All*** *questions* in ***Section I*** and*only* ***Five****questions* from ***section II***
j) ***All*** answers and working ***must*** be written on the question paper in the spaces provided below each question.

For examiner's use only.

Section I

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

Section II

17	18	19	20	21	22	23	24	**Total**

GRAND TOTAL

SECTION 1 (50 MARKS)

Attempt all questions.

1. Factorise $x^2 - y^2$, hence evaluate $3282^2 - 3272^2$ **(3mks)**

2. Find cos x – Sin x, if tan x= ¾ and $90^o \leq x \leq 360^o$ **(3mks)**

3. Expand $\left[1-2x\right]^6$ up to the fourth term. Hence use your expansion to evaluate $(1.02)^6$ to four decimal places. (4mks)

4. The average of the first and fourth terms of a GP is 140. Given that the first term is 64. Find the common ratio. **(3mks)**

5. Make b the subject of the formula. **(3mks)**

$$A = \sqrt{\frac{bd}{b^2 - d}}$$

6. Two variables P and Q are such that P varies partly as Q and partly as the square root of Q. Determine the equation connecting P and Q. When Q=16, P=500 and when Q = 25, P = 800 **(4mks)**

7. **Calculate** the interest on sh 10,000 invested for 1 ½ years at 12 % p.a. Compounded semi-

annually. **(3 mks)**

8. Given that x=2i+j-2k, y= -3i+4j-k and z =5i + 3j+2k and that P= 3x-y+2z, find the magnitude of vector p to 3 significant figure **(4mks)**

9. Eighteen labourers dig a ditch 80m long in 5 days. How long will it take 24 labourers to dig a ditch 64 m long? **(3mks).**

10.

The expression $1+ {}^{x}/_{2}$ is taken as an approximation for $\sqrt{1+x}$

Find the percentage error in doing so if x = 0.44 (3mks)

11. The matrices $A = \begin{bmatrix} 3 & 0 \\ 0 & 4 \end{bmatrix}$ and $B = \begin{bmatrix} a & b \\ o & c \end{bmatrix}$

are such that AB = A + B
Find a, b, and c. **(3mks)**

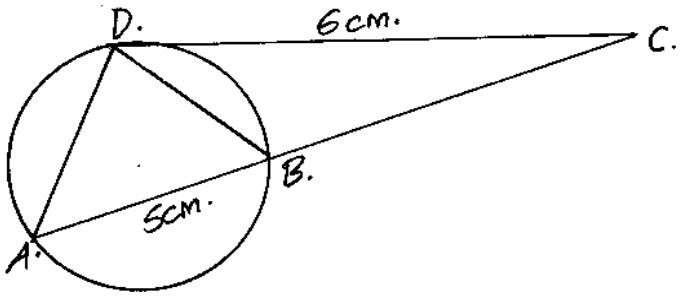
12. Simplify **(3mks)**

$$\frac{2x^2 - x - 1}{x^2 - 1}$$

13. On map of scale 1:25000 a forest has an area of $20cm^2$. What is the actual area in Km^2

(3mks)

14. In the figure below, DC = 6cm, AB = 5cm. Determine BC if DC is a tangent**.(3mks).**



15. Evaluate without using logarithm tables. **(3mks)**

$$3\log_{10} 2 + \log_{10} 750 - \log_{10} 6$$

16. A bag contains 10 balls of which 3 are red, 5 are white and 2 green. Another bag contains 12 balls of which 4 are red, 3 are white and 5 are green. A bag is chosen at random and a ball picked at random from the bag. Find the probability that the ball so chosen is red.**(4mks)**

SECTION II (50 MARKS)

Answer any five questions in this section.

17. Income tax is charged on annual income at the rates shown below.

Taxable Income K£	Rate (shs per K£)
1 – 1500	2
1501 – 3000	3
3001 – 4500	5
4501 – 6000	7
6001 – 7500	9
7501 – 9000	10

9001 – 12000

12

Over 12000

13

A certain headmaster earns a monthly salary of Ksh. 8570.. He is entitled to tax relief of Kshs. 150 per month.

(a) How much tax does he pay in a year. **(6 mks)**

(b) From the headmaster's salary the following deductions are also made every month;

W.C.P.S 2% of gross salary

N.H.I.F Kshs. 1200

House rent, water and furniture charges Kshs. 246 per month.

Calculate the headmaster's net salary.

(4 mks)

18. (a) (i) Taking the radius of the earth, R = 6370 km and $\pi = {}^{22}/_{7}$ calculate the shorter distance between the two cities P (60^{o}N , 29^{o}W) and Q (60^{o}N, 31^{o}E) along the parallel of latitude. **(3mks)**

(ii) If it is 1200Hrs at P, what is the local time at Q. **(3mks)**

.

(b) An aeroplane flew due South from a point A (60^{0}N, 45^{0}E) to a point B. The distance covered by the aeroplane was 800km. Determine the position of B. **(4mks).**

19. Triangle PQR whose vertices are p(2,2), Q(5,3) and R(4,1) is mapped onto triangle P′Q′R′ by a transformation whose matrix is $\begin{pmatrix} 1 & -1 \\ -2 & 1 \end{pmatrix}$

a) On the grid draw PQR and $P^1Q^1R^1$. (4mks)

b) The triangle $P^1Q^1R^1$ is mapped onto triangle $P^{11}Q^{11}R^{11}$ whose vertices are $P^{11}(-2,-2)$, $Q^{11}(-5,-3)$ and R^{11} (-4,-1)

(i) Find the matrix of transformation which maps triangle $P^1Q^1R^1$ onto $P^{11}Q^{11}R^{11}$. (2mks)

(ii) Draw the image $P^{11}Q^{11}R^{11}$ on the same grid and describe the transformation that maps PQR onto $P^{11}Q^{11}R^{11}$. (2mks)

c) Find a single matrix of transformation which will map PQR on to $P^{11}Q^{11}R^{11}$.(2mks)

20.(a) Complete the table for y = Sin x + 2 Cos x. **(2mks)**

X	0	30	60	90	120	150	180	210	240	270	300
Sinx	0			1.0		0.5		-0.5			-0.87
2 cos x	2			0		-1.73		-1.73			1.0
Y	2			1.0		-1.23		-2.23			0.13

(b) Draw the graph of y = Sin x + 2 cos x. **(3mks)**

(c) Solve sinx + 2 cos x = 0 using the graph. **(2mks)**

(d) Find the range of values of x for which $y \leq -0.5$ **(3mks).**

21. A bag contains 3 red, 5 white and 4 blue balls. Two balls are picked without replacement. Determine the probability of picking.

(a) 2 red balls **2mks**

(b) Only one red ball **2mks**

(c) At least a white ball **2mks**

(d) Balls of same colour. 2mks

(e) Two white balls 2mks

22. (a) Draw the graph of the function **2mks**

$$y = 10+3x - x^2 \text{ for } -2 \leq x \leq 5$$

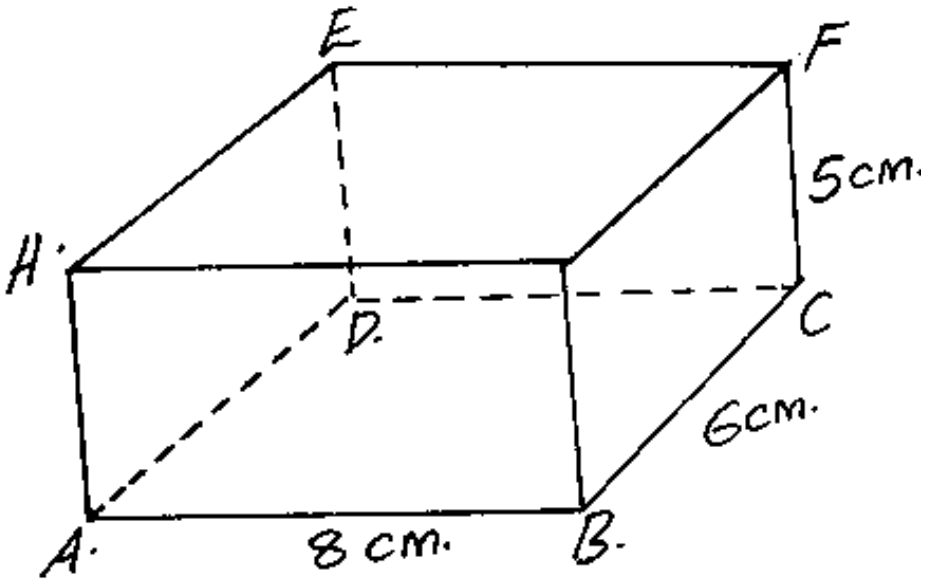
(b) use of the trapezoidal rule with 5 stripes, find the area under the curve from x = -1 to x = 4.

4mks

(c) Find the actual area under the curve from x = -1 to x = 4. **2mks**

(d) Find the percentage error introduced by the approximation. **2mks**

23. The figure below is a cuboid ABCDEFGH such that AB = 8cm, BC = 6cm and CF 5cm.



Determine (a) the length (i) AC **(2mks)**

(ii) AF **(2mks)**

(b) The angle AF makes with the plane ABCD. **(3mks)**

(c) The angle AEFB makes with the base ABCD. **(3mks)**

24. A manager wishes to hire two types of machine. He considers the following facts.

	Machine A	**Machine B**
Floor space	$2m^2$	$3m^2$
Number of men required to operate	4	3

He has a maximum of $24m^2$ of floor space and a maximum of 36 men available. In addition he is not allowed to hire more machines of type B than of type A.

(a) If he hires x machines of type A and y machines of type B, write down all the inequalities that satisfy the above conditions. **3mks**

(b) Represent the inequalities on the grid and shade the unwanted region. **3mks**

(c) If the profit from machine A is sh. 4 per hour and that from using B is kshs8 per hour. What number of machines of each type should the manager choose to give the maximum profit? **(4mks)**

SUKELLEMO JOINT MOCKS

KCSE 2021/22 TRIALS

(SERIES 001)

NAME……

SCHOOL…… **INDEX NO**……

SIGN…… **ADM NO** ……

451/1

COMPUTER STUDIES

PAPER 1

(THEORY)

TIME: 2 ½ hours

Instructions to Candidates

*(a) Write your **name** and **index number** in the spaces provided above.*
*(b) This Paper consists of two sections **A** and **B**.*
*(c) Answer **ALL** the questions in section A.*
*(d) Answer **question 16** (compulsory) and any other **THREE** questions from section **B**.*

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 this section in the spaces provided

1. Name **two** functions of each of the following memories in a computer system **(2 marks)**

a) RAM

i)……

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ii)……

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b) Hard disk

i) ……

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ii) ……

……

2. List **two** application areas of artificial intelligence **(2 marks)**

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3. Explain briefly the following terms as used in desktop publishing **(3 marks)**

a) Embedded object

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b) Auto flow

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c) Zoom

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4. Give **four** ways of identifying an illegal copy of an operating system **(4 marks)**

i) ……
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ii) ……
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iii) ……
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iv) ……
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5. State **three** ways in which horticultural farmers can benefit from the use of information and communication technology **(3 marks)**

i) ……
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ii) ……
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iii) ……
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6. Define the following terms **(2 marks)**

a) Password

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b) Authentication

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……

7. Outline **three** roles of an internet service provider(ISP) **(3 marks)**

i) ……

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ii) ……

……

iii) ……

……

8. State **two** roles of

a) Webmaster **(2 marks)**

i) ……

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ii) ……

……

b) Network administrator **(2 marks)**

i) ……

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ii) ……

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9. List **three** advantages of using computer aided design **(3 marks)**

i) ……

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ii) ……

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iii) ……

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10. List **two** files used in mail merging **(2 marks)**

i) ……

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ii) ……

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11. State any **three** disadvantages of using the magnetic tape **(3 marks)**

i) ……

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ii) ……

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iii) ……

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12. With reference to cables list **two** reasons why a keyboard may not function correctly **(2 marks)**

i) ……

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ii) ……

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13. Kenya has been facing a lot of problems from insurgents of Alshabab terror group in Somalia. Give **three** ways in which robots can be used by Amison during war in Somalia. **(3 marks)**

i) ……

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ii) ……

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iii) ……

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14. The formula = $Z49 + G$19 was typed in cell K31 and was copied to cell P17 of a spreadsheet. Write the formula in the destination cell **(1 mark)**

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15. Simulation is one of the application areas of computers.

a) Define the term simulation **(1 mark)**

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b) Name **two** application areas of simulation **(2 marks)**

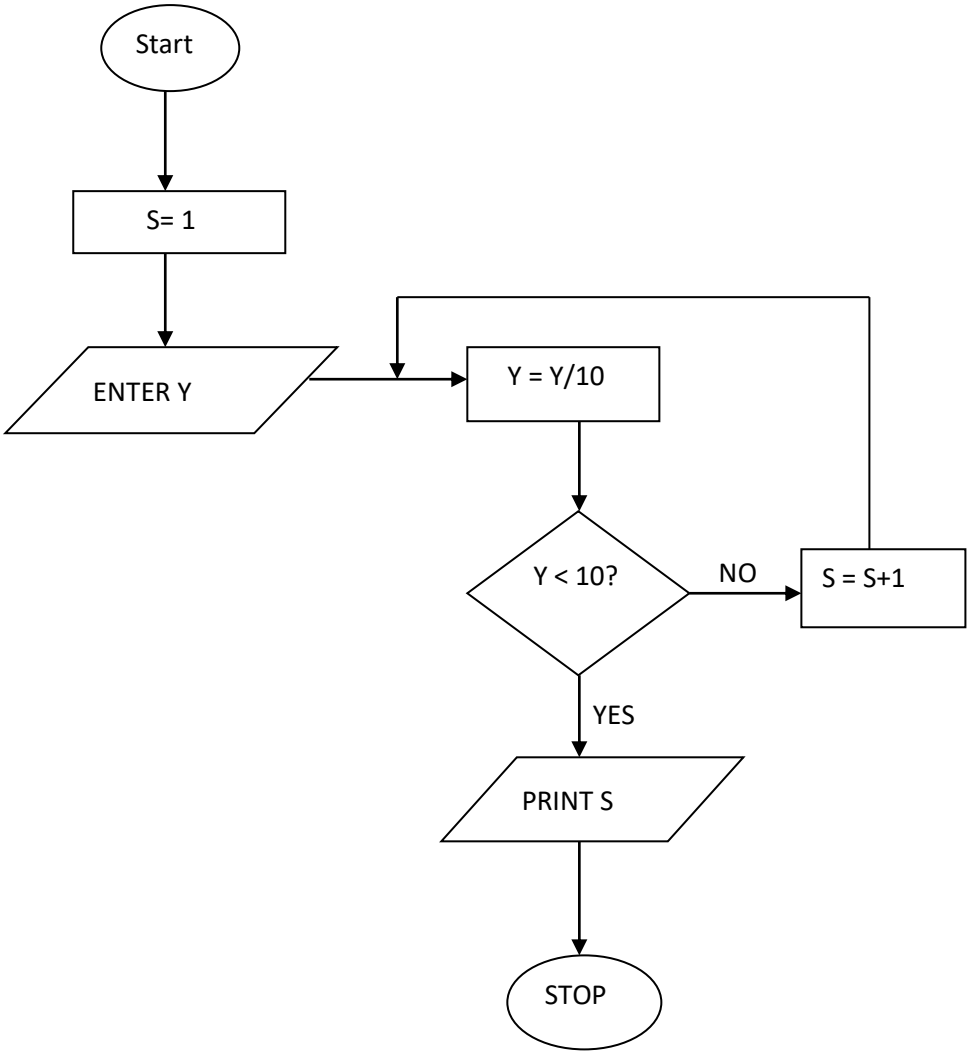
i) ……
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ii) ……
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SECTION B (60 MARKS)

Answer question 16 and any other THREE questions in this section

16. Study this flowchart and use it to answer questions that follows



a) Give the expected output from the flowchart when the value of Y is **(6 marks)**

i) 48

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ii) 9170

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iii) 800

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b) Write the pseudocode that can be used to create a program represented by the above flowchart **(6 marks)**

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c) State **three** advantages of low-level languages **(3 marks)**

i) ……

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ii) ……

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iii) ……

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17. Use twos complement to perform the following arithmetic operations

i) $15_{10} - 12_{10}$ **(4 marks)**

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ii) $10111_2 - 1011_2$ **(3 marks)**

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b) 1011_2 is a ones complement binary representation of a negative number using four bits work out the likely positive equivalent in base 10. **(4 marks)**

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c) Convert the decimal fraction 10.375_{10} into its binary equivalent **(4 marks)**

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d) Assuming the existence of base five, list the numbers used in the number system **(1 mark)**

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18. a) A company in Kericho town wishes to link its offices that are spread across the county through wireless or fibre optic network media.

i) State **three** advantages of using wireless over fibre optic network media **(3 marks)**

a) ……

……

b) ……

……

c) ……

……

ii) Name **two** wireless communication devices **(2 marks)**

a) ……

……

b) ……

……

b) i) Differentiate between Ethernet and token ring topology **(2 marks)**

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ii) List **two** advantages and **two** disadvantages of hierarchical network topology **(4 marks)**

Advantages

a) ……

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b) ……

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Disadvantages

a) ……

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b) ……

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……

c) State **two** importance of the Front-End Processors (FEP) in a network system **(2 marks)**

i) ……
……

ii) ……
……

d) Describe peer to peer networking **(2 marks)**

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19. a) Give **two** reasons for storing files in directories and sub directories (**2 marks)**

i) ……
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ii) ……
……

b) Explain time sharing data processing mode giving **two** advantages and **two** disadvantages of its application **(6 marks)**

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……

<u>Advantages</u>

i) ……
……

ii) ……
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Disadvantages

i) ……
……

ii) ……
……

c) List **four** importance of training the staff or users after the implementation of a new system **(4 marks)**

i) ……
……

ii) ……
……

iii) ……
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iv) ……
……

d) List **three** contents of a feasibility study report **(3 marks)**

i) ……
……

ii) ……
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iii) ……
……

20. The information below is maintained by the patron of Kesup Girls wildlife club. Study it and answer the questions that follow.

Name	Form	Admission number	Membership number	Group

Grace	4K	2720	S001	Lion
Memo	3G	2812	T001	Zebra
Faith	2K	2929	T003	Zebra
Tabitha	4G	2712	M001	Warthog
Marion	3R	2820	A001	Warthog
Chemutai	2G	2915	S002	Lion
Albina	2R	2926	N001	Elephant
Jane	4R	2946	AB001	Elephant
Janet	3K	2805	T002	Zebra
Rita	1R	3229	N002	Elephant
Elvis	1G	3213	M002	Warthog

a) Explain the terms fields, records and file **(3 marks)**

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b) State the most appropriate **data type** for the fields

i) Admission number **(1mark)**

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ii) Membership number **(1 mark)**

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c) Name the most appropriate primary key for the database **(1 mark)**

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d) If a database was to be created from the list; the following objects: forms, Tables, queries and reports are likely to be used

i) State the purpose of each of the objects **(4 marks)**

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ii) Name the objects that cannot be used to store date in the list **(3 marks)**

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e) i) Give the number of field values that are in the list **(1 mark)**

……

……

ii) Give the number of records that are in the list **(1 mark)**

……

……

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……

……

SUKELLEMO JOINT MOCKS

KCSE 2021/22 TRIALS

(SERIES 001)

NAME……

SCHOOL…… **INDEX NO**……

SIGN…… **ADM NO** ……

451/1

COMPUTER

Paper 2

(PRACTICAL)

2½ hours

1. *Indicate your name and index number at the top right hand corner of the printout.*
2. *Write your name and index number on the CD/removable storage medium provided.*
3. *Write the name and version of the software used for each question attempted.*
4. *This paper consists of two questions each having **50** marks.*
5. *Answer **all** the questions **Passwords should not be** used while saving files.*
6. *All files created must be saved in the provided CD/removable storage medium.*
7. *Make printouts of your answers on the answer sheet provided.*
8. *Hand in all the printouts and the Cd/Removable storage medium used.*
9. *This paper consists of 7 printed pages.*
10. *Students should check the question paper to ascertain that all the pages are printed as indicated and no question is missing.*
11. Candidates should answer the questions in English.

1. The following table contains data extracted from an employees' payroll file maintained by a certain company.

EMPNO	NAME	BASIC	DEPARTMENT	AGE	STATUS
E100	Marren	16000.00	Computer	34	Single
E101	Wezo	17000.00	Computer	44	Married
E102	Dave	19000.00	Finance	33	Divorced
E103	Charles	21000.00	Research	33	Single
E104	Davy	23000.00	Research	25	Single
E105	Thomas	25000.00	Computer	26	Married
E106	Ann	27000.00	Finance	28	Married
E107	Susan	29000.00	Finance	29	Divorced
E108	Tina	31000.00	Research	24	Divorced
E109	Andrew	33000.00	Computer	40	Single
E110	Hardy	35000.00	Finance	20	Married
E111	Selly	37000.00	Finance	43	Single
E112	Kimani	10000.00	Research	15	Single
E113	Chep	15000.00	Finance	35	Divorced
E114	Eddie	35000.00	Computer	25	Married
E115	Moses	59000.00	Research	33	Single
E116	Miriam	70000.00	Finance	56	Divorced
E117	Maurice	32876.00	Computer	70	Divorced
E118	Alphine	43876.00	Research	65	Divorced
E119	Cazy	48098.00	Research	32	Single
E120	Langat	6500.00	Computer	12	Single
E121	Phenny	29000.00	Finance	70	Single
E122	Hilda	32000.00	Computer	13	Married

(a) (i) Create a database file and save as **Company.** **(2 mks)**

(ii)Create a table named **Workers** containing the fields shown in the table above. **(5 mks)**

(iii) Choose and set an appropriate field as a primary key. **(2 mks)**

(b) (i) Create a form named **WorkersForm** to be used to enter the data above in the **Workers**table to appear as shown below**.** **(7 mks)**

WORKERS DETAILS CAPTURE SCREEN

EMPNO: NAME:

(ii) Use the **WorkersForm** to enter the data above into the **Workers**table.**(5 mks)**

(c) Create queries to determine:

(i) number of people with basic salary greater than 32,000/= .Save the query as **Basic** **(3mks)**

(ii) number of people with basic salary less than 45,000/= and come from computer department. Save the query as C**omputer.** **(5 mks)**

(iii) those whose name begin with letter 'M' or end in letter 'S'. Save the query as **Names** (3 mks)

(d) (i) Create a query to determine those employees who will earn more than 50,000/= if there is an increment of basic pay by 10%. Save the query as **SalaryIncrement.** (4marks)

(ii) Create a query to determine the year of birth of each employee from the current year. Save as **YearOfBirth**. (3 mks)

(e) (i) Create a report from **Workers**table to display all the data in the table. Save as **WorkersReport**. **(3 mks)**

(ii)Modify the **WorkersReport** in (e)(i) above as follows:

I. Add the "**EMPLOYEE SALARY DETAILS"**as the report title. Use font size 19 pts, bold, underline and centre it across the columns containing data. (3 mks)

II. Display the employees records according to their department and show the total amount the company spend on each department as salary and the total amount spend on paying all the employees. Save as **WorkersReport_2**. **(6 mks)**

(f) Print: **(3 mks)**

(i) Workers table;

(ii) YearOfBirth query;

(iii) WorkersReport_2.

2. The following data was extracted from Applicants' file of KERICHO COMPUTER COLLEGE.

(a) (i) Enter the data as it appears in a spreadsheet. (12mks)

	A	B	C	D	E	F	G	H	I
1	NAME	ADDRESS	TOWN	ENG	KISW	MATH	MEAN	POSITION	REMARK
2	Wanjiku N.	400	Nairobi	40	60	60			
3	Otieno D.	3201	Kisumu	55	50	40			
4	Nyambane T.	5600	Kisii	70	60	50			
5	Simiyu S.	1236	Bungoma	30	80	70			
6	Chebet K.	48	Eldoret	75	70	80			
7	Fatuma A	6032	Mombasa	40	30	50			
8	Kamau J.	8021	Nyeri	50	40	55			
9	Amoit C.	2	Busia	80	50	70			

(ii) Insert two blank rows at the top of the worksheet. (2 mks)

(iii) Enter the following title and subtitle in the blank rows respectively; KERICHO COMPUTER COLLEGE and APPLICANTS FILE. (2 mks)

(iv) Centre the title and subtitle across the columns that contain data. (2 mks)

(b) Using functions, compute:

(i) the mean for each student and format it to 2 decimal place. (3 mks)

(ii) the position of each student. (2 mks)

(iii) the highest score for each subject. (2 mks)

(c) The college wishes to analyze the applicants' data in order to find those applicants who qualify for admission to pursue a course in IT. Successful candidates MUST meet the following minimum requirements;

a. Must have scored a mean of 40 marks and above;

b. Must have scored 60 marks and above in Mathematics;

c. Must have scored 50 marks and above in either English or Kiswahili.

Enter an appropriate function in cell I4 and copy it to other cells to determine whether the

student qualifies for admission. If the student qualifies, the function should display 'Successful'. Otherwise it should display 'Unsuccessful'. (12 mks)

(d) Create a function to find the number of applicants who are successful. (3 mks)

(e) Copy the entire worksheet to sheet 2 and rename it as Successful Applicants. (4 mks)

(f) Filter the 'Successful Applicants' sheet to display the records of those applicants who are successful. (4 mks)

(g) Print: (2 mks)

I. Sheet1;
II. Successful Applicants Sheet;

SUKELLEMO JOINT MOCKS

KCSE 2021/22 TRIALS

(SERIES 001)

NAME……

SCHOOL…… **INDEX NO**……

SIGN…… **ADM NO** ……

441/1

HOMESCIENCE

Paper 1

THEORY

Time: 2 ½ Hrs

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 three sections A,B and C.

d) Answer **all** the questions in sections A and B and any **two** questions from section C in the spaces provided.

For examiner's use only

Section	Question	Maximum score	Candidates score
A	1-15	40	
B	16	20	
C		20 20	
Total Score		100	

SECTION A:(40MARKS) COMPULSORY

1. Stainless steel is the best material for making knives. Give two reasons for its popularity.**(2mks)**

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2. Give the meaning of each letter in the acronym RICE in first aid. **(2mks)**

R……

I……

C……

E……

3. Mention three desirable characteristics of a duster. **(3mks)**

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4. Give three characteristics of a well made French seam. **(3mks)**

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5. List down four methods of neatening an open seam. **(2mks)**

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6. List down three positive effects of advertising to a consumer. **(3mks)**

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7. Mention three measures a person handling food should take to ensure the food does not get contaminated. **(3mks)**

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8. State two ways of ensuring that fresh milk at home is safe for consumption. **(2mks)**

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9. Saucepans should be covered when cooking. Give three reasons for doing this. **(3mks)**

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10. Food can be contaminated through various ways. Identify three ways in which food can be contaminated by a cook. **(3mks)**

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11. Give two reasons for use of each of the following items in laundry work.

i) Fabric conditioner **(2mks)**

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ii) Salt **(2mks)**

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12. Mention two ways of preventing infections in a baby through the umbilical cord. **(2mks)**

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13. Describe three ways of reinforcing the end of a machine stitched dart. **(3mks)**

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14. List down two functions of openings. **(2mks)**

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15. Give three disadvantages of using charcoal when cooking. **(3mks)**

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SECTION B: COMPULSORY (20 marks)

16. You visited your aunt and are required to help her with household chores;

a) Describe the procedure you would use to thoroughly clean a discoloured melamine cup. **(9mks)**

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b) Outline the procedure you would follow when cleaning water glasses **.(6mks)**

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c) Explain how you would finish a white cotton table cloth. **(5mks)**

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SECTION C:(40 marks)

Answer any TWO questions

17. a) Explain four ways in which old newspaper may be used when cleaning a house. **(4mks)**

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b) Discuss five factors that may influence the frequency of cleaning a house.

(10mks)

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c) Mention four types of information which may be found on the labels of goods. (**4mks)**

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d) Describe any two types of drainage found in modern homes. **(2mks)**

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18. a) Discuss four factors that determine the method of cooking to be used. **(8mks)**

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b) Mention five causes of malnutrition in Kenya today. **(5mks)**

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c) Give three reasons for food fortification. **(3mks)**

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d) Mentiontwo factors to consider when selecting fastenings. **(2mks)**

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e) List down two qualities necessary for a fabric used for an apron. **(2mks)**

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19. a) Describe three physical changes that occur in girls during adolescence. **(3mks)**

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b) Mention four advantages of baking. **(4mks)**

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c) Give three reasons why a mother may decide to deliver at home. **(3mks)**

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d) Explain four dangers of teenage pregnancy. **(8mks)**

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e) Mention any two types of thread. **(2mks)**

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SUKELLEMO JOINT MOCKS

KCSE 2021/22 TRIALS

(SERIES 001)

NAME……

SCHOOL…… **INDEX NO**……

SIGN…… **ADM NO** ……

441/2

HOMESCIENCE

(CLOTHING CONSTRUCTION)

PAPER 2

TIME: 2 ½ HOURS

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

INSTUCTIONS TO CANDIDATES

A pattern of a girls skirt is provided. You are advised to study the sketches, instructions and the layout carefully before you begin the test.

Materials provided.

1. Pattern pieces

   A - BACK SKIRT

   B -LOWER FRONT SKIRT

   C - SKIRT YOKE

   D - FRONT WAIST BAND

   E - BACK WAIST BAND

   F - INTERFACING (CUT WAIST BANDS)

2. Plain light weighed cotton fabric 40cm long by 90cm wide.
3. Sewing thread to match
4. White 7 inches zip
5. On envelope.

THE TEST

Using the materials provided, cut out and make the LEFTHALF of the girls skirt to show the following

(a) Working of the back dart.

(b) Preparing and Stitching of the tucks on the lower skirt..

(c) Joining of the yoke to the lower skirt using aunneatened overlaid seam.

(d) Joining of the side seam using a neatened open seam and leaving the zip opening ready.

(e) Insertion of the zip fastener using semi-concealed method.

(f) Preparing and attachment of the interfaced waist bands.

(h) Cutting and working of the 1cm long button hole on the front waist band.

At the end of the examination firmly sew onto your works on single fabric, a label bearing your name and index number. Remove the needle, pins and loose threads from your work. Fold your work neatly and place it in the envelope provided.

All cut pattern pieces must be enclosed even if not used. However; do not put scraps of fabric in the envelope.

SUKELLEMO JOINT MOCKS

KCSE 2021/22 TRIALS

(SERIES 001)

NAME……

SCHOOL…… **INDEX NO**……

SIGN…… **ADM NO** ……

314/1

ISLAMIC RELIGIOUS EDUCATION

Paper 1

TIME: 2 ½ Hours

Instructions to candidates

(a) Write your name and index number in the spaces provided.
(b) Sign and write the date of examination in the spaces provided above.
*(c) This paper consists of **six** questions.*
(d) Answer any five questions on a separate answer sheet.
(e) Candidates should check the question paper to ascertain that all the pages are printed as indicated and that no questions are missing.
(f) Candidates should answer the questions in English.

For Examiner's Use Only

Question	1	2	3	4	5	6	**Candidate's total score**
Candidate's score							

QUESTIONS

1. (a) Explain SEVEN reasons why the Quran was revealed in portions. (7 Marks)

(b) Discuss the role of Angel Jibril in the revelation of the Quran. (8 Marks)

(c) State FIVE benefits for the introduction of diacritical marks in the Quran. (5 Marks)

2. (a) Explain the teachings of *Surah Asr*. (5 Marks)

(b) Discuss the vices condemned in *Surah Hujra't*. (8 Marks)

(c) Identify the features of the *'Madani Surahs'*. (7 Marks)

3. (a) The Prophet (saw) is reported to have said*: "...Do not envy one another..."* Based on the above Hadith, explain how Muslims can reduce the effects of envy in the society. (7 Marks)

(b) Discuss the rules Imam Bukhari formulated in the collection and recording of the Hadith. (8 Marks)

(c) Give the themes mentioned in *'al-Muwatta'* of *Imam Malik*. (5 Marks)

4. (a) Explain the *'Ahka'm Shariah'* which a *'Mukallaf'* is obliged to observe. (8 Marks)

(b) Discuss the rules of evidence that must be presented in the ruling of 'Theft'. (7 Marks)

(c) Mention FIVE forms of punishment in *'Ta'zeer'* in Islamic penal code. (5 Marks)

5. (a) Describe the contribution of Imam *Ahmad ibn Hambal* in *Fiqh*. (5 Marks)

(b) Explain the rights of the people in Islam. (8 Marks)

(c) Outline the importance of *'Shaha'dah'* to the Muslims. (7 Marks)

6. (a) Discuss the THREE types of *'SHIRK'* in Islam. (9 Marks)

(b) Explain the qualities of an Imam according to the *Shiah doctrine*. (6 Marks)

(c) State the stages people will undergo during *'Qiyamah'* after the second trumpet. (5 Marks)

SUKELLEMO JOINT MOCKS

KCSE 2021/22 TRIALS

(SERIES 001)

NAME……

SCHOOL…… **INDEX NO**……

SIGN…… **ADM NO** ……

314/2

ISLAMIC RELIGIOUS EDUCATION

PAPER 2

TIME: 2 ½ Hours

Instructions to candidates

(a) Write your name and index number in the spaces provided.
(b) Sign and write the date of examination in the spaces provided above.
*(c) This paper consists of **six** questions.*
(d) Answer any five questions on a separate answer sheet.
(e) Candidates should check the question paper to ascertain that all the pages are printed as indicated and that no questions are missing.
(f) Candidates should answer the questions in English.

For Examiner's Use Only

Question	1	2	3	4	5	6	Candidate's total score
Candidate's score							

QUESTIONS

1. (a) Explain the effects of *'incest'* in the society. **(6 Marks)**

(b) Discuss ***FOUR*** types of *'Swabr'*. **(8 Marks)**

(c) State ***SIX*** benefits of the virtue of *'Shukr'* in Islam. **(6 Marks)**

2. (a) Identify the rights of the extended family members. **(5 Marks)**

(b) Explain reasons that will oblige a Muslim wife to ask for *'Talaq'*. **(7 Marks)**

(c) Discuss the causes of domestic violence. **(8 Marks)**

3. (a) Explain ***FOUR*** kinds of sale in trade. **(8 Marks)**

(b) Suggest ways how *child-abuse* can be resolved. **(6 Marks)**

(c) Give ***SIX*** conditions of marriage in Islam. **(6 Marks)**

4. (a) Discuss the allegation labeled on *Caliph Uthman bin Affan*. **(7 Marks)**

(b) Explain the role played by *Kabaka Mutesa I* in the spread of Islam in Uganda. **(8 Marks)**

(c) Identify possible reasons for the election of Caliph Umar bin Khattab. **(5 Marks)**

5. (a) Give the contribution *of Abu Assafa* the first *Abbasid Caliph*. **(5 Marks)**

(b) Explain the structure of administration under the *'Umayyad'*. **(7 Marks)**

(c) Discuss the economic challenges faced by the Muslims in Kenya. **(8 Marks)**

6. (a) Explain how *Sheikh Uthman Dan Fodio* organized the *Sokoto Caliphate*. **(10 Marks)**

(b) Discuss the contribution of *'Ibn Khaldun'*. **(10 Marks)**

SUKELLEMO JOINT MOCKS

KCSE 2021/22 TRIALS

(SERIES 001)

NAME……

SCHOOL…… **INDEX NO**……

SIGN…… **ADM NO** ……

501/1

FRENCH

Paper 1

Time: 2 ¾ Hours

Kenya Certificate Of Secondary Education

INSTRUCTIONS:

- *This paper consists of **three** sections*
- *Section **I** is listening comprehension*
- *Section **II** Dictation*
- *Section **III** is composition: Choose one composition from Question 1 and one from Question 2.*
- *Answer **all** questions in the spaces provided.*

For examiners use ONLY.

SECTION	MAX. SCORE	CANDIDATE SCORE
I	15	
II	5	
III	25	
TOTAL	45	

SECTION I

Listening Comprehension (15 points)

Passage 1

(a) Quand est-ce que Nadine a téléphoné à Paul ? _ _ _ _ _ _ _ _ _ _ _ _ (½pt)

(b) _ _ _ _ _ _ _ _ _ _ _ est le frère de Nadine. (½pt)

(c) Qu'est-ce que Paul fait Mercredi ? _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ ? (1pt)

(d) Jeudi, il y aura _ _ _ _ _ _ _ _ _ _ _ _ _ de foot contre l'école _ _ _ _ _ _ _ _ _ _ _ (1pt)

Passage 2

(a) Le voleur porte quels types de vêtements ?

(i) _ (½ pt)

(ii) _ (½ pt)

(b) Son jean est _ _ _ _ _ _ _ _ _ _ _ _ au genou _ _ _ _ _ _ _ _ _ _ _ _ (1 pt)

(c) Ou' est-ce qu'on a vu le voleur ? _ (½ pt)

(d) Cette personne ne _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ parce qu'il _ _ _ _ _ _ _ _ _ _ _ _ (1pt)

Passage 3

(a) De quoi fait – on l'enquête ? _ (½ pt)

(b) Ou` va – t- elle comme sortie ? _ (½ pt)

(c) Que fait –elle au lieu d'aller au cinéma ? _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ (1pt)

(d) Elle aimerait _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ mais _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _

(1pt)

(e) (i) Que fait la personne interviewée pour ses enfants ? _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ (½pt)

(ii) Que faut – il avoir pour faire çà ? _ (½ pt)

Passege _ 4

(a) (i) Qui est la personne qui téléphone ? _ _ _ _ _ _ _ _ _ _ _ _ (½ pt)

(ii) Elle téléphone à qui _ (½ pt)

(b) Ou` se trouve le nouveau appartement par rapport le cinéma ? _ _ _ _ _ _ _ _ _ _ _ _ (½ pt)

(c) Le bureau de la personne a` qui l'on téléphone est _

_ _ _ _ _ _ _ _ _ _ _ de l'appartement.

(½ pt)

(d) Pour y arriver, on doit traverser _ (½ pt)

Passage _ 5

(a) Ce texte s'agit de quoi ? _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ (½ pt)

(b) Il s'agit de quel type/modéle de téléphone ? _ (½ pt)

(c) (i) Ou` peut – on l'acheter ? _ (½ pt)

(ii) Quand peut-on l'acheter ? _ (½ pt)

SECTION TWO

(DICTATION 5 MARKS)

Write the dictation in the spaces provided below.

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FOR MARKING SCHEMES, CALL 0705525657/ 0707550000

COMPOSITION. (25PTS)

Write one composition from question 1 and another composition from question 2.

1. In 120 – 150 words, write on :-

(a) Vous organisez une activité scolaire dans votre école. Préparez-en le programme (10pts)

(b) Faites une annonce pour un nouveau produit dans votre usine (10pts)

2. In 150 – 180 words, write a composition on

(a) Ma première leçon de français (15pts)

or

(b) Un souvenir scolaire. (15pts)

SUKELLEMO JOINT MOCKS

KCSE 2021/22 TRIALS

(SERIES 001)

NAME……

SCHOOL…… **INDEX NO**……

SIGN…… **ADM NO** ……

501/2

FRENCH

Paper 2

Time: 1 ½ Hours

INSTRUCTIONS TO CANDIDATES:

- *This paperconsists of **two** sections*
  - *Reading comprehension*
  - *Grammar*
- *Answer**all** questions in the spacesprovided.*

For examiners use ONLY.

SECTION	MAX. SCORE	CANDIDATE SCORE
I	15	
II	15	
TOTAL	30	

SECTION I (15 MARKS)

Read the following passages and answer the questions that follow after each passage.

PASSAGE I

Un certain monsieur a un domestique très paresseux. Un jour, il appelle son domestique et demande ses souliers. Il pleut `a torrents, mais il désire voir un ami malade.

Le domestique apporte les souliers ; ils ne sont pas propres. Le monsieur est très vexé. Regardez mes souliers, Joseph ! « dit-il. « Votre paresse est inexcusable ! » « Eh bien, monsieur, » répond Joseph. « Inutile de polir vos souliers. Dans deux heures, ils vont être sales. » «Très bien, » répond froidement son maître. Il met les souliers sales et quitte à maison.

A sept heures du soir, Joseph frappe à la porte du salon. Il désire la clé de la cuisine. «Pour quoi faire ? » demande son maitre. « Pour faire mon souper, monsieur. » « Ah non, pas de souper pour vous, ce soir, mon homme ! »

«Mais monsieur…j'ai faim ! » « Peut-être bien, » dit le maître. « Inutile de manger, Joseph. Dans deux heures, vous allez recommencer à avoir faim ! »

1. (a) Pourquoi le monsieur sort-il? (½ pt)

   ……

   (b) Pourquoi le monsieur, n'est-il pas content de Joseph? (1 pt)

   ……

   (c) Comment est-ce que le maître a puni Joseph? (1pt)

   ……

   ……

Passage II

L'avion du chef d'état Togolais a atteri à 11 heures à l 'aéroport d'Orly. Le visiteur a été accueilli par le Premier ministre et son épouse. Tout de suite après, il s'est rendu á L'Elysée l'attendait ou le Présidentfrançais. Celui-ci a donné en son honneur un déjeuner où il y avait de nombreuses personnalités. A 15 heures, les deux chefs d'état ont discuté du problème des relations internationales. En fin d'après- midi le chef d'état étranger a reçu la presse et a répondua des questions. La première journée du voyage s'est terminée par une visite au Théâtre national de Paris.

2. (a) Dans ce passage on parle de ……

   …….. en France d'un

   chef d'état qui

vient……..……
…….. (1point)

(b) Qu'est que ce chef d'état a fait avec le Président français ?

(i)……
……(½ point)

(ii)

……..(
½ point)

(c) Trouvez dans le texte l'expression utilisée pour ;

(i) il est allé

……
……(½ points)

(ii) les
journalistes……
…….(½ points)

PASSAGE III

Une jeune française vivait à l'étranger et elle avait toujours l'habitude d'envoyer des cadeaux aux amis pendant le Noel.

Cette année -là, elle allait offrir des cadeaux à deux personnes. Elle les a envoyés un mois à l'avance. Malheureusement, allé a envoyé a chacun le paquet destine à l'autre.

Agnès, qui n'aimait ni vins ni bière a reçu une bouteille de champagne.

Moise, au contraire, a reçu une grosse caisse de pommes.

Par bonheur, tout s'est bien passé. Agnès s'est dit, « Je m'en servirai pour mes invités. »

Moïse, lui, qui n'aimait pas les pommes, a crié, "J'en mangerai une tout de suite. "

3. (a) Selon le passage, est-ce que c'est la première fois que la jeune fille envoyait les cadeaux?

……..(1
point)

(b) Citez ce que Moïse et Agnes devaient recevoir.

(i) Moïse……...(½ point)

(ii) Agnes ……...…(½ point)

(c) Quelle était la reaction commune de ces deux personnes quand les cadeaux sont arrivés?

……..... (1 point)

PASSAGE IV

Annette voulait se marier avec Léandre, mais elle était muette, et le père ne permettait pas le mariage avant sa guérison. Ses domestiques ont découvert un célébré médecin. Ils devaient le battre pour le force à venir la jeune fille. Mais il l'a guérie vite avec des coups de bâton.

4. (a) Le père d'Annette n'a pas accepté le mariage, Pourquoi ?

……

(b) Selon le texte qu'est-ce qu'on a fait pour obliger le médecin d'aller aider la fille ?

……

……(1 point)

(c) Comment est-elle sortie de sa condition ?

……

……(1 point)

PASSAGE V

Cher Omondi,

Nous sommes arrivés à Tananarive à 13h30 et mes parents m'attendaità l'aéroport. Au bout d'une demi-heure, **on** était déjà à la maison. Je suis maintenant dans ma chambre et j'ai voulu t'écrire, avant de me coucher, pour vous dire, à toi et tes parents un grand merci. » Sache que j'que j'attends avec impatience le jour où j'aurai le plaisir de rembourser la grande dette des moments inoubliables que j'ai passés dans votre pays magnifique avec un peuple très hospitalier. Tu pourras alors voir de tes propres yeux, tout ce que je t'ai dit sur Madagascar. Pourquoi ne pas venir au moment du match de rugby ? Les joueurs kenyans auront besoin de supporters. Aucun malgache, y compris moi-même, ne pourra soutenir l'équipe kenyane, mais, toi, avec les quelques autres Kenyans qui vivent ici, vous pourrez le faire sans problèmes. J'ai pris le même avion que notre équipe

de rugby qui rentrait de Nairobi. Ils ont parlé du match pendant tout le voyage. Ils disent qu'ils vont gagner le match retour sans difficulté, mais comme moi, ils avaient un très bon souvenir du Kenya. En attendant de te lire, bien des choses à tous. ***Racoutou Ratararana***

(a) Ou` habite Racoutou? (½ point)

……
……

(b) A quell moment ecrit-il la lettre? (½ point)

……
……

(c) (i) Qu'est-ce que Racoutou, a apprecié des habitants du pays qu'il a visité? (½ points)

……
……

(ii) Pendant le match de rugby, quelle équipe soutiendra-t-il? (1pt)

……
……Quand Racoutou propose-t-il à son ami de venir chez lui? (1pt)

……
……

SECTION II (15MKS)

6 ***For each of the following questions, complete the response correctly. Avoid unnecessary changes.***

Example. Ilest fatigué mais il fait la lessive.

Bien que…….

Bien qu'il soit fatigué, il fait la lessive.

(a) Je travaille et je danse en meme temps.

(1point)

En……

……Nous habitons au Kenya depuis trois mois.

(1 point)

Ca fait

……

……Ma me`rem `a demande' : "Avez- vous le temps pour des boums?"

(1 point)

Elle m`a demande'

……..……

……..

(b) Je ne fais pas le tour du monde car je ne suis pas riche.

(1 point)

Si

……

……Il est Parti mais il n'a pas parlé

(1point)

Sans……

……As – tu mange' des tomates?

(1 point)

Non,

je……

……

(c) Anne m`avait vendu ces oranges.

(1 point)

Voici les

oranges……

……

7 . ***Match the sentences in column A with the correct ones in column B.***

(3pts)

1.	Combien d'argent est-ce Qu'on paie en charcuter?	(a)	Il faut réussira son examen
2.	Pour aller à l'université'	(b)	Mais c'est la mode les jeans troues
3.	Tu sors comme ça ?	(c)	On lui doit 50 dollars
4.	Vous connaissez la sociétéBatim ?	(d)	Je vous en prie
5.	Vous écrivez quelque chose ?	(e)	Pourquoi ? vous devez y aller ?
6.	Merci beaucoup	(f)	Oui, une historie.
		(g)	Oui,à coté

1	2	3	4	5	6

8. ***Fill in the blank spaces with ONE word only.***

(5mks)

Monsieur le Directeur _____ 1. ressources humaines, J`ai lu _____2. le journal que vous cherchez un attaché commercial et votre _____3. m`a intéressé.

Je travaille maintenant comme vendeur chez bull _____4.cinq ans. Pendant ces ans, j`ai vendu beaucoup d'ordinateurs.

J`ai commencé _____ 5. études _____6. six mois a` l'université NJEMA. Mes notes sont agréables et j'espère travailler mieux. Je _____7.trois langues couramment. L'anglais, le Swahili et _____8.français. Ne passez pas trop de temps a` réfléchir et répondez-moi. S'il vous plait. Je vous prie de _____9, monsieur le Directeur, mes sincères _____10.

Jacques

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