KCSE 2022 MOCKS

ALL SUBJECTS

SERIES 2

SUBJECTS COMPILED;

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

2nd Series of JOINT TRIAL EXAMS Amongst Shared COMMUNAL SCHOOLS Administered to ALL KCSE CANDIDATES.

For Marking Schemes/Answers

CALL/WHATSAPP 0746 222 000

COMPILED BY MWALIMU AGENCY

KCSE 2022 MOCKS

SERIES 002

NAME……

SCHOOL…… **INDEX NO**……

SIGN…… **DATE**……

231/1

BIOLOGY

PAPER 1

(THEORY)

TIME: 2 HOURS

INSTRUCTIONS TO CANDIDATES.

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

b) *Sign and write the date.*

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

d) *Answers must be written in the spaces provided in the question paper. Additional pages must not be inserted.*

FOR EXAMINER'S USE ONLY.

QUESTIONS	MAXIMUM SCORE	CANDIDATE'S SCORE
1 - 27	**80**	

1. a) Name the organelle where Kreb's/ citric cycle take place in a cell. **(1mark)**

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(b) Where are lysosomes synthesized **(1mark)**

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2. Distinguish between ecological niche and habitat. **(2mark)**

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3. State the importance of osmo - regulation in organisms **(2 marks)**

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4. Explain why unicellular organisms such as paramecium lack complex organs for gaseous exchange. **(2marks)**

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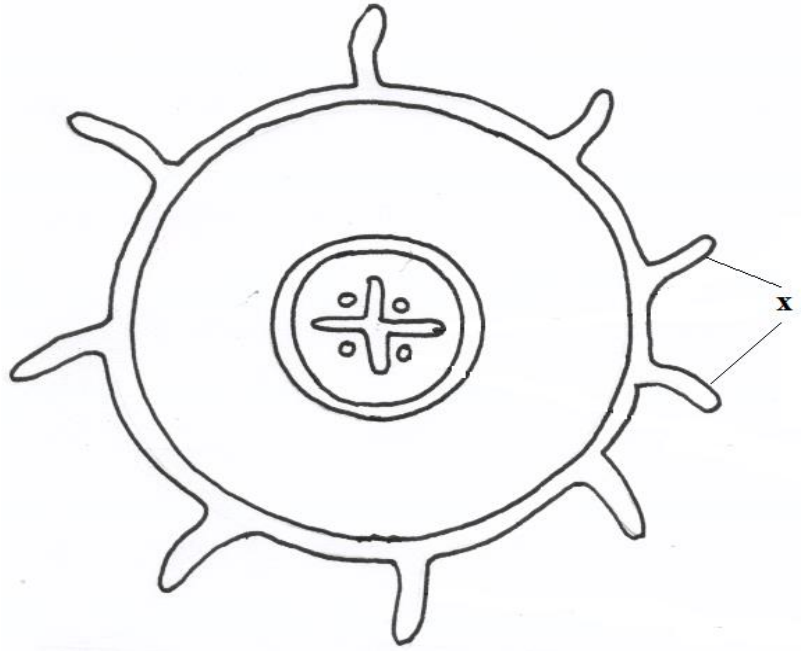
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5. The diagram below represents a transverse section of a plant part. Study it and answer the questions that follow.



a) Name the class in which the plant belongs. **(1marks)**

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

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c) State one adaptation for the structures labeled X to their functions. **(1mark)**

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6. State the function of the following structures in the human n ear.

(a) Semi – circular canals. **(1mark)**

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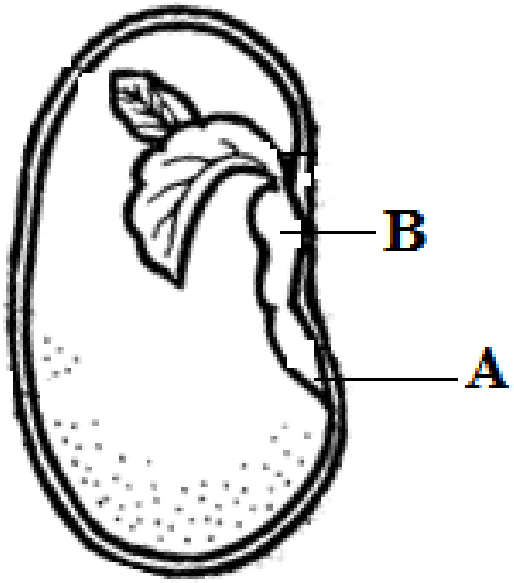
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(b) Eustachian tube. **(1mark)**

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7. The diagram below shows the internal structure of a broad bean seed. Study it and answer the questions that follow.



(a) Name the part labeled B. **(1 mark)**

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(b) Why is it important that the part labeled A develops first during germination? **(2 mark)**

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8. Explain what causes global warming. **(3 marks)**

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9. The diagram below represents a mammalian bone.



(a) Identify the bone **(1mark)**

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(b) i) Name the bones that articulate with this bone at points K and L **(2 marks)**

K

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L

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10. The equation below represents a metabolic process that occurs in the mammalian liver.

Amino Acids ⟶ Organic + Urea
Compounds

(a) Name the process **(1 mark)**

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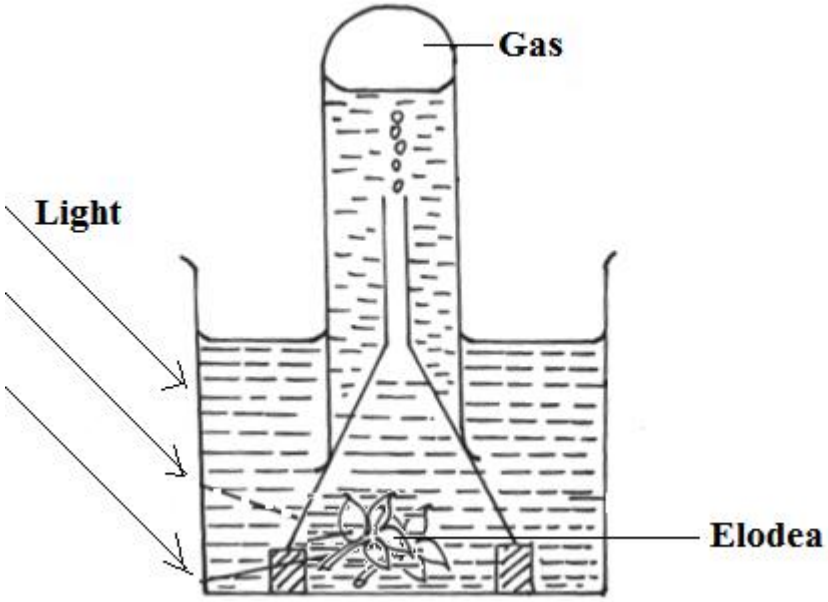
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(b) What is the importance of the process to the mammal? **(2marks)**

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11. The diagram below represents a set up that was used to investigate a certain process in a plant.



(a) State the process that was being investigated. **(1 mark)**

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(b) Other than the factors shown, state two factors that would affect the process named in (a) above. **(2 mark)**

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12. Give an example of the sex linked trait in humans on

Y – Chromosomes **(1mark)**

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X – Chromosomes **(1 mark)**

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13. Explain why a rat has a higher food intake compared to a lizard of the same body weight. **(4 mks)**

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14. (a) Mutua and Mwende used a light microscope to observe guard cells in a leaf surface.

They indicated a magnification of X 450 .Given that the eye piece was marked X10, work out the objective lens magnification. **(2 marks)**

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(b) State the function of fine adjustment knob. **(1mark)**

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15. State two structural differences between skeletal and smooth muscles. **(2 marks)**

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16. Outline two roles of active transport in human beings. **(2 marks)**

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17. State three advantages of asexual reproduction in plants. **(3 marks)**

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18. a).Name the causal organism for amoebic dysentery. **(1 mark)**

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b) State three preventive measures of schistosomiasis in human beings **(3 mark)**

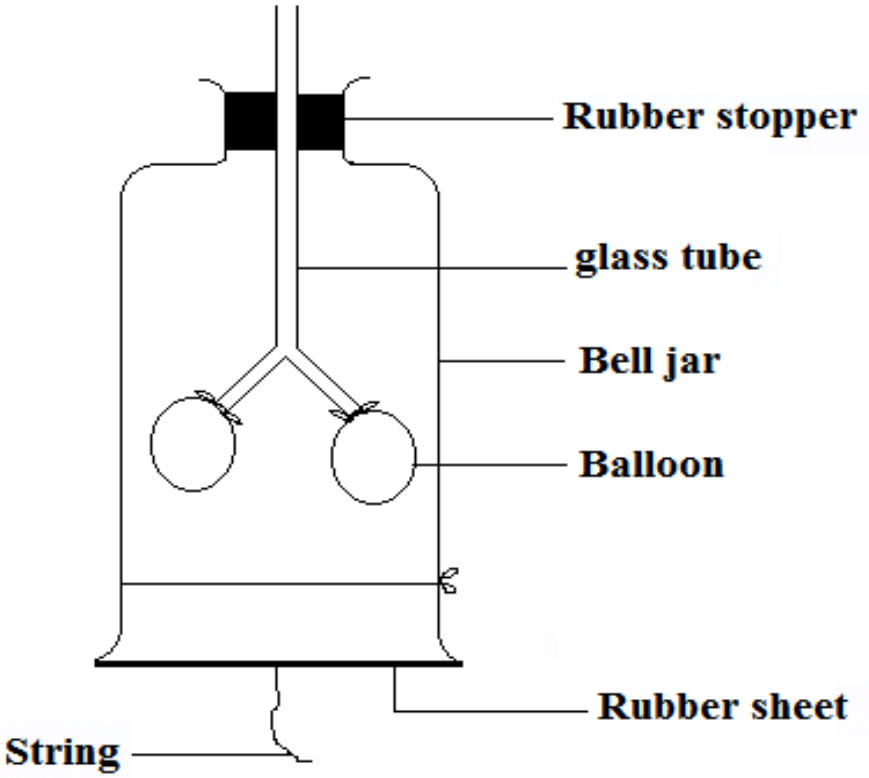
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19. 0Tom, a form two students set up the apparatus shown below to demonstrate the breathing mechanism in a mammal.



(a) What structure in a mammal is represented by each of the following? **(2marks)**

i) Glass tube

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ii) Rubber sheet

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(b) Explain what will happen to the balloons if the rubber is pulled down wards. **(2 marks)**

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20. a) What is adaptive radiation? **(2 marks)**

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b) Explain why crossbreeding is important in animal breeding. **(2 marks)**

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21. a) State the most suitable biological tool for collecting the following organisms:-

i) A moth from a coffee farm. **(1 mark)**

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ii) Ants from a tree trunk. **(1 mark)**

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b) State two distinguishing characteristics of the kingdom protoctista. **(2 mark)**

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22. a) Name the hormone that stimulate the maturation of the graafian follicles to release a mature ovum in female reproductive cycle. **(1mark)**

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b) Explain why menstruation does not take place after fertilization in human beings. **(2marks)**

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23. How does sunken stomata help in lowering transpiration? **(3marks)**

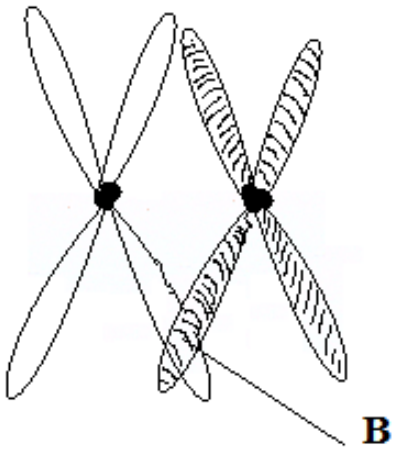
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24. The diagram below shows a phenomenon which occurs during cell division.



a) Identify the stage of cell division in which this phenomenon occurs. **(1 mark)**

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b) State the importance of the phenomenon taking place in the part labeled B. **(2 marks)**

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25. a) An organism was found to have a dental formula

$$i\ \frac{0}{3}\quad c\ \frac{0}{1}\quad pm\ \frac{3}{2}\quad m\ \frac{3}{3}$$

i) State the mode of feeding of the organism. **(1mark)**

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

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b) Name the vitamin which plays an important role in the formation of blood cells. **(1mark)**

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26. a) State **one** advantage of double circulation over single circulation. **(1mark)**

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b) State **two** adaptations of blood capillaries to their functions. **(2marks)**

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27. a) Name a growth hormone that has inhibitory effects in plants growth. **(1mark)**

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b) State two characteristics of a meristematic cells. **(2marks)**

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28. Write down two functions of exoskeleton in the phylum Arthropoda. **(2 marks)**

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KCSE 2022 MOCKS

SERIES 002

NAME……

SCHOOL…… **INDEX NO**……

SIGN…… **DATE**……

231/2

BIOLOGY

Paper 2

Time 2Hours

INSTRUCTIONS T O CANDIDATES

1. *Write your name and index number in the spaces provided above.*
2. *.. Sign and write the date of the examination in the spaces provided .*
3. *T his paper consist of two sections A and B.*
4. *In section B,answer question 6 (compulsory) and either question 7 or 8 in the spaces provided after question 8.*

FOR EXAMINER USE ONLY.

SECTION	QUESTIONS	MAX SCORE	SCORE
A	1 2 3 4 5	08 08 08 08 08	
B	6 7 8	20 20 20	
TOTAL SCORE		80	

1. In a garden with plants of the same species, 705 plants had red flowers while 224 had white flowers.

a) Work out the ratio of red to white flowered plants **(1mark)**

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b) i) Using letter R to represent the dominant gene , work out a cross between F1 offspring and a white flowered plant. **(4 marks)**

ii) What is the genotypic ratio from the cross in b)(i) above?

Genotypic ratio **(1 mark)**

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Phynotypic ratio **(1 mark)**

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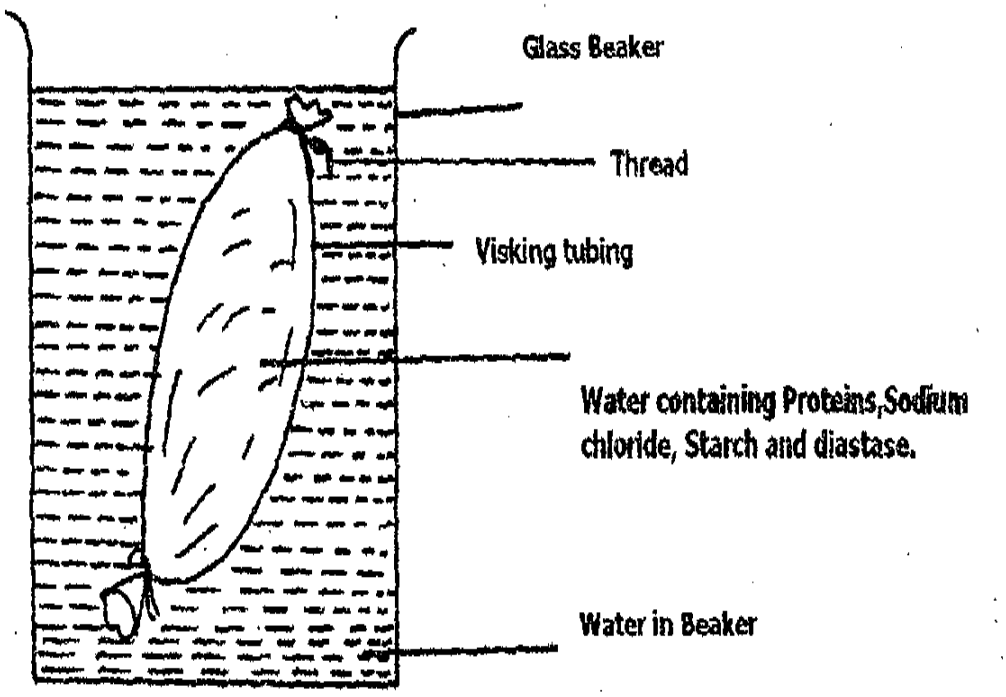
c) What is meant by the term allele? **(1 mark)**

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2. In a physiological experiment, starch, protein, diastase and sodium chloride were added to water and put inside a visking tubing. The visking tubing was then placed in a water bath maintained at a temperature between *35* - 40°C. The set up was as shown in the diagram below.



The following observations were made after the procedures indicated.

Contents in	At the start of experiment	After 1 hour
Visking tubing	i) Solution tastes salty	Solution tastes salty
	ii) Visking tubing is not firm	Visking tubing is firm
	iii) After boiling with Benedicts solution, solution remains blue	After boiling with Benedicts solution the solution turns brown
	iv) On addition of solution hydroxide followed by copper	On addition of sodium hydroxide followed by coppers

	sulphate solution to the solution, the colour changes to purple	sulphate to the solution, the colour changes to purple
Beaker	i) Water is tasteless	Solution tastes sweet/salty
	ii) After boiling solution with Benedicts solution, Blue colour remains	After boiling solution with Benedicts solution, colour turns to brown
	iii) On addition to sodium hydroxide followed by copper sulphate solution, colour remains blue	On addition of sodium hydroxide followed by copper sulphate solution, colour remains blue

a) Name the process by which salt moved into the water in the beaker from the visking tubing. **(l mark)**

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b) **i)** Name the food substance responsible for the brown colour observed after 1 hour both in the beaker and visking tubing when solutions are boiled with benedicts solution. **(l mark)**

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ii) Account for the observation in (b i) above. **(3 marks)**

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c) i) Name the food substance tested with sodium hydroxide followed by copper sulphate solution(s) **(1 mark)**

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ii) Account for the absence of the food substance named in (c i) above in the beaker after

1 hour. **(l mark)**

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d) After one hour the visking tubing was firm. State the term used to describe this state.**(1mark)**

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3. **a)** Distinguish between natural and acquired immunity **(l mark)**

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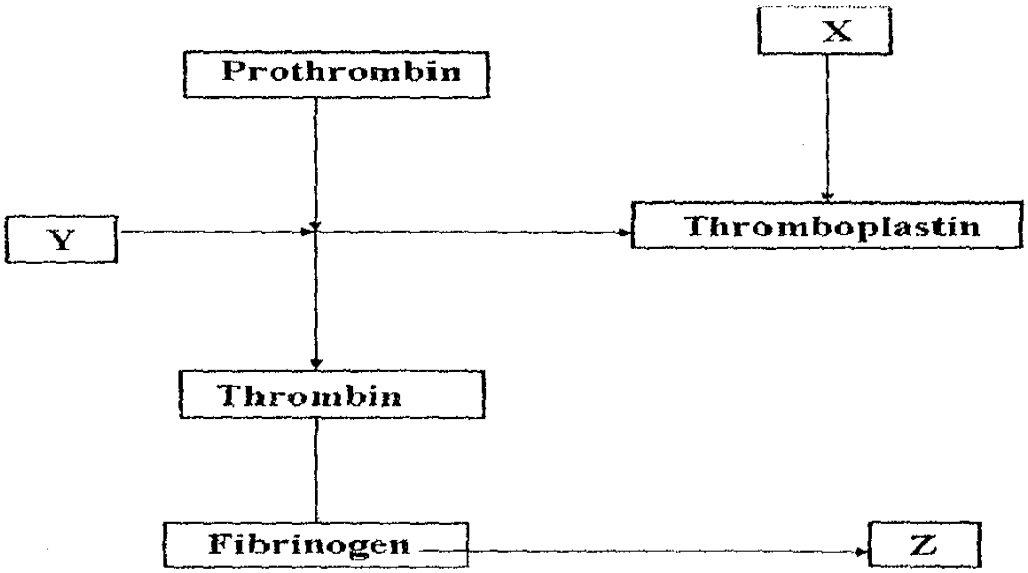
b) Define the term allergy **(l mark)**

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c) The chart below shows the blood clotting mechanism



i) Name the blood cells represented by X **(1mark)**

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ii) The end product of the mechanism represented by Z **(1 mark)**

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d) Explain how the following environmental factors increase the rate of transpiration.

i) Temperature **(2 marks)**

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ii) Humidity **(1 mark)**

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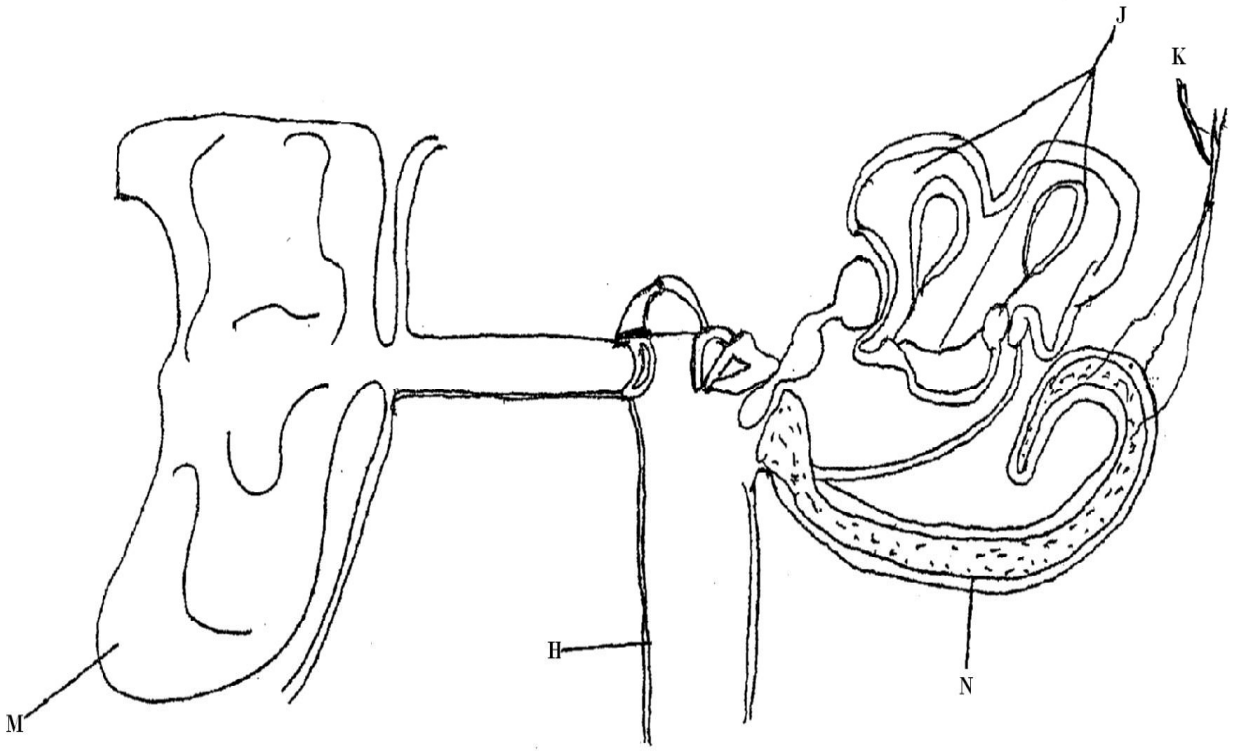
iii) Atmospheric pressure **(1 mark)**

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4. The diagram below represents a section through the mammalian ear. Study it and answer the questions that follow.



a) Name the structures labeled H and J **(2 marks)**

H ……..

J …….

b) State how the structures labeled H, M and N are adapted to their functions**.(3 marks)**

H

……

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M

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N

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c) State *what* would happen if the structure labeled K was completely damaged. **(1 mark)**

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d) Name the fluid contained in structure N. **(1 mark)**

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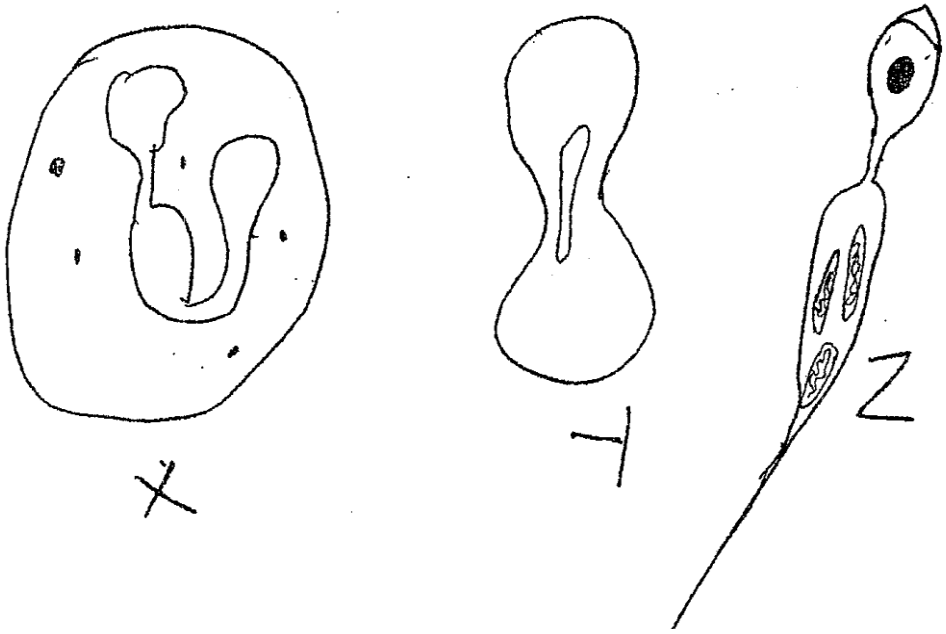
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e) Apart from hearing, state the other role performed by the human ear. **(1 mark)**

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5. The structures below represent specialized cells in man.



a) Identify structure X, Y and *Z.*

X …… **(l mark)**

Y …… **(1 mark)**

Z …… **(1 mark)**

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

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c) Give two adaptation of *Z* to its function. **(2 marks)**

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d) What is tissue fluid? **(2 marks)**

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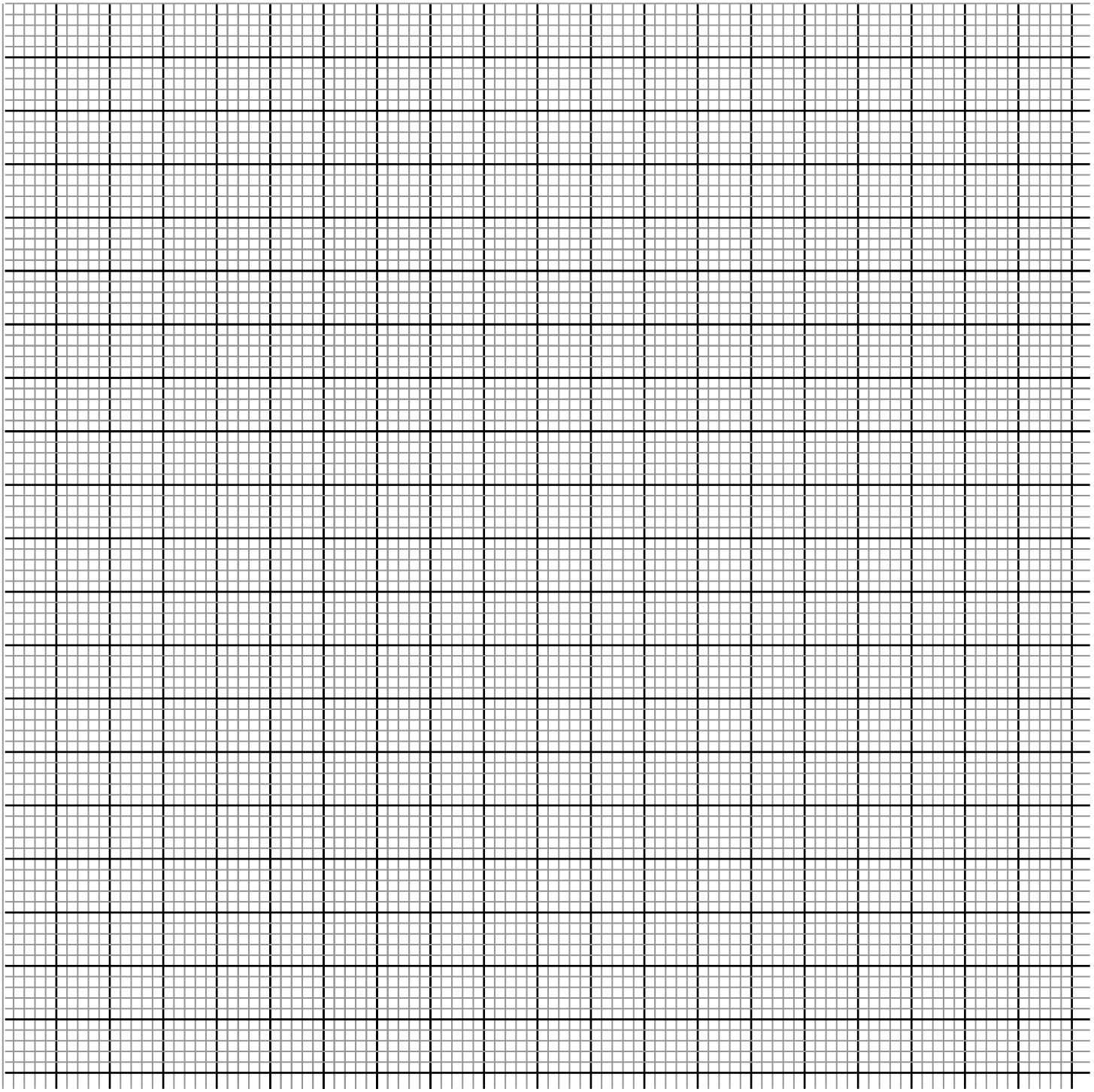
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SECTION B(40 MARKS)

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

6. The table below shows the population of a housefly *musca domestica* which is parasitized by wasps of species Nasonia spp. The investigation of their population growth pattern was carried out for 70 weeks. In these experimental space and physical factors were assumed to be limiting.

Time in weeks	0	5	10	15	20	25	30	35	40	45	50	55	60	65	70
Musca domestica	40	70	110	260	350	480	400	395	350	40	60	140	250	240	230
Nasonia Spp.	10	20	30	45	100.	200	300	380	410	250	60	20	40	200	280



a) Using the readings in the table, plot graphs on the same axis of population growth of organisms against time. **(8 marks)**

b) Account for the growth of

i) *Musca domestica* between 10th week — 25th week. **(1 mark)**

ii) Nasonia species between 40th week –50th week. **(1 mark)**

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c) What is the population of?

i) Nasonia spp. on the 62nd week? **(1 mark)**

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ii) *Musca doniestica* on the **4th** week? **(1 mark**)

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d) Bemex, another parasite of housefly was introduced into the ecosystem. Giving a reason; what will be the effect on the population of

i) Housefly *Musca domestica.* **(2 marks)**

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ii) Nasonia Spp. **(2 marks)**

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e) In estimating the population of *Musca domestica* in the experiment above. Capture-mark release recapture method was used. Describe the procedure which was followed.

(4 marks)

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7. a) What is natural selection? **(2 marks)**

b) Describe how natural selection brings about adaptations of a species of a living organism to its environment **(18 marks)**

8. a) Describe how urea is formed **(5 marks)**

b) Describe the path followed until it is eliminated from the body **(15 marks)**

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KCSE 2022 MOCKS

SERIES 002

NAME……

SCHOOL…… **INDEX NO**……

SIGN…… **DATE**……

231/3

BIOLOGY

PAPER 3

(PRACTICAL)

CONFIDENTIAL:

The information contained in this confidential is meant to assist the school and the Biology teacher to prepare adequately for the Biology Practical.

No person should have the access to information in this people either directly or indirectly apart from the head teacher and the Biology teacher.

The students are to be provided with the following:

1. 4 test tube.
2. Source of heat.
3. Suspension W (mixture of 10% sucrose and 10% egg white) about 10ml per student.
4. Iodine solution.
5. Benedict solution.
6. Dilute hydrochloric acid.
7. Sodium hydrogen carbonate solution.
8. Sodium hydroxide solution.
9. Copper (II) sulphate.

KCSE 2022 MOCKS

SERIES 002

NAME……

SCHOOL…… **INDEX NO**……

SIGN…… **DATE**……

231/3

BIOLOGY

PAPER 3
(PRACTICAL)
TIME: 1¾ HOURS

INSTRUCTIONS TO CANDIDATES:

(a) *Write your name and index number in the spaces provided above.*
(b) *Sign and write the date of examination in the spaces provided above.*
(c) *Answer all the questions in the spaces provided.*
(d) *You are required to spend the first 15 minutes of the 1¾ hours allowed for this paper reading the whole paper carefully before commencing your work.*
(e) *Additional papers must not be inserted.*

FOR EXAMINER'S USE ONLY:

Question	Maximum Score	Candidate's Score
1	15	
2	15	
3	10	
Total score	40	

1. **(a)** You are provided with suspension W. Using the reagents provided carry food test and record the procedure, observation and conclusion.

Food substance	Procedure	Observations	Conclusion

(12 marks)

(b) Mention **two** enzymes that may be required to digest the content of suspension W in the alimentary canal of mammal. **(2 marks)**

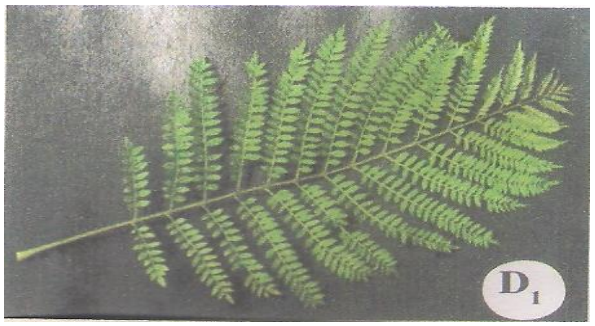
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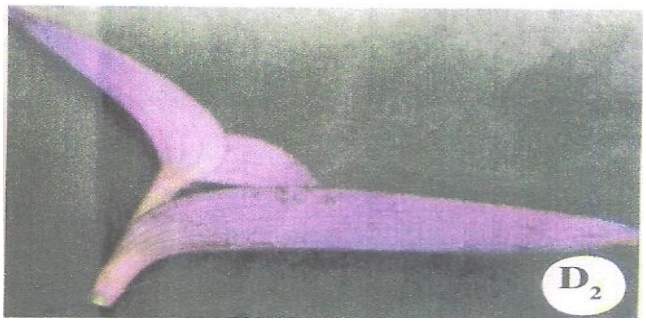
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(c) State the purpose of hydrochloric acid in the experiment. **(1 mark)**

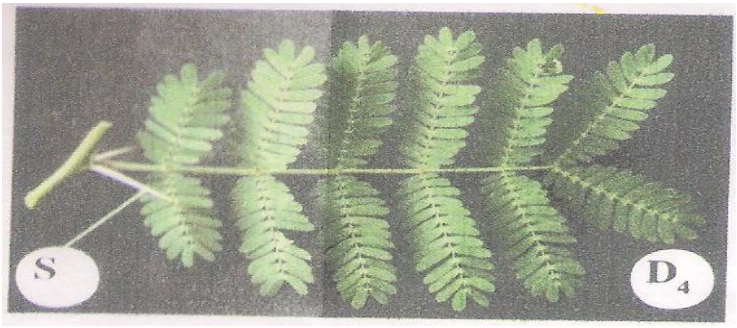
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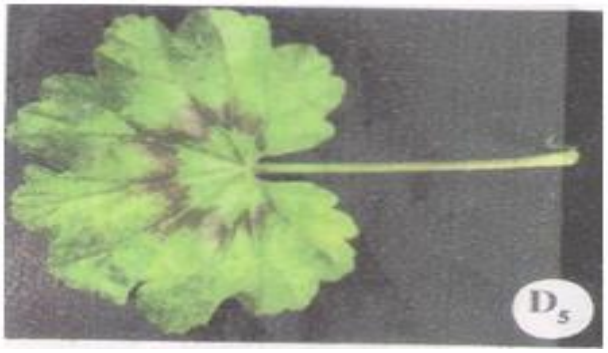
2. You are provided with seven photographs of plant specimens. They are labelled specimen D_1, D_2, D_3, D_4, D_5, D_6, D_7.















(a) Use the dichotomous key to identify the taxonomic group of each of the seven specimens in the photographs provided.

The dichotomous key

1. (a) Leaves needle like ---------- go to 2
   (b) Leaves broad ---------- go to 3

2. (a) Leaves arranged in clusters on stem ---------- Pinaceae
   (b) Leaves not arranged in clusters on stem ---------- Auraucariaceae

3. (a) Leaves compound ---------- go to 4
   (b) Leaves simple ---------- go to 7

4. (a) Leaf pinnate ---------- go to 5
   (b) Leaf bipimate ---------- go to 6

5. (a) Leaflets attached to many small stalks that join the main one ---------- Mimosaceae
   (b) Leaflets attached to one stalk ---------- Rosaceae

6. (a) Leaflets attached to many small stalks that join the main one ---------- Bignonaceae
   (b) Leaflets attached to one stalk ---------- Compoistae

7. (a) Leaves green ---------- go to 8
   (b) Leaves purple ---------- go to 9

8. (a) Leaves parallel veined ---------- Graminae
   (b) Leaves net veined ---------- Geranaceae

9. (a) Leaves parallel veined ---------- Commelinaceae
   (b) Leaves net veined ---------- Euphorbiaceae

Specimen	Steps followed	Identify	
D_1			
D_2			
D_3			
D_4			
D_5			
D_6			
D_7			

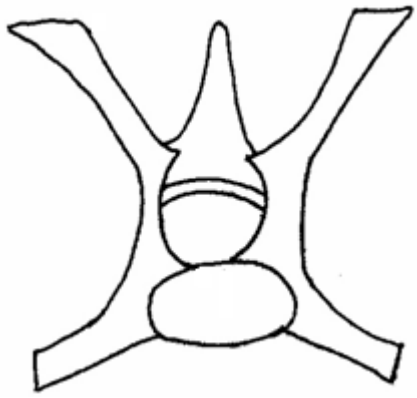
(14 marks)

(b) Suggest the possible habitat that specimen D_4 is adapted to. **(1 mark)**

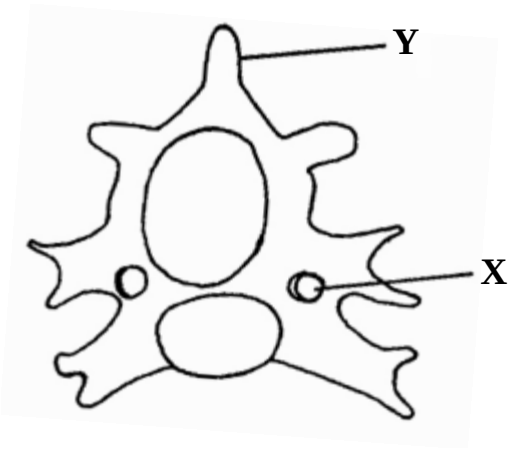
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3. The diagram **below** represents bones obtained from a mammal.

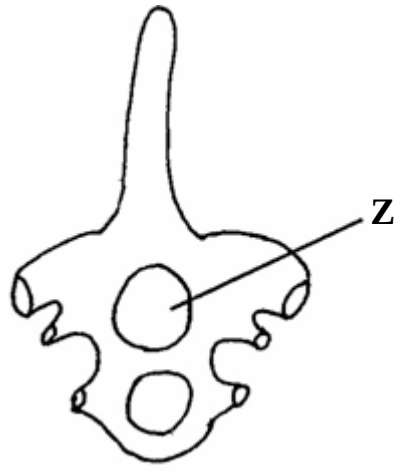
A_1



A_2



A_3



(a) Identity bones. **(3 marks)**

A_1 _____

A_2 _____

A_3 _____

(b) Name parts labelled. **(3 marks)**

X _____

Y _____

Z _____

(c) From which region of the body was bone labelled A_2 obtained. **(1 mark)**

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(d) State the function of part labelled **X**. **(1 mark)**

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(e) State **two** adaptations of bone labelled A_1 to its function. **(2 marks)**

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KCSE 2022 MOCKS

SERIES 002

NAME……

SCHOOL…… **INDEX NO**……

SIGN…… **DATE**……

233/1

CHEMISTRY

Paper 1

Time: 2 Hours

INSTRUCTIONS TO CANDIDATES

(a) *Write your name and index No. in the spaces provided above.*

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

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

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

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

FOR EXAMINER'S USE ONLY

QUESTION	MAXIMUM SCORE	CANDIDATE'S SCORE
1-29	80	

1. Name the method of separation that can most suitably be used to separate the following mixtures

a) Gasoline from petroleum. **(1mk)**

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b) Benzoic acid and potassium carbonate. **(1mk)**

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c) Oil from cashew nuts. **(1mk)**

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2. The table below shows information about three solid substances A,B and C.Study it and answer the question that follow.

SOLID A	**COLD WATER**	**HOT WATER**
A	Soluble	soluble
B	Insoluble	Insoluble
C	Insoluble	Soluble

Describe how you will separate the three solids from a mixture of three three. **(3mks)**

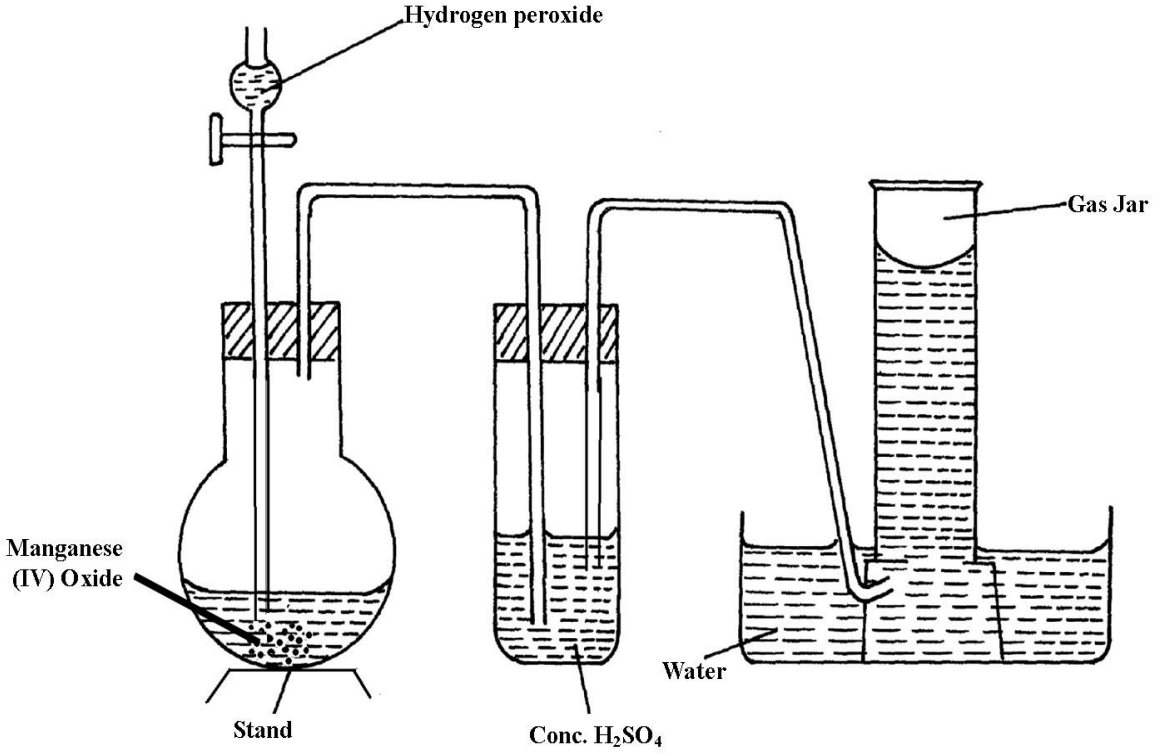
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3. The diagram below shows the set-up that can be used to prepare and collect oxygen gas. Study it and answer the questions that follow.



a) Identify two mistakes from the diagram which must be corrected for one to collect dry oxygen gas. **(2mks)**

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b) What property of oxygen gas makes it possible to be collected over water. **(1mk)**

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4. The table below gives information about some reactions of metals A,B, C and D and their rates.

METAL	Reaction with acid	Reaction with water	Action of heat on its nitrate
A	Hydrogen evolved	No reaction	Oxide formed
B	NO reaction	No reaction	Metal formed
C	Hydrogen evolved	Hydrogen evolved	Oxide formed
D	NO reaction	NO reaction	Oxide formed

Arrange the metals in order of decreasing activity (Starting with the most reactive) **(2mks)**

5. The table below gives information on four elements by letters K,L,M and N.Study it and answer the questions that follow. The letters do not represent the actual symbol of the elements

Element	Electron arrangement	Atomic radius (nm)	Ionic radius(nm)
K	2.8.2	0.136	0.065
L	2.8.7	0.099	0.181
M	2.8.8.1	0.203	0.133
N	2.8.8.2	0.174	0.099

a) Which <u>two</u> elements have similar properties?

Explain **(2mks)**

……

……

……

b) What is the most likely formula of the oxide of L? **(1mk)**

……

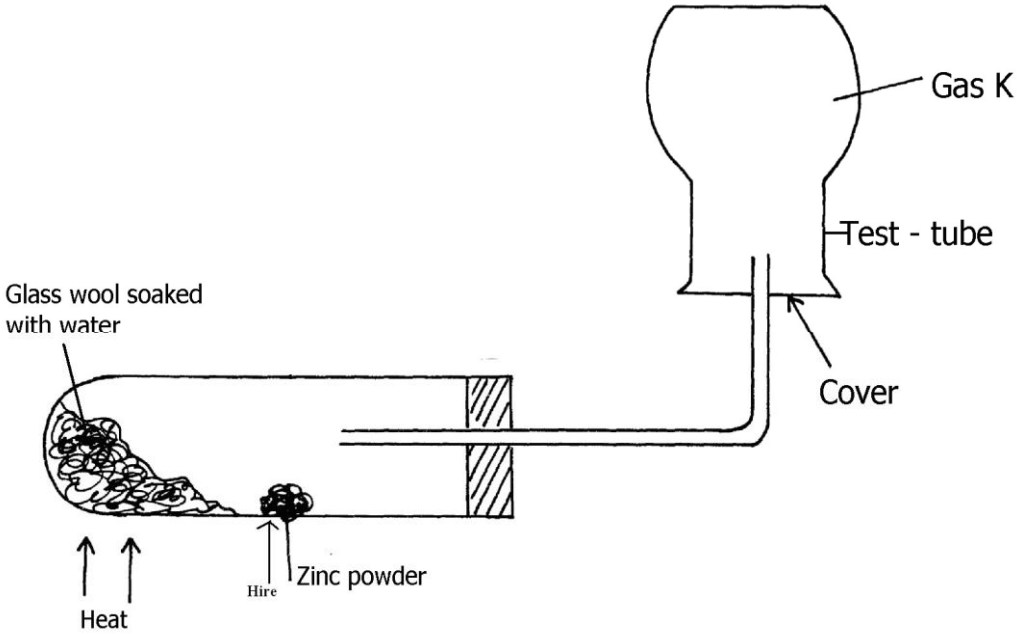
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c) Which element is a non – metal. Explain. **(1mk)**

……

……

6. A student set- up the experiment below to collect gas K. The glass wool was heated before heating the zinc powder.



a) Why was it necessary to heat the moist glass wool before heating the zinc powder**.(1mk)**

……

……

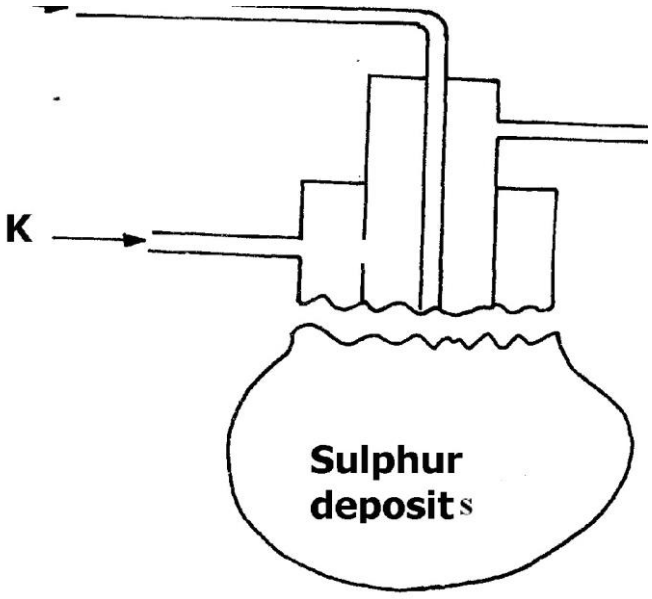
b) What observation were made in the test-tube. **(1mk)**

……

……

7. Using dots(•) and crosses (x) to represent the outermost electrons, draw the structure to show the bonding in CO_2 (C = 6, O = 8) **(3mks)**

8. Sulphur is extracted from underground deposits by a process in which three concentric pipes are sank down to the deposits as shown below.



a) Name the process represented above. **(1mk)**

……

……

b) What is passed down pipe J. **(1mk)**

……

……

c) Name **two** allotropes of sulphur **(1mk)**

……

……

9. Name the particles responsible for the electrical conductivity of

a) Graphite **(1mk)**

……

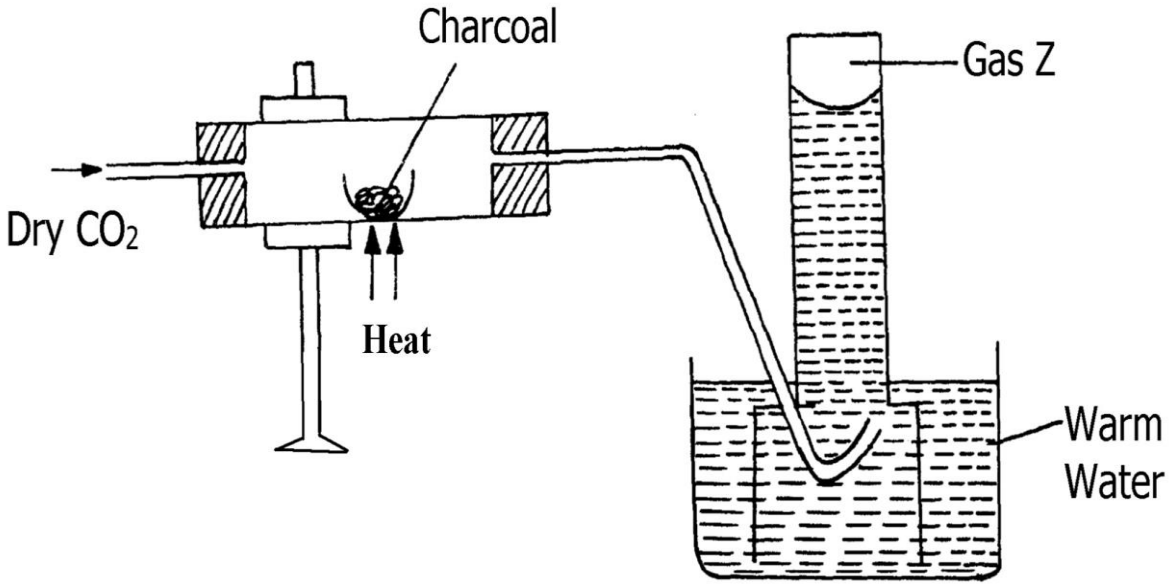
……

b) Magnesium sulphate solution. **(1mk)**

……

……

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



a) Identify gas Z **(1mk)**

……

……

b) Write the chemical equation for the reaction which produced gas Z. **(1mk)**

……

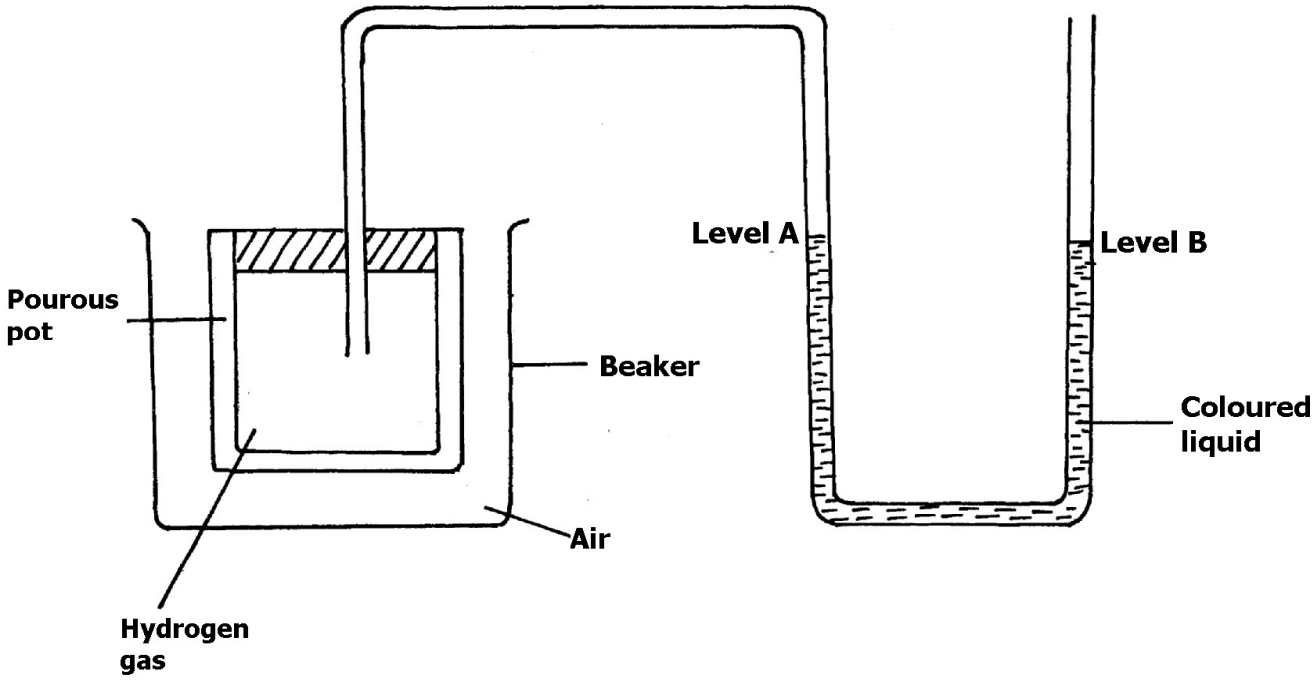
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c) State why the above experiment should be carried out in a fume chamber. **(1mk)**

……

……

11. The set- up below was used to investigate the rate of diffusion of different gases.



a) Explain why a coloured liquid is used in this experiment. **(1mk)**

……

……

……

b) State and explain the observation made after 20 minutes. **(2mks)**

……

……

12. 25.0cm^3 of 0.12M potassium hydroxide solution required 30.0cm^3 of a solution of a dibasic acid (H_2H) for complete neutralization. The acid contained 3.15g per 500cm^3 solution Calculate:

a) The molarity of the acid solution. **(1½ mks)**

……

……

……

……

b) The relative formula of the acid. **(1½ mks)**

……

……

……

13. Explain how a sample of CH_3CH_2OH could be distinguish from a sample of CH_3 COOH by a chemical test. **(2mks)**

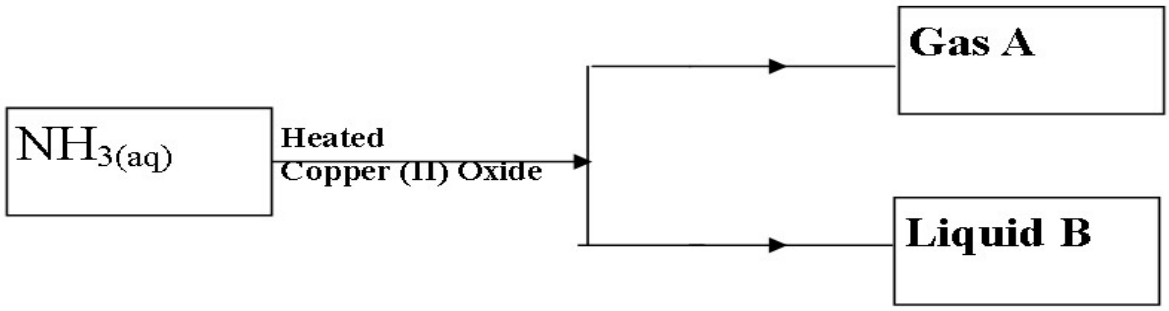
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14. Study the flow chart below and answer the questions that follow.



a) State the observations made when ammonia gas is passed over heated copper(II) oxide. **(1mk)**

……

……

b) Identify :

i) Gas A **(1mk)**

……

……

ii) Liquid B **(1mk)**

……

……

15. Starting from calcium carbonate, describe how a solid sample of calcium sulphate can be prepared. **(3mks)**

……

……

……

……

……

……

16. A gas, G is prepared in the laboratory by adding concentrated sulphuric (VI) acid to a compound C. Gas G is denser than air and dissolves in water to form a solution which is strongly acidic.

a) Name two gases that are likely to be G. **(2mks)**

……

……

b) Draw a diagram to show how gas G can be collected. **(1mk)**

17. Equal volumes of 2M dibasic acids X and Y were each reacted with excess zinc carbonates powder. The table below shows the volumes of the gas produced after 2 minutes.

Acid	Volume of gas (cm^3)
X	20
Y	80

a) Identify the gas produced. **(1mk)**

……

……

b) Explain the difference in the volumes of the gas produced. **(2mks)**

……

……

……

18. Methane gas reacts with chlorine gas as shown in the equation below.

$$CH_4(g) + Cl_2(g) \xrightarrow[\text{light}]{\text{u.v}} CH_3Cl(g) + HCl(g)$$

Use the bond energies in the table below to calculate the enthalpy for the above reaction.

Bond	Bond energy kJ/ mol
C – H	413
Cl – Cl	242
C – Cl	346
H – Cl	431

19. An equilibrium exists between the chromate ion (CrO^{2-}_4) and the dichromate ($Cr_2O^{2-}_7$) as represented by the following equation.

$$2CrO_4^{2-}(aq) + 2H^+(aq) \rightleftharpoons Cr_2O_7^{2-}(aq) + H_2O(l)$$

(Yellow) **(Orange)**

State and explain the observation made on adding aqueous potassium hydroxide solution to the equilibrium mixture. **(2mks)**

……

……

……

20. Below is a table of reduction potentials and volts of some half cells. The letters do not represent the actual symbols of the elememts but use them to answer the questions which follows.

Reaction	**Volts** A^{2+} +
2e $A_{(s)}$	-2.80
$B^{+}_{(aq)}$ + e $\longrightarrow$ B (s)	-1.50
2C $\longrightarrow$ $^{+}_{(aq)}$ + 2e $C_{2(s)}$	0.00
$D_{2(g)}$ + 2e $2D^{-}_{(aq)}$ $\longrightarrow$ + 3.20 G^{+} + e $G_{(s)}$	+ 1.80

a) Select the species with the largest

i) Oxidising power. **(1mk)**

……

……

ii) Reducing power **(1mk)**

……

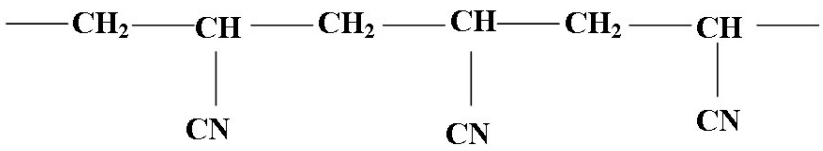
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Calculate the electrode potential (e.m.f) for a cell constructed using half – cells of A and B.

(1mk)

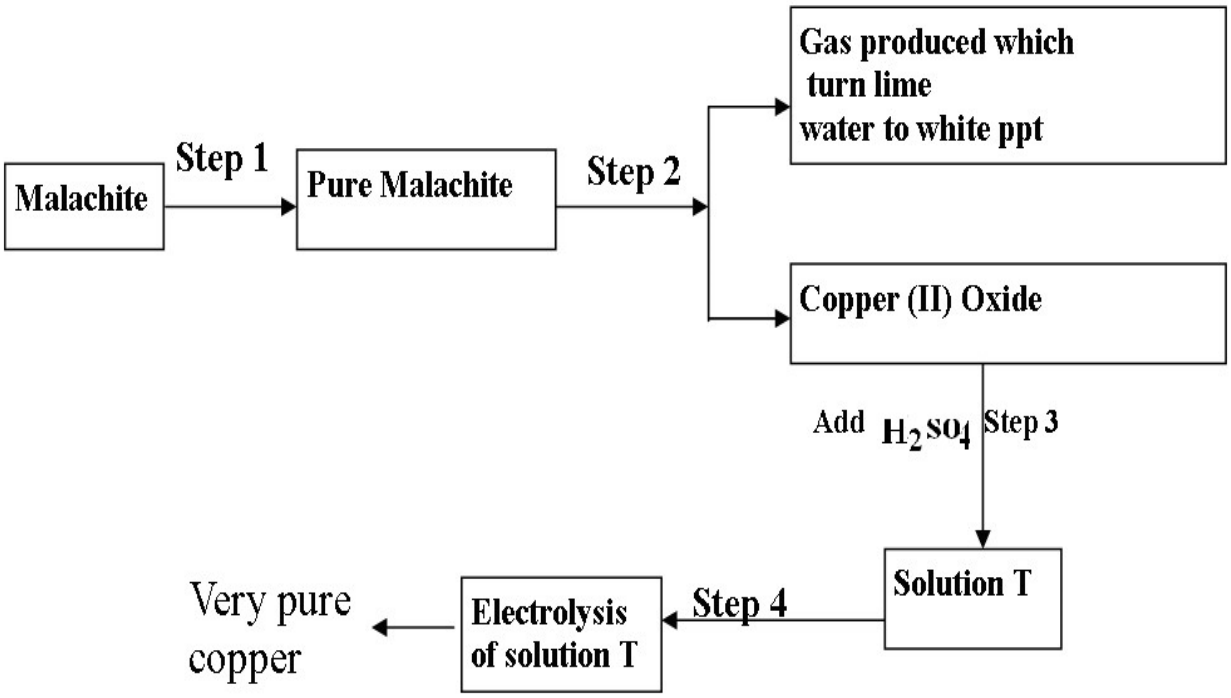
21. A polymer has the following structure



A sample of this polymer is found to have a molecular mass of 5194.Determine the number of minomoers on the polymer.

(H = 1.0 , C = 12.0, N = 14.0) **(2mks)**

22. Malachite is an ore of copper. The main impurity is Iron(II) Oxide. Extraction of copper from its ore occurs in 3 stages; purification formation of electrolyte and electrolysis. The flow chart below shows the process of extraction.



a) Write the formula of the anion present in malachite. **(1mk)**

……

……

b) State how the main impurity in malachite is removed. **(1mk)**

……

……

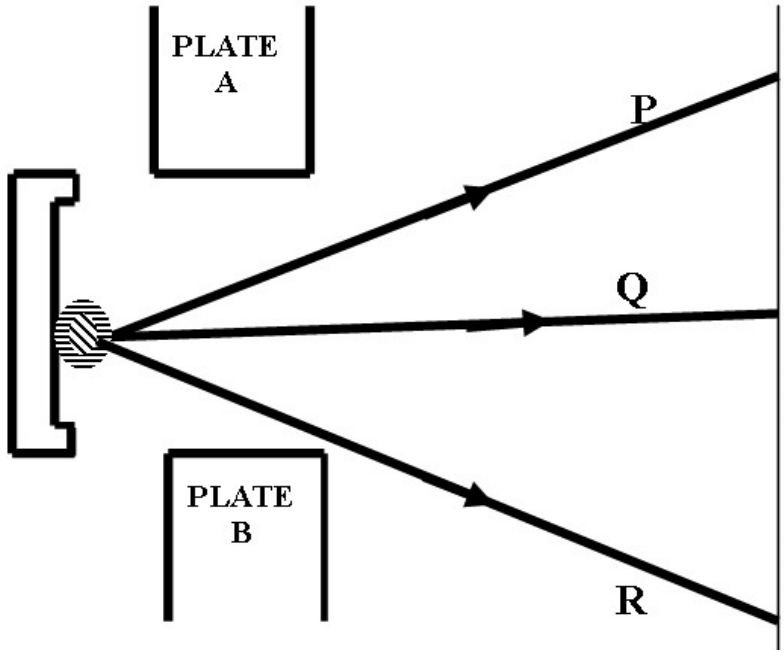
c) Explain why the method produces very pure copper metal. **(1mk)**

……

……

……

23. The diagram below shows the behavior of radiation from a radioactive material in an electric field. Study it and answer the questions that follow.



a) Identify the radiations P and R

i) P **(1mk)**

……

……

R **(1mk)**

……

……

ii) b) Identify the charge on:

i) Plate A **(½ mk)**

……

……

ii) Plate B **(½ mk)**

……

……

24. Describe how a pure sodium chloride can be obtained from the mixute of iodine sodium chloride and sand. **(3mks)**

……

……

……

……

25. a) Name two cations making water hard. **(2mks)**

……

……

b) By use of an ionic equation show how sodium carbonate makes permanent hard water soft. **(1mk)**

26. State and explain what would be observed when hydrogen gas is passed over heated copper (II) oxide in a combustion tube**.** **(3mks)**

……

……

……

……

27. Solution R,S and T have PH values shown in the table below:

Solution	pH value
R	1.0
S	6.5
T	8.0

a) What do you deduce about the nature of solution R? **(1mk)**

……

……

b) Which solution would react most vigorously with sodium hydrogen carbonate. **(1mk)**

……

……

c) Which solution is likely to be ammonia solution? **(1mk)**

……

……

28. a) Define the term solubility? **(1mk)**

……

……

b) Give two uses of solubility curves **(2mks)**

……

……

29. a) Name two allotropes of sulphur. **(1mk)**

……

……

b) Describe a suitable test for sulphite (SO_3^{2-}) ions. **(2mks)**

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KCSE 2022 MOCKS

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233/2

CHEMISTRY

PAPER 2

(Theory)

TIME: 2 HRS

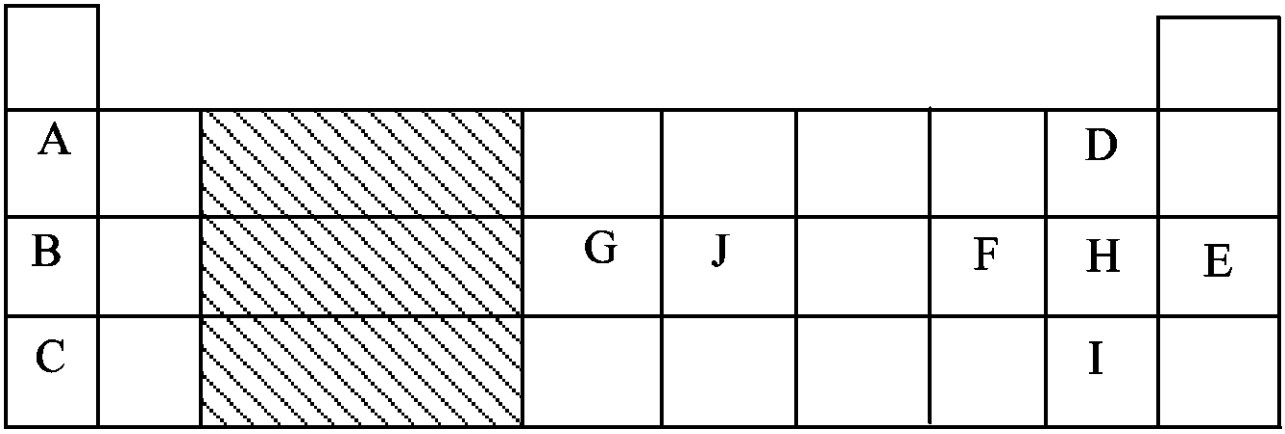
Instructions To Candidates

1. *Write your name and index number in the spaces provided.*
2. *Answer all questions in the spaces provided.*
3. *All working must be clearly shown.*
4. *KNEC Mathematics table and silent scientific calculators may be used.*

EXAMINER'S USE

QUESTION	MAX SCORE	CANDIDATES SCORE
1	13	
2	9	
3	11	
4	10	
5	12	
6	13	
7	12	
Total Score	80	

1. The figure below represents a section of the periodic table. Study it and answer questions (a) to (h). Note that the letters do not represent the actual symbols of the elements.



(a) Consider elements D. H and I

i) Give the chemical family of these elements. **(1 mk)**

……

ii) How do their ionic size compare. **(1mk)**

……

……

iii) Compare and explain the reactivity of the three elements. **(2mks)**

……

……

……

……

b) **i)** Write the electronic configuration of;

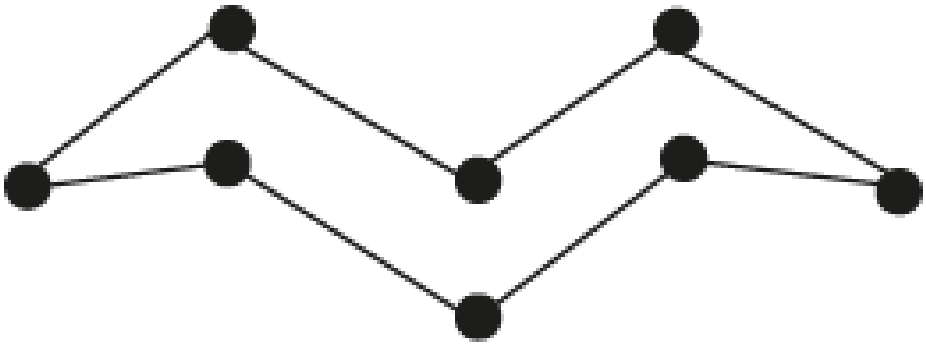
Element H **(1mk)**

……

ii) The ion of element G. **(1mk)**

……

c) A molecule of one of the elements is shown below. **(2mks)**



i) Identify this element from the section of the periodic table and give its actual symbol and name. **(2mks)**

……

……

……

ii) Explain why this element has a higher boiling point compared to that of oxygen. **(2mks)**

……

……

……

iii) Write an equation to show the reaction between the element named above with oxygen**.** **(1mk)**

_____

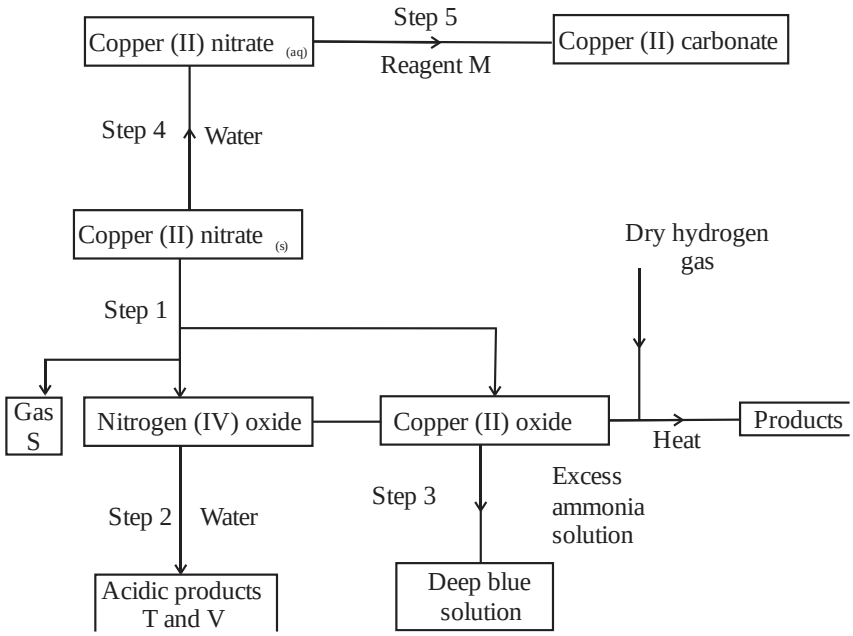
_____

iv) Predict the pH of the oxide of the above element when in water. Explain. **(2mks)**

……

……

2. The flow chart below shows some reactions starting with copper (II) nitrate. Study it and answer questions that follow.



a) **i)** State the condition necessary in step 1. **(1mk)**

……

……

ii) Identify **(4mks)**

Reagent M

……

Gas S

……

Acidic products

T……

V……

iii) Write the formula of the complex ion formed in step 3. **(1mk)**

……

……

iv) Write the equations for the reaction in

Step 1

……

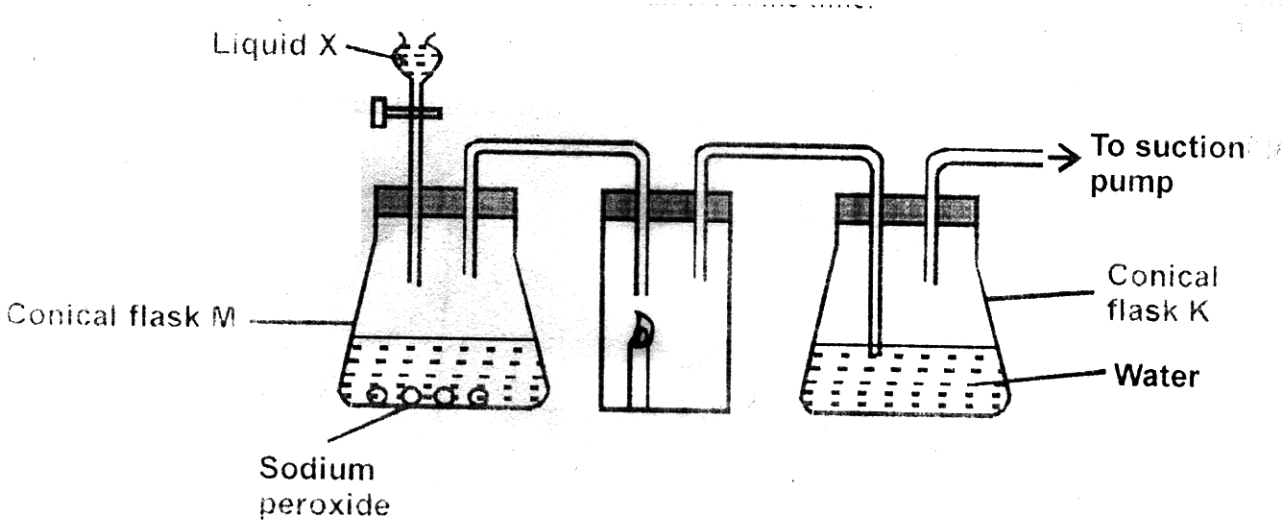
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Step 2

……

……

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



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

……

……

ii) Suggest the pH of the solution in conical flask K. Explain **(2mks)**

……

……

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

……

……

b) State and explain the two observations made when hydrogen sulphide is bubbled into the solution containing iron (III) chloride. **(2mks)**

……

……

……

……

c) i) Describe a simple chemical test that can be used to distinguish between carbon (IV) oxide and carbon (II) oxide gases. **(3mks)**

……

……

……

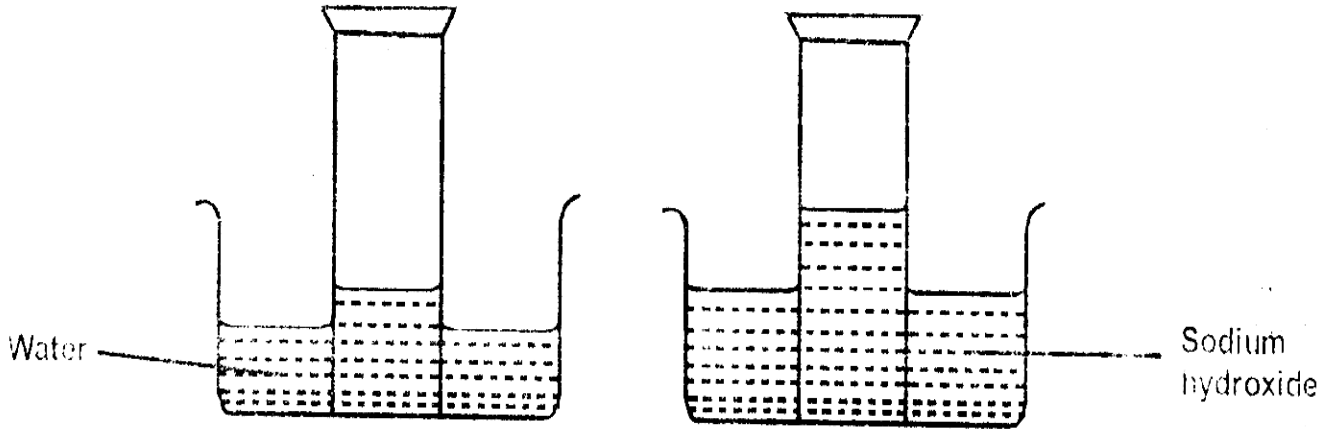
……

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

……

……

d) A form two student inverted a gas jar full of carbon (IV) oxide over water and sodium hydroxide solution as shown below.



Explain the observations made. **(2mks)**

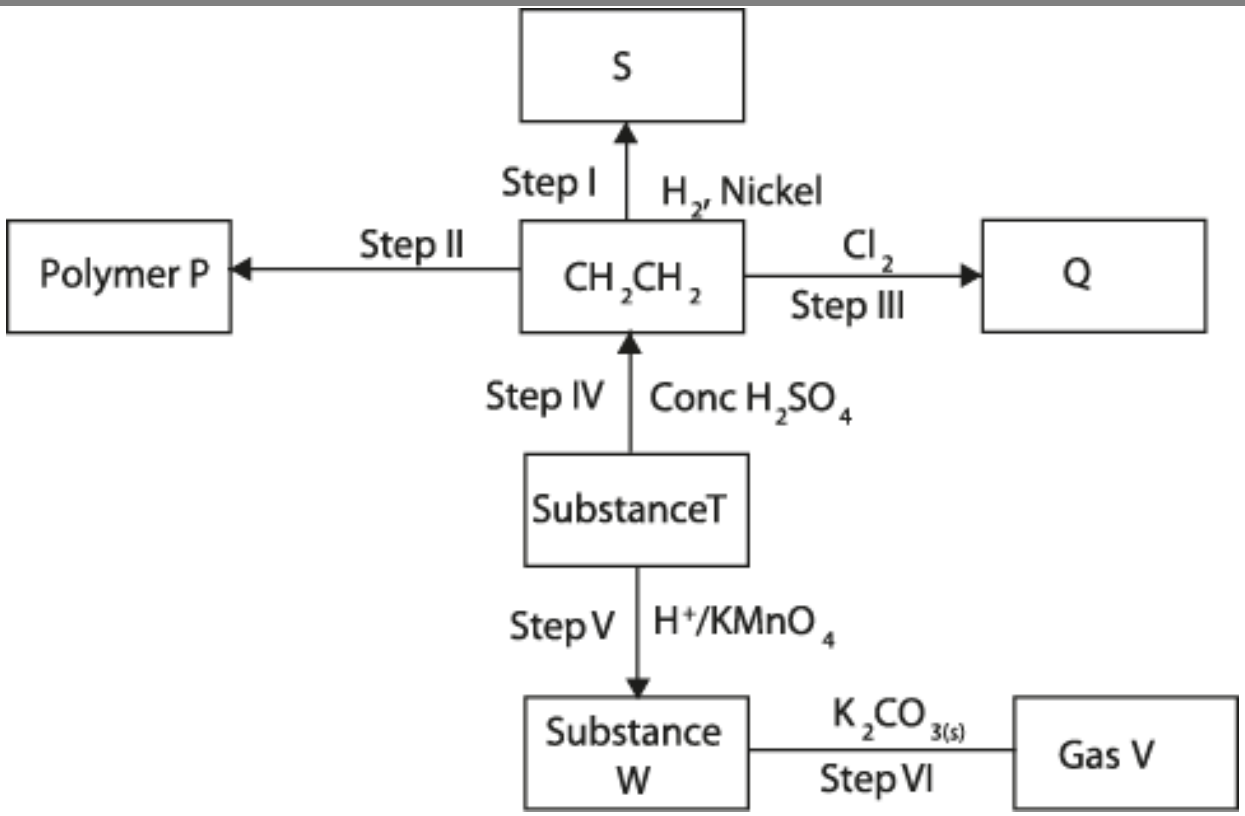
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4. Study the flow chart below and answer the question that follows:



a) Identify the following:

i) Substance W…… **(1mk)**

ii) Gas V…….. **(1mk)**

b) Name the processes involved in the following steps

i) Step I……**(1mk)**

ii) Step III……**(1mk)**

c) i) What type of reaction is taking place in step V? **(1mk)**

……

ii) Draw the structure and give their IUPAC name for the following compounds.

COMPOUND	STRUCTURE	NAME
Q		

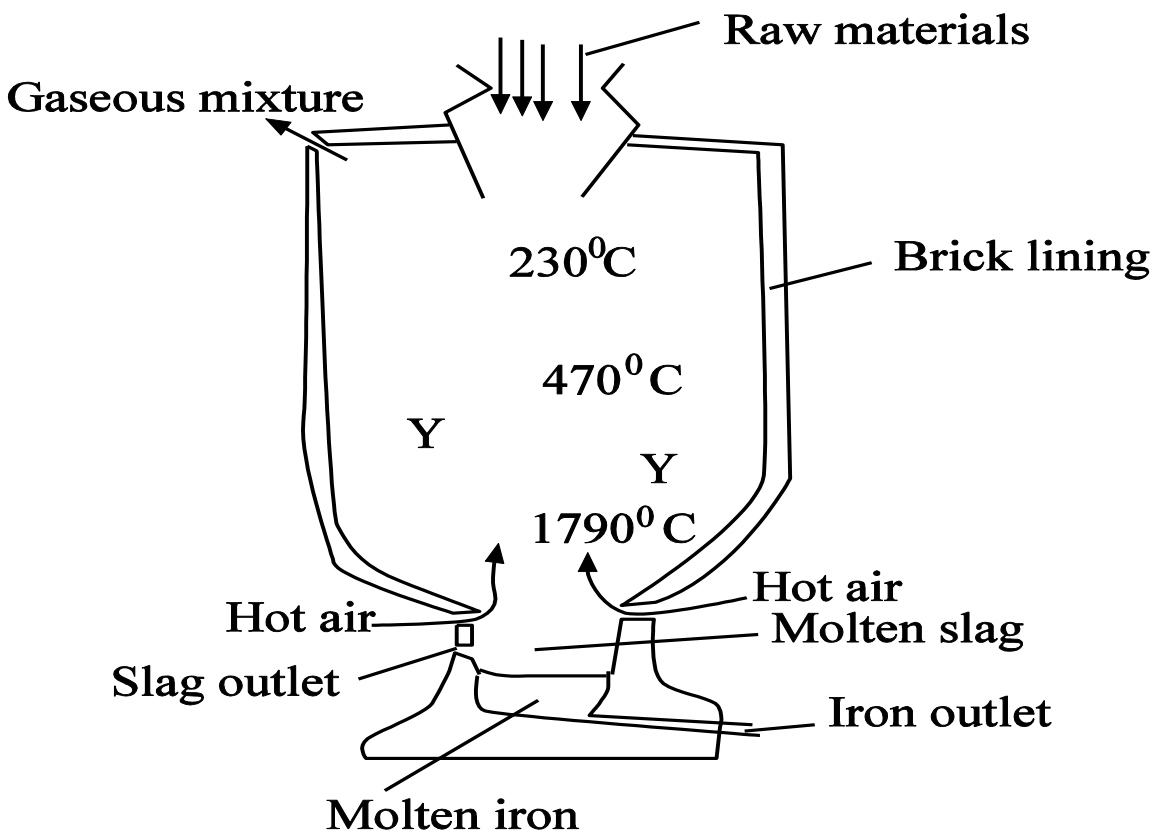
P		

(4mks)

d) Write the equation that took place in step III. **(1mk)**

……

5. Iron is obtained from hematite using a blast furnace shown in the diagram below;



a) Name the **four** raw materials required for the production of iron;

……

……

……

……

b) Write an equation for the reaction in which carbon (IV) oxide is converted into carbon (II) oxide. **(1mk)**

……

……

c) Explain why the temperature in the region marked Y is higher than of the incoming air. **(1mk)**

……

……

……

d) State two physical properties of molten slag that allows it to be separated from molten iron as shown above. **(2mks)**

……

……

……

e) Iron from the blast furnace contains about 5% carbon

i) Describe how the carbon content is reduced. **(2mks)**

……

……

……

ii) Why is it necessary to reduce the carbon content? **(1mk)**

……

……

f) Give a reason why the melting point of iron obtained from the blast furnace is 120^0C while that of pure iron is 1535^0c. **(1mk)**

……

……

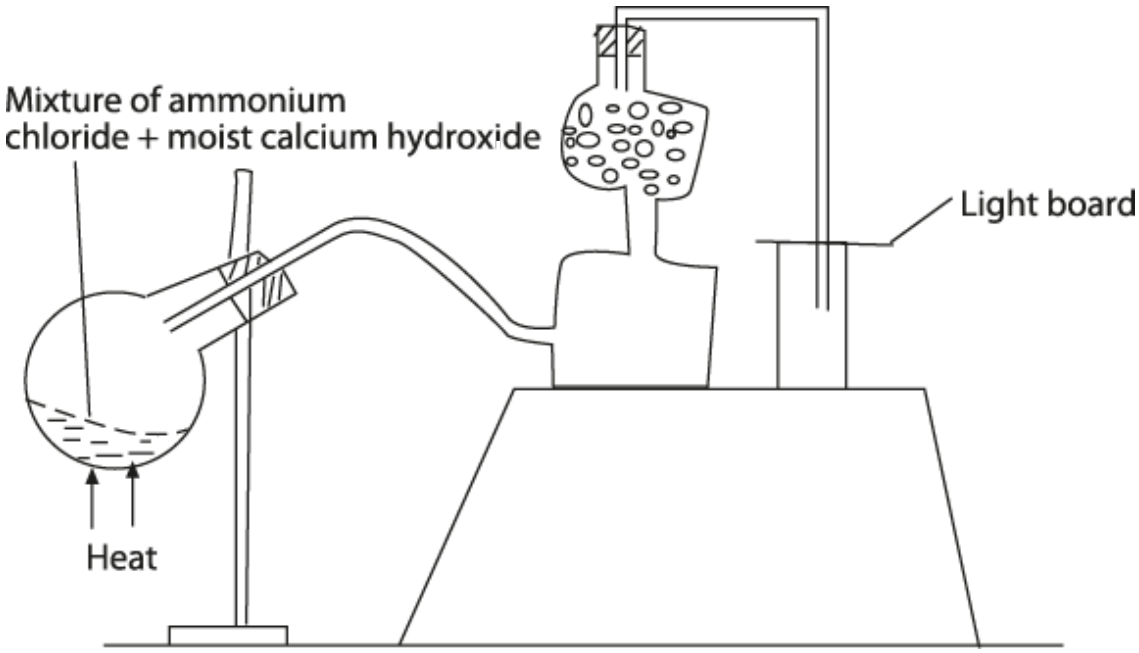
g) State two uses of steel. **(2mks)**

……

……

……

6. a) A student set up the apparatus as shown in the diagram below to prepare and collect dry ammonia gas.



i) Identify three mistakes in the set up and give a reason why each is mistake. **(3mks)**

……

……

……

……

ii) Name a suitable drying agent for ammonia. **(1mk)**

……

iii) Write an equation for the reaction that occurred when a mixture of ammonium chloride and calcium hydroxide was heated. **(1mk)**

……

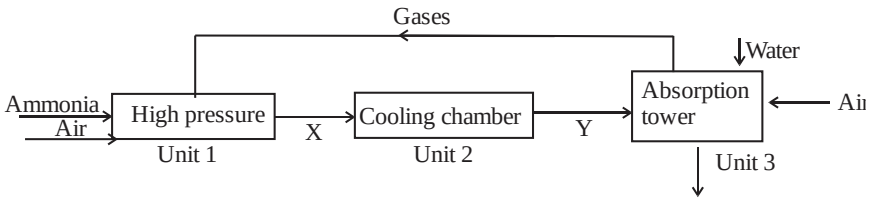
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iv) Describe one chemical test for ammonia gas. **(1mk)**

……

……

b) Ammonia gas is used to manufacture nitric (V) acid as shown below.



i) This process requires the use of a catalyst in which unit is the catalyst used? **(1mk)**

……

……

ii) Identify compound X and Y. **(2mks)**

……

……

iii) Using oxidation number explain why the conversion of ammonia to nitric (V) acid is called catalytic oxidation of ammonia. **(3mks)**

……

……

……

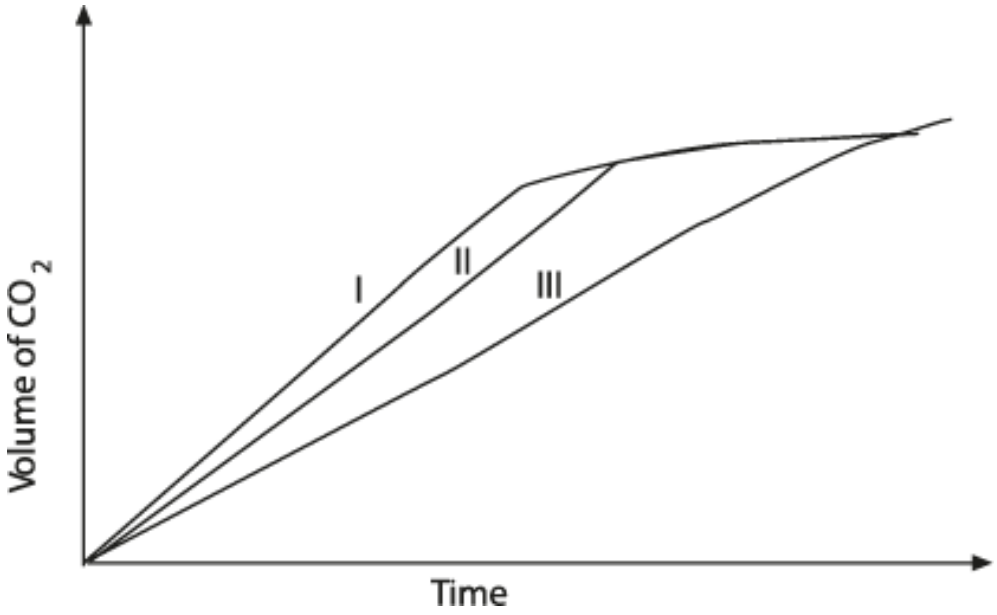
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iv) Ammonia reacts with nitric (v) acid to form ammonium nitrate fertilizer. Calculate the percentage composition of nitrogen in ammonium nitrate. (N = 14, O = 16, H = 1)

……

……

7. a) Below is a graph that was obtained when different concentrations of hydrochloric acid was reacted with equal amount of calcium carbonate.



The concentration of hydrochloric acid were 0.8M, 0.5M and 0.1M. The calcium carbonate was in powder form. Match the graphs with concentrations.

Graph I…… **(1mk)**

Graph III…….. **(1mk)**

b) A state of equilibrium between dichromate (VI) and chromate ions is established as shown in the equation below.

$Cr_2O_{7(aq)} + 2OH^-_{(aq)} \rightleftharpoons 2CrO_{42-(aq)} + H_2O_{(l)}$

Orange Yellow

i) What is meant by dynamic equilibrium? **(1mk)**

……

……

ii) State and explain observation made when a few pellets of potassium hydroxide are added to the equilibrium mixture. **(2mks)**

……

……

……

……

c) An experiment was done using magnesium ribbon and dilute hydrochloric acid of different concentrations. The time needed to produce $50cm^3$ of the gas for every experiment was recorded in the table below.

Conc. of HCL in Mol/litre	2.0	1.75	1.50	1.25	1.00	0.75	0.50	0.25
Time in sec(s)	8.8	10.0	11.7	13.5	17.5	22.7	35.5	70.0
$Sec^{-1}\frac{1}{t}$								

i) Complete the table above. **(2mks)**

iii) Plot a graph of rate$\frac{1}{Time}$ against concentration. **(4mks)**

i) Determine from your graph the concentration needed to produce $50cm^3$ of hydrogen gas, when time is 15 seconds. **(1mk)**

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233/3

CHEMISTRY

Confidential

Confidential instructions

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

1.Solution B about 150 cm^3

2.About 60 $cm^3$of solution A.

3.About 80$cm^3$of solution C

4. Burette 50ml

5.Filter funnel

6.25 cm^3 pipette

7.Clamp and stand

8.White tile

9.2 CONICAL FLASKS

10.10ml measuring CYLINDER

11.6 TEST TUBES

12.Boiling tube

13.Distilled water

14,Thermometer

15.A stop watch

16.About 19 solid L

17.About 1.5g of solid L

18.Metallic spatula

19.About 1g of sodium hydrogen carbonate

20.Water bath

21.Pipette filter

Access to

1.Phenolphthalein indicator

2.Source of heat

3. 2M Pb ($N0_3$) $_2$ (aq)

4.2M HNO_3 (aq)

5.0.5M Ba (NO_3)2 (aq)

6.2M Ammonia solution

7.2M NaOH

8.Acidified $KMnO_4$ solution

9. 2M HCl (aq)

10. Acidified $K_2CV_2O_7$ solution

NOTES

1. Solution B is 0.05M oxalic acid

2. Solution A is 0.01M potassium manganite (VII) solution.

3. Solution C is 0.1M sodium hydroxide solution .
4. Water bath prepared by placing about 200 $cm^3$of water in a 250ml beaker .
5. Solid Q mixture $(NH_4)_2 SO_4$ and $AL_2 (SO_4)_3$ in the ratio 1: 1
6. Solid L is maleic acid crystal.
7. Acidified $K_2 Cr_2 O_7$ is prepared by dissolving 25g of solid potassium dichromate(iv) in About 600 cm^3 of $2MH_2 SO_4$ acid and diluting to one litre of solution.
8. Acidified $KMnO_4$ is made by dissolving 3.169 of the solid $KMnO_4$ in about 500 cm^3 of 2M $H_2 S0_4$ acid and and diluting to one litre of solution.

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233/3

CHEMISTRY

PAPER 3

TIME: $2\frac{1}{4}$ HOURS

Kenya Certificate of Secondary Education

INSTRUCTIONS: Answer all the questions in the spaces provided

1. You are provided with potassium manganate (VII)

solution A

solution B, containing 6.3 g' litre of dibasic acid $H_2X.nH_2O$

Solution C_1 containing 4.0g/litre of Sodium hydroxide solution.

You are required to determine :

a) The value of n in H_2X . nH_2 O

b) How the rate of reaction of solution A with solution B varies with change in temperature.

Procedure 1

Fill the burette with solution B . Pipette 25cm^3 of solution C into a conical flask and titrate solution B with

Solution C using phenolphthalein indicator.

Record your results in table I below and repeat the titration to obtain consistent results:

Table 1.

Burette readings	1	2	3
Final readings (cm^3)			
Initial readings ($cm^{3)}$)			
Volume of solution B used (cm^3)			

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

b)Calculate the concentration of solution C in moles per litre.

(Na = 23.0, 16.0, H= 1.0) **(1mk)**

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

H_2X + 2NaOH $\longrightarrow$ Na_2X + H_2O

(aq) (aq) (aq) (l)

CaLculate

1.The number of moles of the dibasic acid solution B that reacted **(2mks)**

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

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

iv) The value of n in the formula of the hydrated acid . (0 =16.0 H = 1.0) **(2mks)**

Procedure II

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

ii) Clean the measuring cylinder and use it to place 10.0 cm3 of solution B into a boiling tube.

iii) Insert a thermometer in the solution B in the boiling tube and place the boiling tube in the attains a

temperature of 40^o C.

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

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

VI))Repeat the experiment using 10cm^3 of solution B at 50^o , 60^o c, 70^o c and 80^{O}c. Record the time in the

Table. Complete the table by computing 1h/t sec -1.

Table II

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

(5mrks)

a)Plot a graph of 1/t (sec -1) against temperature. **(3MKS)**

b) From the graph , determine the time taken for decolourisation of the mixture, if the temperature of solution

B was $65^{O}C$ **(1 MK)**

C) How does the rate of reaction of potassium manganite (VII) with oxalic acid vary with temperature**.** **(1mk)**

2.You are provided with solid Q . Carry out the tests below and record your observations and inferences

In the spaces provided.

a) Strongly heat a spatula – end full of solid Q in a dry test – tube.

6.i) Place the remaining solid Q in a boiling tube. Add 10cm^{3}of distilled water. Divide the solution

Into five portions.

Description	**Expected observations**
(1/2 mark)	(½ mark)

ii)To the first portion, add aqueous lead (II) nitrate solution .

Description	**Expected observations**
(1 mark)	(1 mark)

iii)To the second portion add dilute nitric (V) acid followed by barium nitrate solution .

Description	**Expected observations**

(1 mark)	(1 mark)

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

Description	**Expected observations**
(1 mark)	(1 mark)

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

Description	**Expected observations**
(1/2 mark)	(½ mark)

vi) To the fifth portion add few drops HCL acid. Warm the content

Description	**Expected observations**

(1/2 mark)	(½ mark)

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

a) Place about one third of solid L on a metallic spatula and burn it using Bunsen burner.

Description	**Expected observations**
(1/2 mark)	(½ mark)

b)Place the remaining solid L in a test tube . Add about $6cm^3$ of distilled water and shake well. Retain the mixture for use in tests (C)

Description	**Expected observations**

(1/2 mark)	(½ mark)

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

Description	**Expected observations**
(1 mark)	(1 mark)

ii) To about $1cm^3$ of the mixture add $1cm^3$ of acidified potassium dichromate (VI) and warm

Description	**Expected observations**
(1 mark)	(1 mark)

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

Description	Expected observations
(1 mark)	(1 mark)

KCSE 2022 MOCKS

SERIES 002

NAME……

SCHOOL…… **INDEX NO**……

SIGN…… **DATE**……

232/1

PHYSICS

Paper 1

Time 2 HOURS

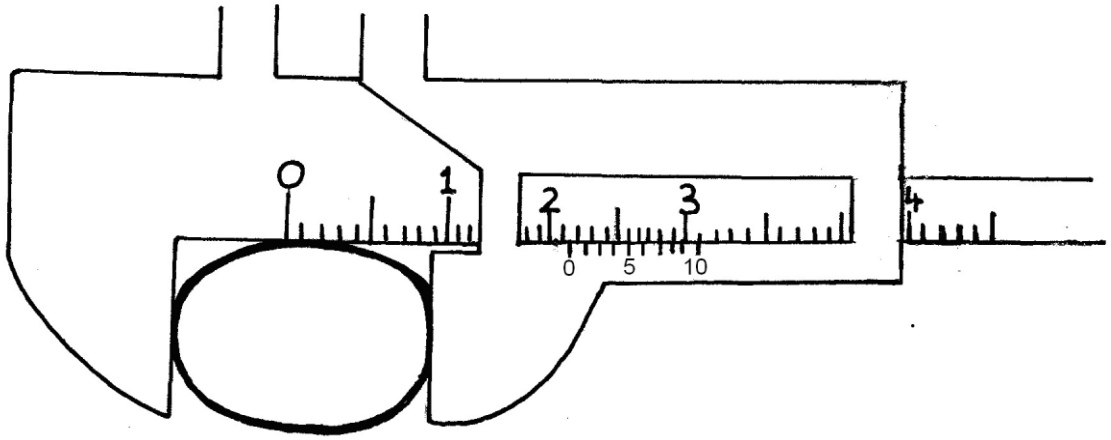
INSTRUCTIONS TO CANDIDATES

1. *Write your index no in spaces provided.*
2. *This paper consists of two sections A and B*
3. *Answer all questions in the spaces provided*
4. *Non-programmable calculators and mathematical tables may be used*
5. *Show all your workings*

SECTION	QUESTION	MAX. SCORE	CANDIDATES SCORE
A	1 – 11	25	
B	12	14	
	13	14	
	14	10	
	15	9	
	16	8	
	TOTAL	80	

SECTION A (25 MARKS)

1. **(i)** What is the name of the instrument shown below **(1mk)**



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(ii) If the instrument has zero error of 0.04cm, find the diameter of the sphere **(2mks)**

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2. A block of copper of mass 2kg and specific heat capacity of 400J/kg/K initially at 121^0C is immersed in water at 20^0C. If the final temperature is 21^0C, determine the mass of water. (specific heat capacity of water is 4200J/kgk) **(3mks)**

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3. Sketch a graph of velocity against time of a steel ball which is dropped to fall through glycerine in a measuring cylinder **(3mks)**

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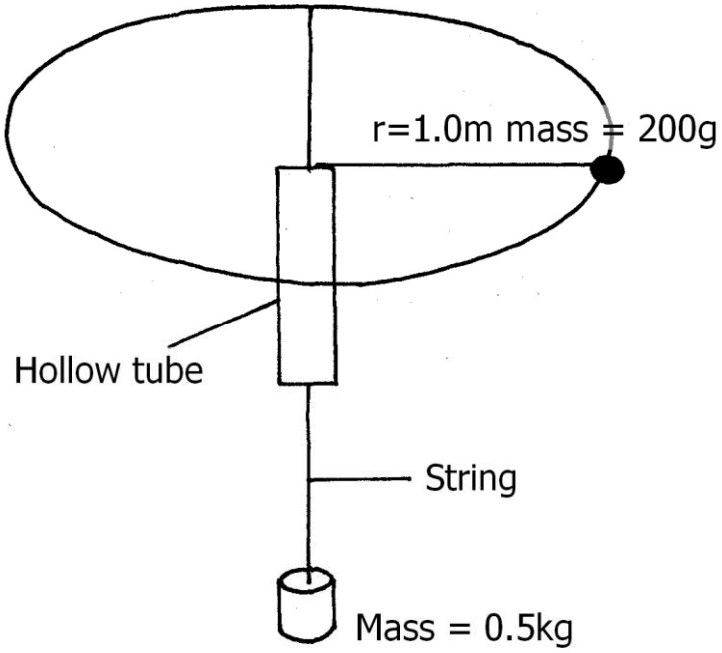
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8. The figure below shows a mass of 200g connected by a string through a hollow tube to mass of 0.5kg. The 0.5kg mass is kept stationary in the air by whirling the 200g mass round in a horizontal circle of reading 1.0metre



Determine the angular velocity of the 200g mass **(3mks)**

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9. A steel ball bearing is allowed to fall freely in a viscous liquid. State the condition necessary for it to attain terminal velocity **(1mk)**

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10. State reason why heat transfer by radiation is faster than by conduction **(1mk)**

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11. A body is projected vertically upwards from the top of a building. If it lands on the base of the building, sketch the velocity time graph for the motion **(2mks)**

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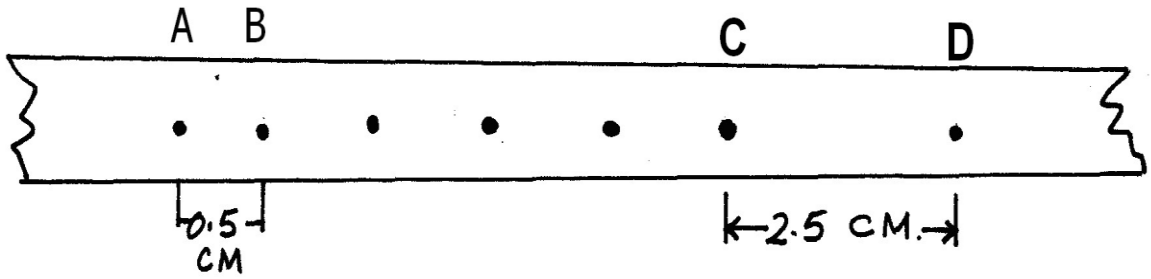
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SECTION B

12. The figure below shows the motion of a trolley on a ticker timer. The ticker has frequency of

50HZ



(a) **(i)** Calculate the initial velocity between A and B **(2mks)**

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(ii) Calculate the final velocity between C and D **(2mks)**

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(iii) Calculate the acceleration of the trolley during the motion **(3mks)**

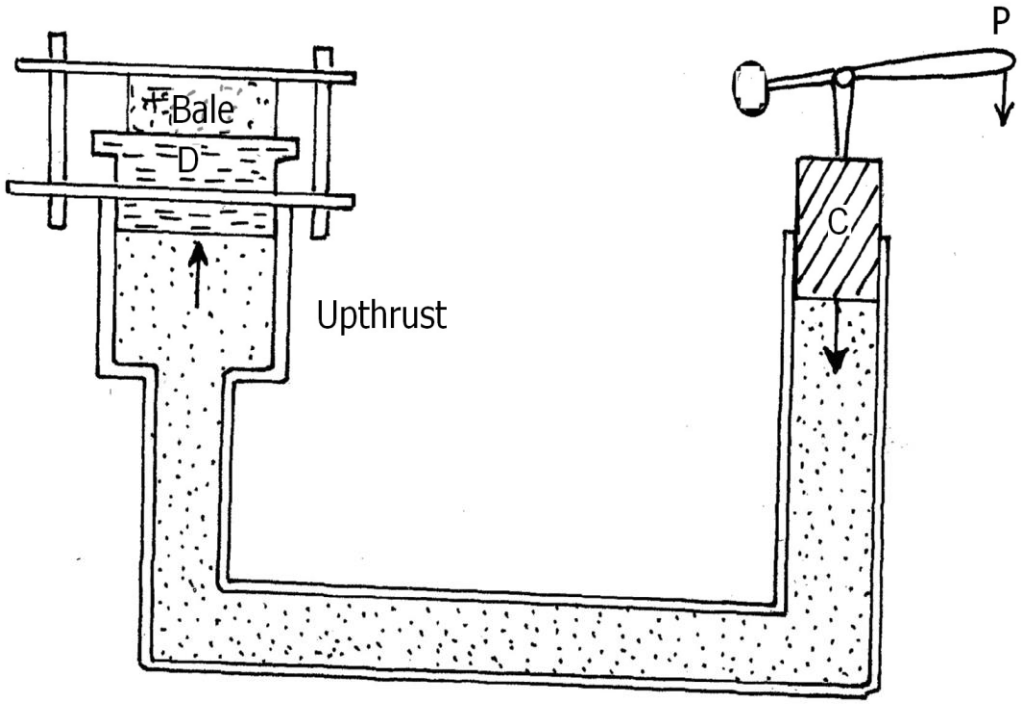
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The two pistons C and D are of areas $100cm^2$ and $2m^2$ respectively. A force of 100N is applied on the smaller piston, find the load that can be lifted on the large piston if :-

(a) The piston has negligible weights and no frictional forces **(3mks)**

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(b) The small and larger pistons have negligible weights and frictional forces 10N and 40N respectively **(3mks)**

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(c) The small piston has a weight of 5N, the larger piston has weight of 10N and the frictional forces are negligible **(3mks)**

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(d) In a hydraulic brake the master piston has an area of $4mm^2$ and the wheel piston

each has an area $4cm^2$. Find the forces applied to the wheel when a force of 10N is applied on the master piston **(3mks)**

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(e) State two properties of the liquid used in the hydraulic system. **(2mks)**

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14. In an experiment to determine the density of sand using a density bottle, the following measurements were recorded.

Mass of empty density bottle = 43.2g

Mass of density bottle full of water = 66.4g

Mass of density bottle with some sand = 67.5g

Filled up with water (sand, watered bottle) = 82.3g

Use the above information to determine the;

(a) Mass of the water that completely fill the bottle **(2mks)**

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(b) Volume of water that completely filled the bottle **(1mk)**

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(c) Volume of the density bottle **(1mk)**

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(d) Mass of sand **(1mk)**

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(e) Mass of water that filled the space above the sand **(1mk)**

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(f) Volume of the sand

(2mks)

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(g) Density of the sand **(2mks)**

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15. **(a)** Explain why it is advisable to use the pressure cooker for cooking at high altitudes **(2mks)**

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(b) Water of mass 3kg initially at 20^0C is heated in an electric kettle rated 3.0kw. The water is heated until it boils at 100^0C. Taking specific heat capacity of water to be $4200Jkg^{-1}K^{-1}$, heat capacity of kettle = 450J/kg, specific latent heat of vaporization of water = 2.3MJ/kg, calculate

(i) The heat absorbed by the water **(1mk)**

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(ii) Heat absorbed by the electric kettle **(2mks)**

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(iii) The time taken for the water to boil **(2mks)**

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(iv) How much longer it will take to boil away all the water **(2mks)**

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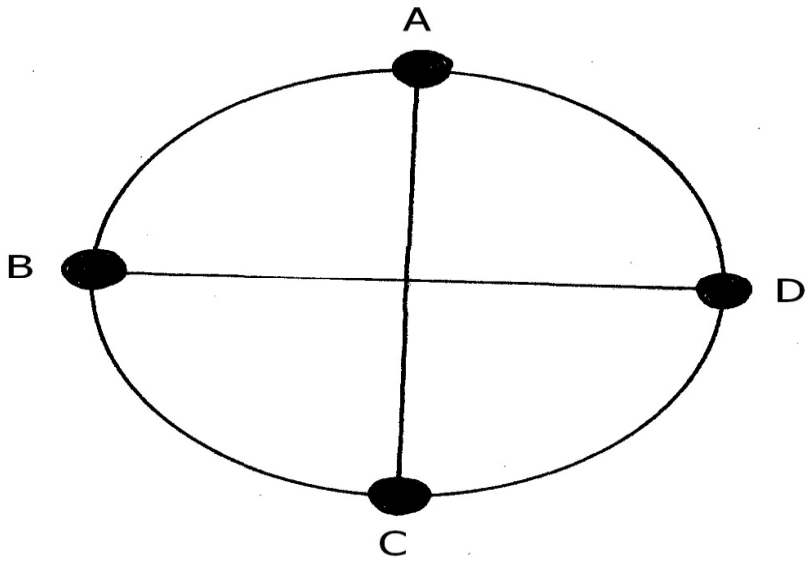
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16. (a) Define angular velocity **(1mk)**

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(b) The figure below shows an object of mass 0.2kg whirled in vertical circle of radius 0.5m at uniform speed of 5m/s



Determine the tension in the string at

(i) Position A **(3mks)**

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(ii) Position B **(3mks)**

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(iii) At what point is the string likely to cut. Explain **(2mks)**

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KCSE 2022 MOCKS

SERIES 002

NAME……

SCHOOL…… **INDEX NO**……

SIGN…… **DATE**……

232/2

PHYSICS

Paper 2

Time 2 HOURS

INSTRUCTIONS TO CANDIDATES

1. *Write your name and index number in the spaces provided*
2. *Sign and write the date of examination in the spaces provided*
3. *This paper consists of TWO sections A and B*
4. *Answer ALL questions in the spaces provided*
5. *Non-programable calculators and mathematical tables may be used where necessary*
6. *ALL working MUST be shown clearly where necessary*
7.

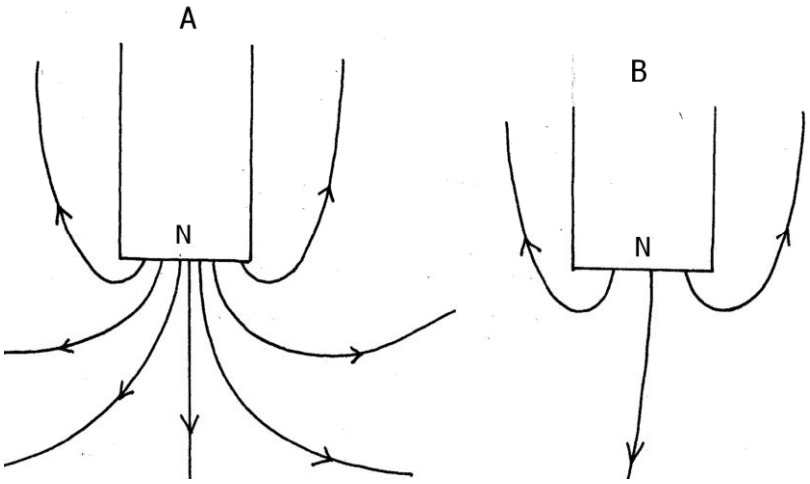
FOR EXAMINERS USE ONLY

SECTION	QUESTION	MAX. SCORE	CANDIDATES SCORE
A	1 – 12	25	
B	13	8	
	14	12	
	15	11	
	16	12	
	17	12	
	TOTAL	**80**	

SECTION A (25 MARKS)

1. Two magnets A and B in figure 1 were brought from a point high above a table towards a steel pin.

Fig. 1



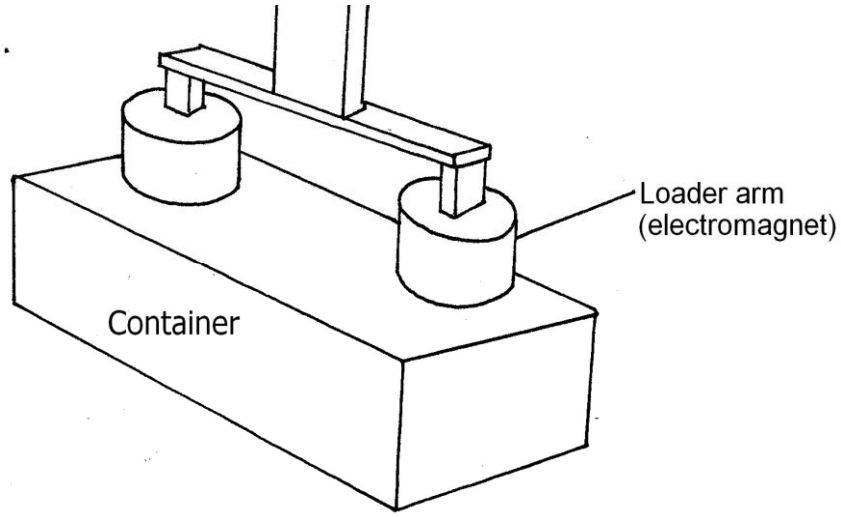
State with reason which magnet will attract the pin at a bigger height above the table. **(2mks)**

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2. The figure 2 below shows container loader which uses electromagnet to offload containers from a ship.

Fig. 2



(i) Why should the container be made of iron or steel **(1mk)**

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(ii) State two ways in which the loader can be made to lift heavier container **(2mks)**

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3. Explain why sound cannot be heard from far when one shouts in a forest **(1mk)**

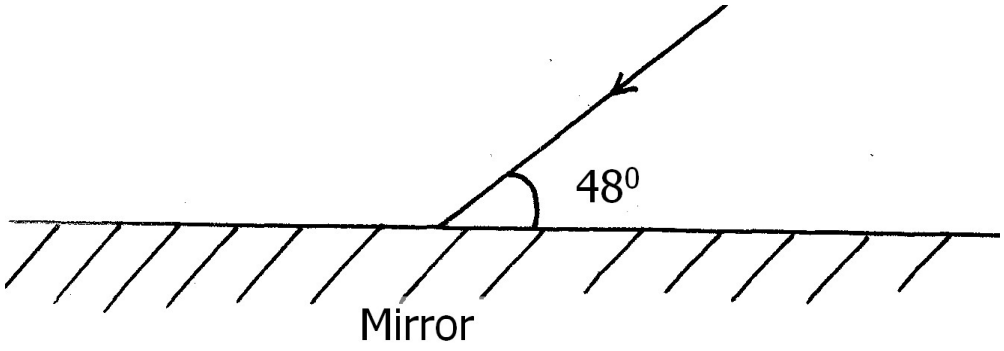
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4. The figure 3 shows a ray of light incident on a mirror.

Fig. 3



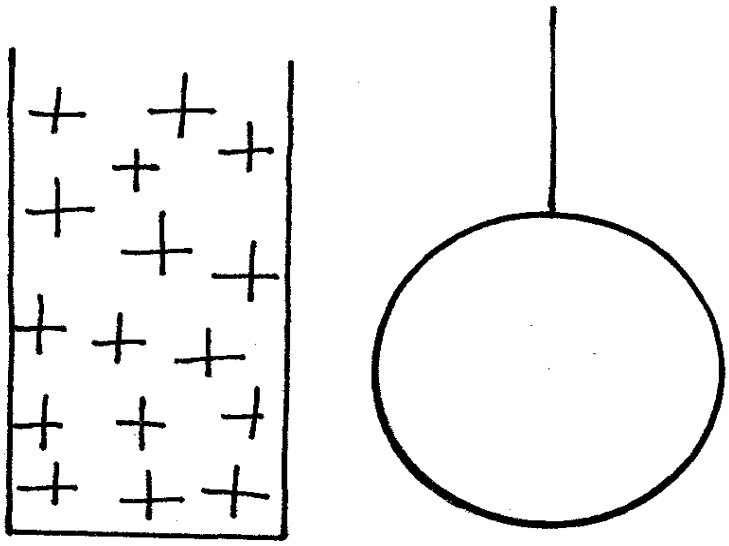
Determine the angle of reflection when the mirror is rotated 10^0 anticlockwise **(2mks)**

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5. A positively charged material was brought close to an insulated metallic ball as shown in Fig 4. State and explain the distribution of charge in the ball **(2mks)**

Fig. 4



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6. Two 12V lead acid accumulators are vated 60Ah and 70Ah. State two physical differences between the accumulators **(2mks)**

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7. When a new dry cell is connected in series with a 2.7^{Ω} resistor, a current of 0.5A flows in the circuit. Determine the internal resistance of the cell. **(3mks)**

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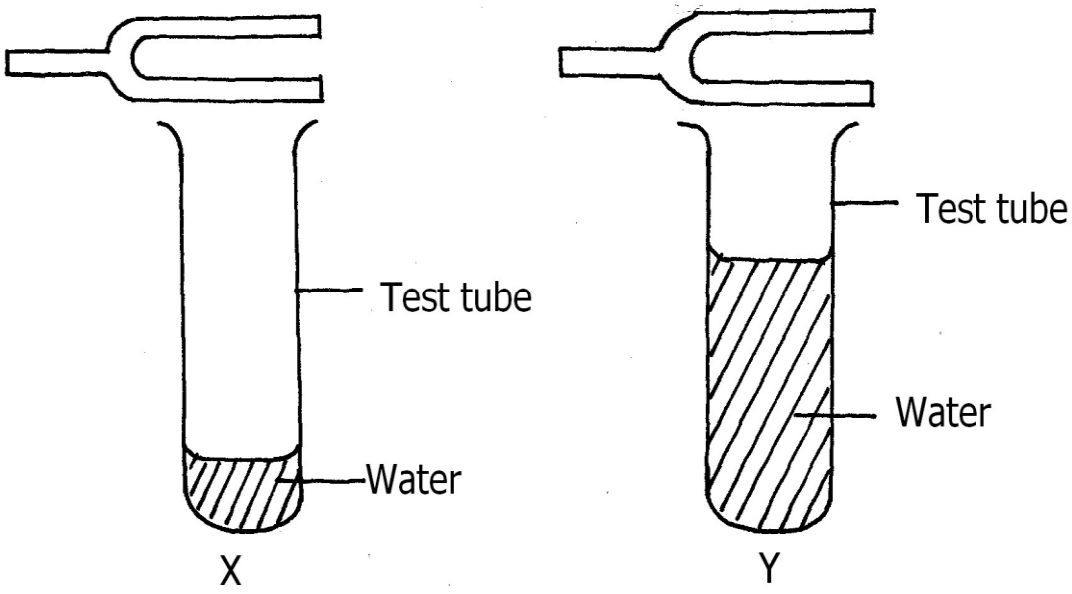
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8. A vibrating tunning fork of frequency 512Hz was brought close to two test tubes X and Y with water levels as shown in fig. 5

Fig. 5



It was observed that loud sound is produced in test tube X but not in Y. Explain this observation.

(2mks)

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9. A form 4 student observed that his grandfather positions a book far from his eyes when reading it. Explain the type of lenses that the student should advice his grandfather to wear**(2mks)**

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10. Explain how earth wire provides safety in an electrical installation **(2mks)**

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11. In a cathode ray oscilloscope the time base is set at 25cs/mm. Given that crest to crest of a signal covers a length of 6cm, determine the frequency of the signal **(3mks)**

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12. The chart below shows an arrangement of different parts of the electromagnetic spectrum.

Radio	A	Visible	Ultra-violet	X-rays	Gamma-Rays

Name the radiation represented by A **(1mk)**

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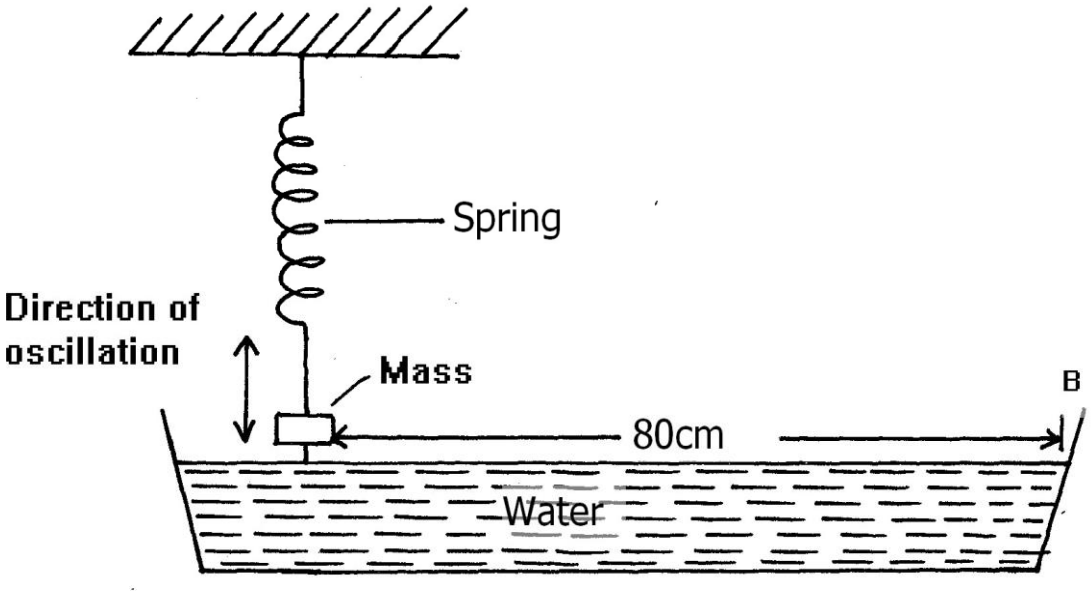
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SECTION B (55 MARKS)

13. Students set up a mass attatched to spring such that when it oscillates it taps on water surface in a wide shallow tank.

Fig. 6



The students measured time for 20 oscillations and found that the mass takes 36 seconds.

(i) Determine the periodic time of the mass **(2mks)**

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(ii) Calculate the frequency of the waves produced on the water surface **(3mks)**

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(iii) Given that the student counted four ripples between the mass and end B of the tank,

Determine the speed of the waves. **(3mks)**

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14. (a) (i) State Snell's law of refraction of light **(1mk)**

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(ii) Give two advantages of totally internally reflecting prisms over plane mirrors.

(2mks)

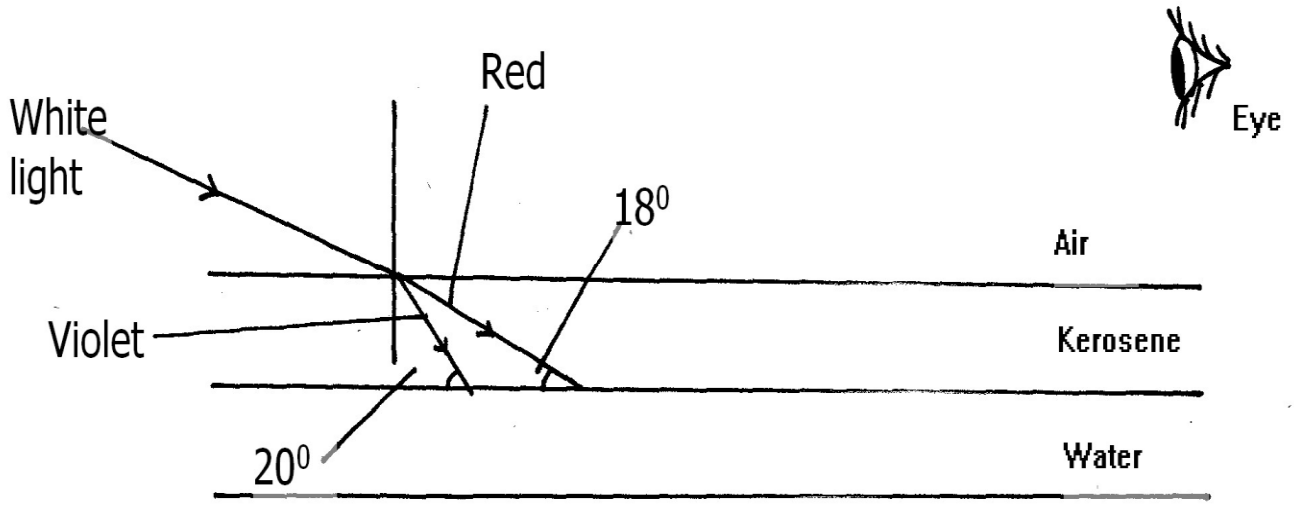
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(b) A ray of light is incident on a kerosene water interfaces as shown in figure 7

Fig. 7



Given that the refractive index of water and kerosene are 1.33 and 1.44 respectively,

Determine

the refractive index for the kerosene – water interface

(3mks)

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(i) determine and show on the figure the path of the rays of light between the Kerosene-water surface **(3mks)**

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(ii) Why does the colours of the light separate at the kerosene layer. **(1mk)**

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(iii) State and explain the observation that the eye above the two surfaces would see

(2mks)

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

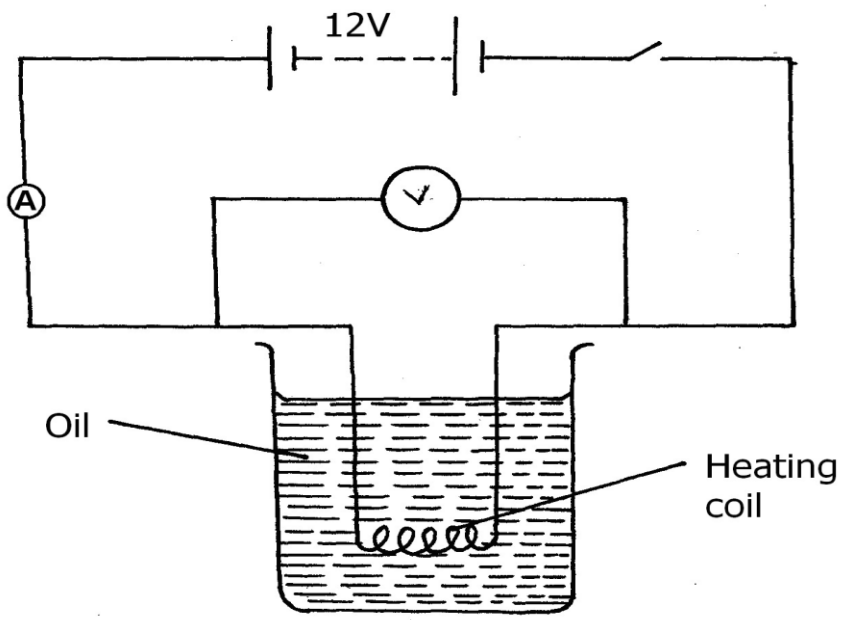
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(b) The figure 8 below shows a circuit with a coil used to warm oil in a beaker.

Fig. 8



(i) Explain how heat is produced in the coil **(2mks)**

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(ii) Given that the reading of the ammeter is 2.4A determine the resistance of the coil.

(3mks)

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(iii) How much heat is produced in the coil in a minute? **(3mks)**

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(iv) Give two changes that can be made in the set up in order to produce more heat per minute. **(2mks)**

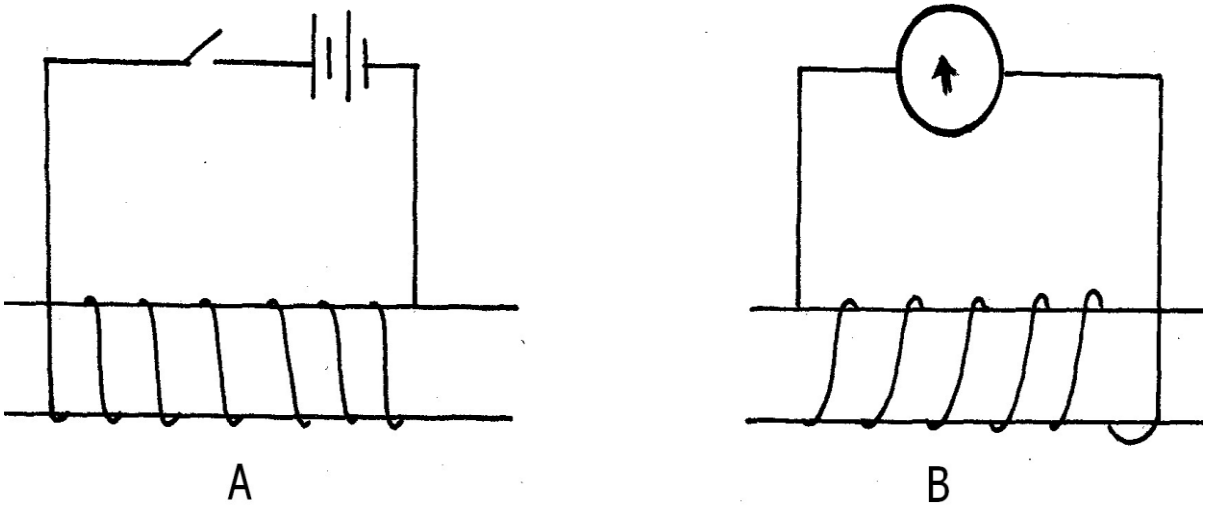
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16. (a) The set up in fig. 9 shows two coils A and B close to each other.

Figure 9



Show on coil B the direction of current when switch is closed. **(1mk)**

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(b) A transformer that is 80% efficient has 4000 turns in primary coil and 500 turns in secondary coil is used to supply power to a 15Ω motor, from 240V mains.

(i) Calculate the voltage in the secondary coil **(3mks)**

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(ii) Power rating of the motor **(3mks)**

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(iii) Current in the primary coil **(3mks)**

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(c) In a step-down transformer the secondary coil is made of thick copper coil.

Explain **(2mks)**

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17. (a) State one property of X-rays **(1mk)**

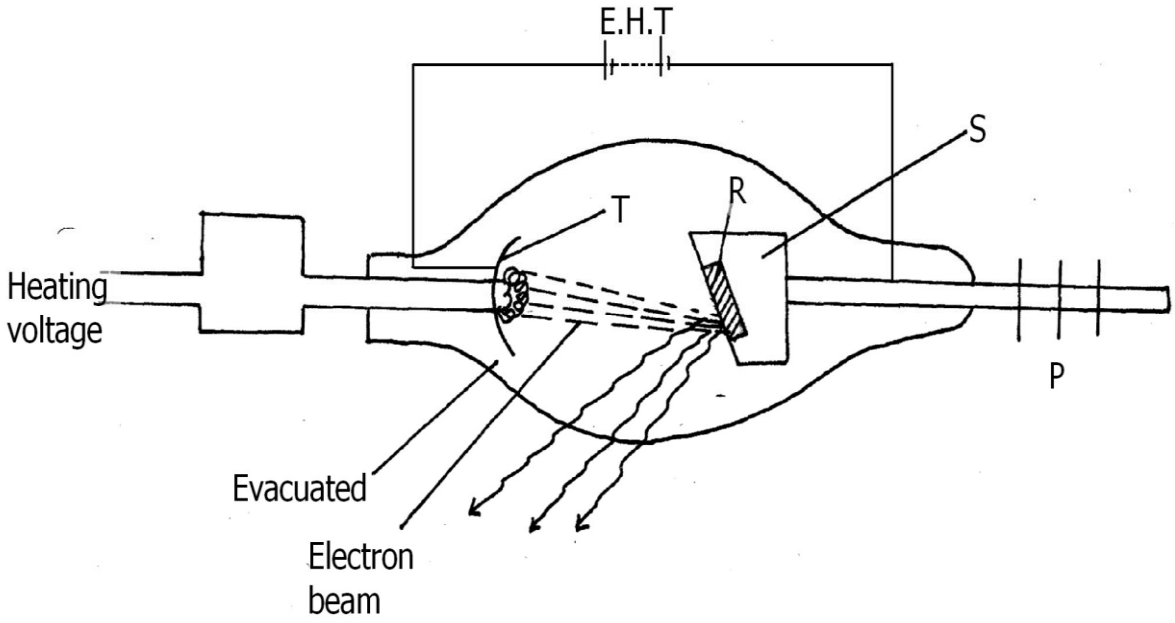
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(b) Figure 11 below shows an X-ray tube drawn by a student. Use it to answer questions which follows

Fig. 11



(i) Why is the tube evacuated? **(1mk)**

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(ii) What adjustment can be made to increase the penetrating power of the X-ray produced **(1mk)**

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(iii) Name a suitable material for the target. **(1mk)**

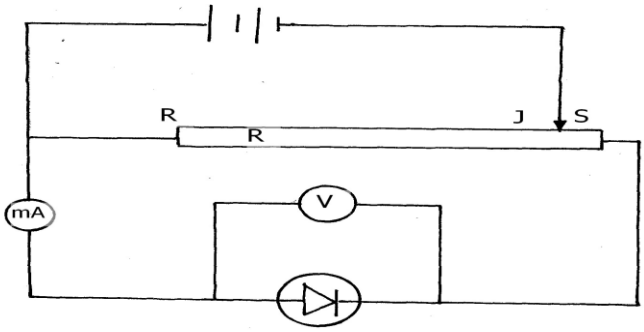
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(iv) Name the part labelled T (1mk)

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(c) Figure 12 shows a circuit used to study behaviour of diode.

Fig. 12

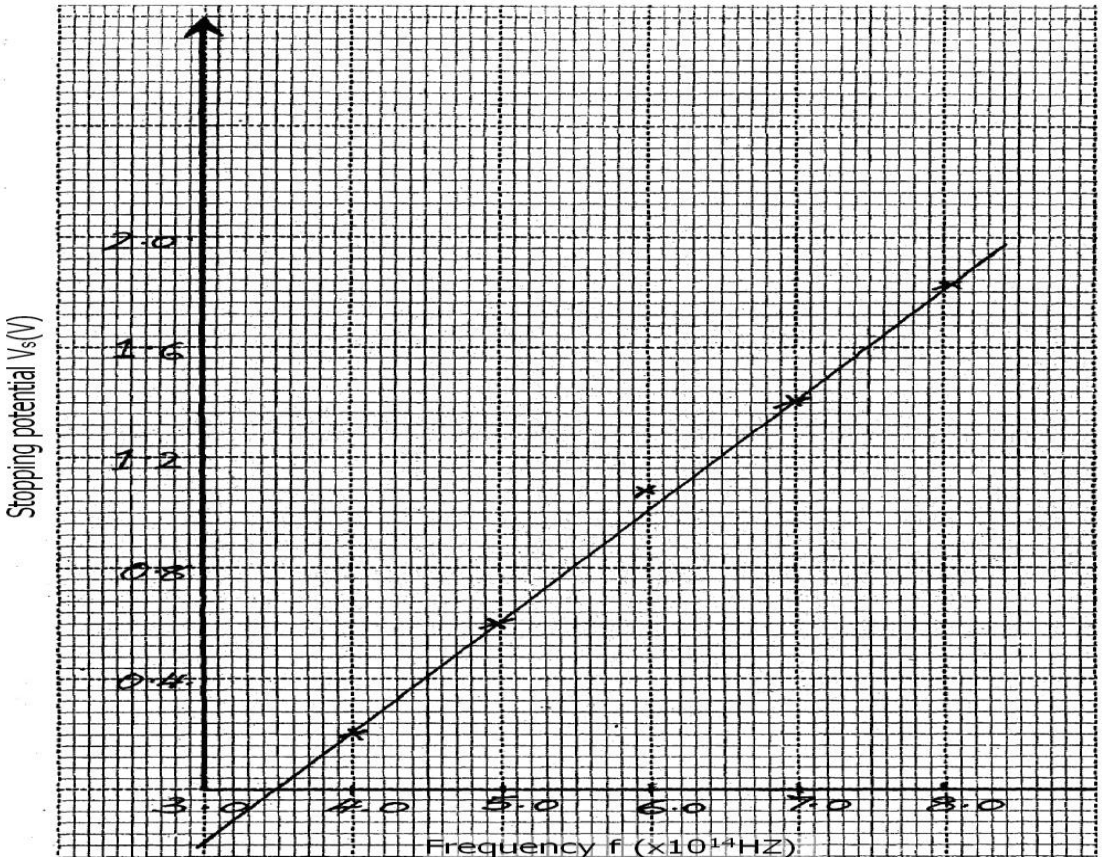


State the behaviour of voltmeter reading as Jockey J is moved from S to R **(1mk)**

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(d) The graph below shows stopping potential V against frequency for a photocell



From the graph determine

(i) the threshold wavelength **(2mks)**

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(ii) Planck's constant **(2mks)**

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(iii) Work function of the metal **(2mks)**

(Take C = 3.0 x 10^{8}m/s, e = 1.6 x 10^{-19}C)

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KCSE 2022 MOCKS

SERIES 002

NAME……

SCHOOL…… **INDEX NO**……

SIGN…… **DATE**……

PHYSICS

Paper 3

CONFIDENTIAL

Question 1

- ✓ One jockey or crocodile clip
- ✓ Two new dry cells (size D)
- ✓ An ammeter 0 – 1A
- ✓ A voltimeter 0 – 5V
- ✓ A cell holder
- ✓ Switch, S
- ✓ Six connecting wires at least three crocodile clips at one end.
- ✓ A resistance wire mounted on a mm scale (SWG 28)

Question 1

- ✓ Candle wax
- ✓ Source of heat
- ✓ Stop watch
- ✓ Boiling tube
- ✓ Thermometer
- ✓ Cork with a hole or cardboard with hole
- ✓ Water
- ✓ Trip stand
- ✓ Tube holder
- ✓ A candle
- ✓ Metre rule
- ✓ White screen
- ✓ Lens holder
- ✓ Convex lens of focal length 20cm
- ✓ Match box (To be shared

KCSE 2022 MOCKS

SERIES 002

NAME……

SCHOOL…… **INDEX NO**……

SIGN…… **DATE**……

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PHYSICS

PAPER 3

PRACTICAL

TIME: 2½ HOURS.

INSTRUCTIONS TO CANDIDATES.

*a) Write your **NAME, SCHOOL** and **INDEX NUMBER** in the spaces provided above.*
b) Sign and write the date of examination in the spaces provided above.
*c) Answer **all** the questions in the spaces provided in the question paper.*
d) You are supposed to spend the first 15 minutes of the 2 ½ hours allowed for this paper reading through the whole paper carefully before commencing your work
e) Marks are awarded for a clear record of the observation actually made, their suitability, accuracy and the use made of them.
f) Non programmable Silent Electronic calculators and mathematical tables may be used.

FOR EXAMINER'S USE ONLY.

Question 1	b	c	e	f	g (i)	g (ii)
Maximum Score	1	6	5	3	3	2
Candidate's Score						

Total ☐

Question 2	iii	iv	v	vi	a	b
Maximum Score	2	1	1	7	1	5
Candidate's Score						

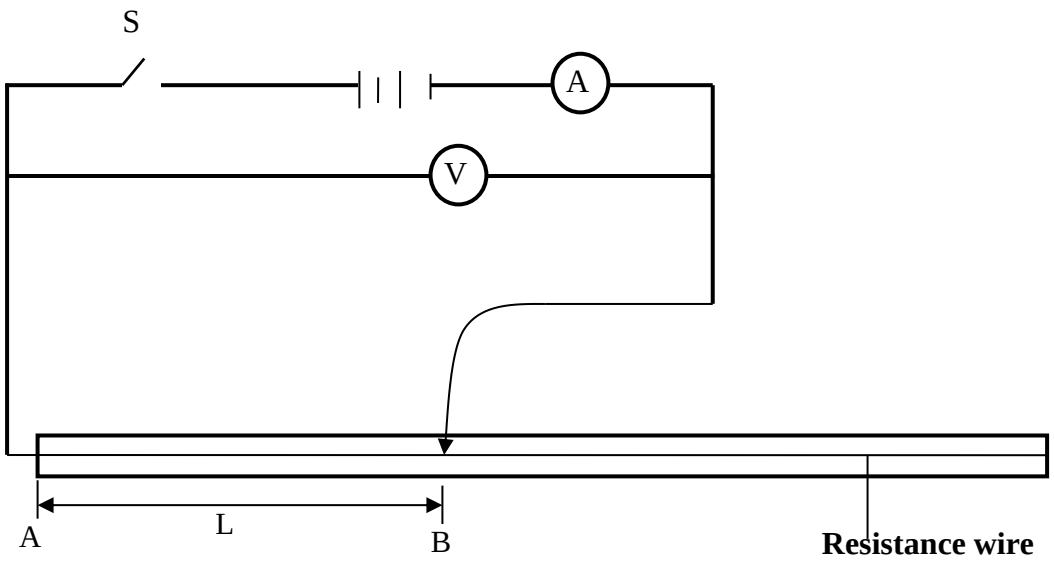
Total ☐

Question 1

1. You are provided with the following
   - ✓ One jockey or crocodile
   - ✓ Two new dry cells (Size D)
   - ✓ An ammeter 0 – 1A
   - ✓ A voltimeter 0 – 5V
   - ✓ A cell holder
   - ✓ Switch, S
   - ✓ Six connecting wires at least three with crocodile clips at one end
   - ✓ A resistance wire mounted on a mm scale

Proceed as follows

- ✓ Set up the circuit as shown in the figure below.



- ✓ Using a micrometer screw gauge, measure the diameter, d, of the nichrome wire.

  d = …… mm (½ mk)

  d = …… mm (½ mk)

- ✓ Close the switch and place the jockey/crocodile in contact with the resistance wire such that the length, L of the wire = 0.10m. Measure and record the current, I, through the wire AB and the potential difference, pd, (V) across. Record your results in table 1 below.

L (m)	0.1	0.3	0.5	0.7	0.9
p.d (v)					
I (A)					
R = $\frac{V}{I}$(Ω)					
$\frac{1}{I}$ (A^{-1})					

✓ Repeat procedure (b) above for the other values of L given in the table 1 above. Read and record the corresponding values of I and V in table 1 above.

✓ Plot a graph of $\frac{1}{I}$ against R. **(5 mks)**

✓ Determine the slope, S of your graph **(3 mks)**

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Given that $\frac{1}{I} = \frac{R}{E} + \frac{r}{g}$, determine the value of

(i) E **(3 marks)**

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(ii) r **(2 mks)**

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QUESTION 2

PART A

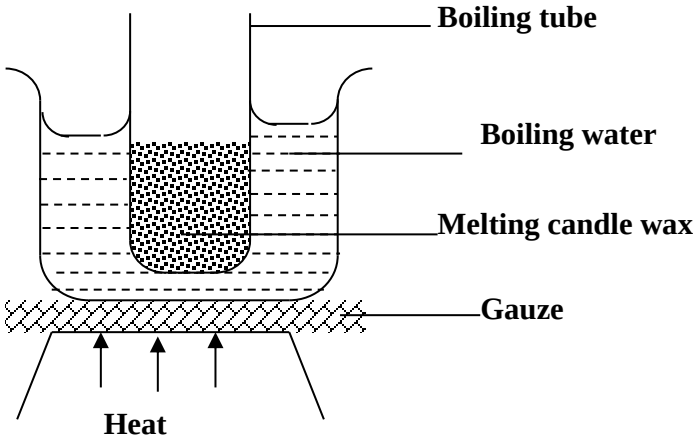
You are provided with the

- ✓ Candle wax
- ✓ Source of heat
- ✓ Stop watch
- ✓ Boiling tube
- ✓ Thermometer
- ✓ Cork with a hole or cardboard with hole
- ✓ Water
- ✓ Tripod stand
- ✓ Tube holder

Proceed as follows:

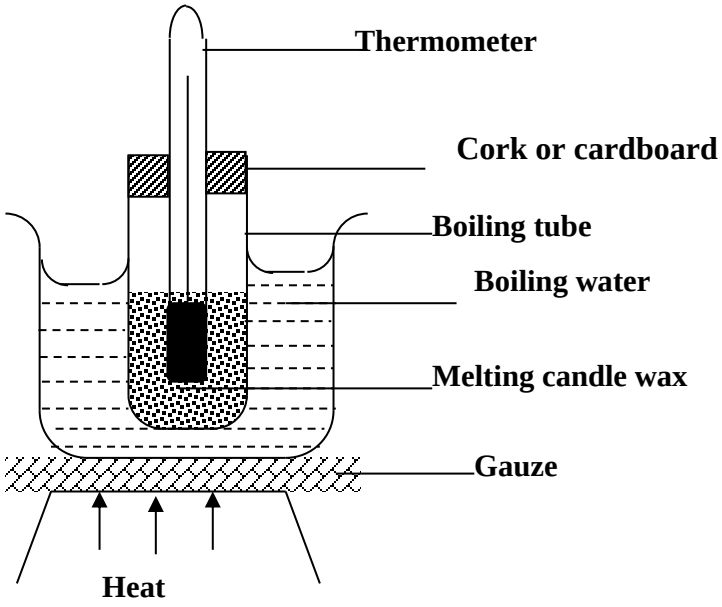
(i) Heat the water in the beaker until it starts to boil

(ii) Place some candle wax in the boiling tube and heat the wax indirectly using the boiling water in beaker as shown in the figure below.



(iii) When the wax completely melted, continue heating for about two minutes. Meanwhile insert the thermometer in the boiling tube through the hole or cardboard. Adjust the thermometer until the bulb of

the thermometer is completely immersed in melted wax.



ntinue heating until the thermometer records no further change in temperature. This the maximum temperature reached. Record this temperature, as T_{max}.

T_{max} = …….. ^0C

(iv) Now remove the boiling tube from the boiling water and simultaneously start the stop watch. Record the temperature of the cooling wax at intervals of two minutes. Record and complete Table 2 below.

Time (min)	0	2	4	6	8	10	12
Temperature (^0C)							

(v) In the axis below, plot a graph of temperature, ^0C against time, t **(5 marks)**

(vi) Determine the rate of cooling at t = 5 min.

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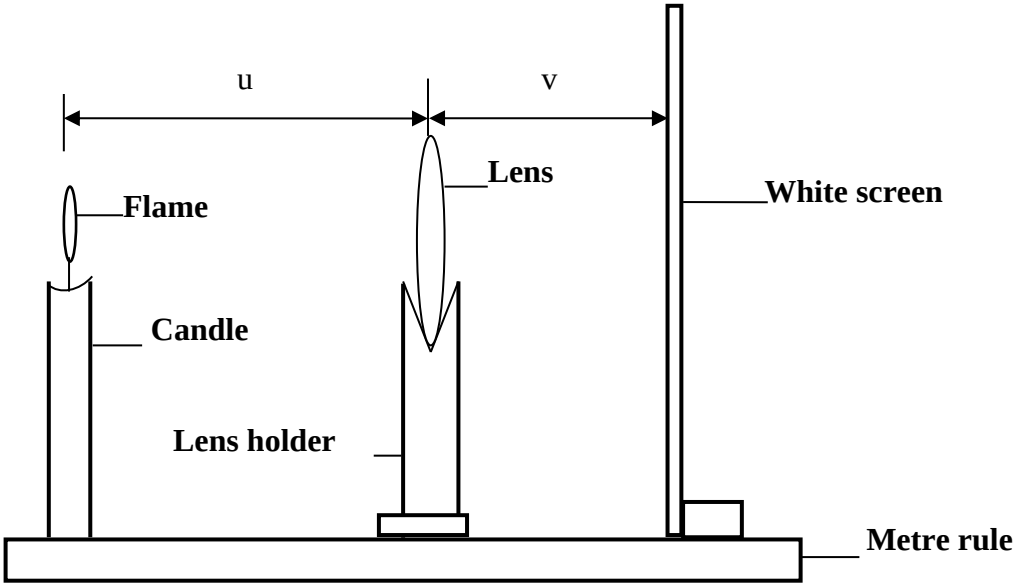
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PART 2

2. You are provided with the following:
   - ✓ A candle
   - ✓ Metre rule
   - ✓ White screen
   - ✓ Lens holder
   - ✓ Convex lens
   - ✓ Match box (To be shared)

   Proceed as follows

   (a) Place the lens on a metre rule. Arrange the set up as shown in the figure below.



(b) Adjust the position of the lens so that it is a distance u = 30cm from the candle. Adjust the position of the screen until a well focused image of the flame is formed on the screen. Measure and record in the table 2, the image distance v, between the screen and lens.

(c) Repeat part (b) for other values of (u) shown in the table 3 and complete the table.

u (cm)	30	35	40
v (cm)			
x = $\frac{v}{u}$			
y = $\frac{v}{(x+1)(cm)}$			

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

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KCSE 2022 MOCKS

SERIES 002

NAME……

SCHOOL…… **INDEX NO**……

SIGN…… **DATE**……

443/1

AGRICULTURE

PAPER I

TIME 2 HOURS

INSTRUCTION TO CANDIDATES

1. *Write your name and adm. No. in the spaces provided above*
2. *This paper consists of three sections A, B and C*
3. *Answer all the questions in section A and B and two questions in section C in the spaces provided*

For Examiners use only

SECTION	Questions	Maximum Score	Candidate's Score
A	1-18	30	
B	19-22	20	
C		20	
		20	
	Total Score	90	

SECTION A (30MARKS)

Answer ALL the question in this section in the spaces provided

1. Give **one** reasons why agriculture is regarded as a science **(1mk)**

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2. List **four** methods offarming **(2mks**

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3. Differentiate between soil structure and soil texture **(1mk)**

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4. State **four** reasons for draining a water logged land **(2mks**

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5. State **two** effects of siltation in dams and reservoirs **(1mk)**

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6. Give **three**benefits of undersowing in pasture production **(1mk)**

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7. Give **four** reasons for growing crops under optimum temperature condition **(2mks)**

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8. Name **one**vegetative material used to propagate each of the following crops **(2mks)**

(a) Bananas …….

(b) Pineapples …….

(c) Irish Potatoes …….

(d) Pyrethrum …….

9. List four advantages of the title deed to a farmer **(2mks)**

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10. What is meant by the following terms in crop as production?

(a) Crop rotation..... **(1mk)**

(b) Mulching..... **(1mk)**

11. Give **two** factors than can increase seed rate in crop production **(2mks)**

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12. State **three**functions of Nitrogen in crops **(1 ½ mks)**

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13. State**four**ways of improving labour productivity on the farm **(2mks)**

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14. State**four** advantages of applying lime as a measure of improving soil condition **(2mks)**

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15. List **three** sources of organic matter in the soil **(1 ½ mks)**

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16. List **four** post harvest practices that are carried out in maize production **(2mks)**

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17. Give **three** factors affecting selectivity and effectiveness of herbicides **(1 ½ mk)**

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18. What is meant by the term preference and choice as used in agriculture economics **(1mk)**

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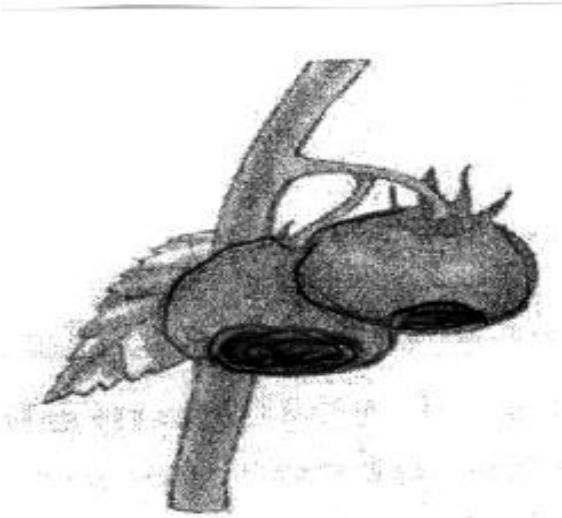
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SECTION B (20 MKS)

Answer all questions in this section in the spaces provided

19. The diagram below shows a physiological condition of tomatoes . Use it to answer the following questions.



(a) Identify the condition **(1mk)**

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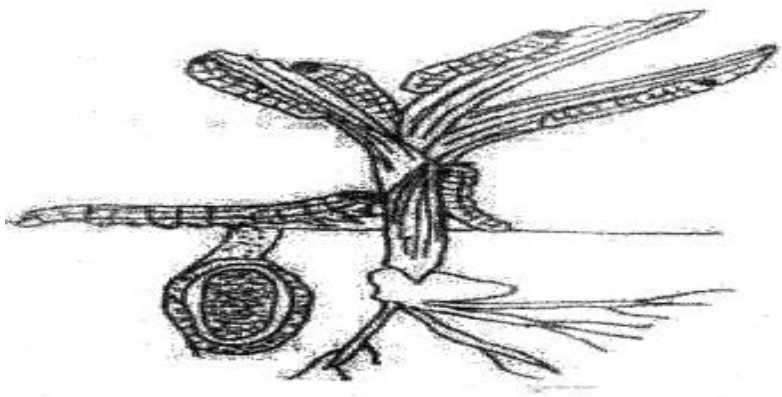
(b) Give **three** causes of the condition identified in (a) above **(3mks)**

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20. The diagram drawn below shows pests that attack crops in the field. Use it to answer the questions that follows.



(a) Identify the pest **(1mk)**

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(b) Classify the above pest depending on the feeding habit **(1mk)**

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(c) List **three** effects of the pest above in crop production **(3mk)**

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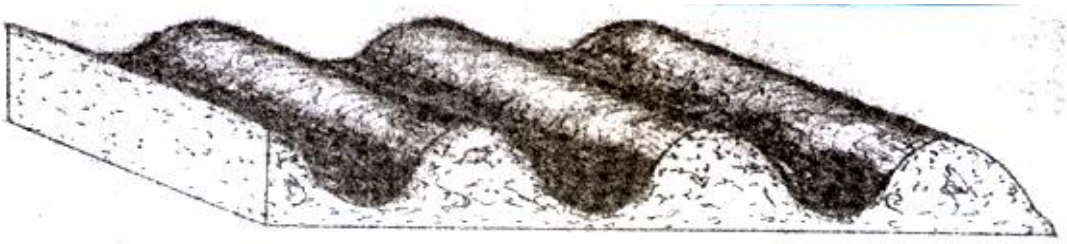
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21. The diagram below illustrates a final seedbed after a tertiary operation done during land preparation.

Study it carefully and answer the questions that follow



(a) Name the tertiary operation carried out on the seedbed **(1mk)**

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(b) Describe how the tertiary operation named in (a) above is carried out **(2mks)**

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(c) Give **two** advantages of planting crops on the final seedbed illustrated above **(2mks)**

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

Country	Gross Domestic Produce (Million Kshs)	Population (Million)
A	1800	36
B	1200	15

(a) Calculate the per capita income for each country. Show your working **(3mks)**

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

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

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

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SECTION C (40 MARKS)

Answer any TWO questions from this section in the spaces provided after question 25

23. (a) Discuss production of beans (*Phaseolus Vulgaris*) under the following sub-headings

(i) Selection and preparation of planting materials **(3mks)**

(ii) Planting **(3mks)**

(iii) Disease control **(2mks)**

(b) Outline four factors that determine the depth of planting maize seeds **(4mks)**

(c) Outline the advantages of a mixed grass legume pasture over pure grass **(8mks)**

24. **(a)** Explain the factors that contributes to competitive ability of weeds **(7mks)**

(b) State **five** factors that determine the choice of irrigation to use in the farm **(5mks)**

(c) Outline **five** characteristics of fertile soil **(5mks)**

(d) Name **three** types of soil water? **(3mks)**

25. (a) Describe **five** characteristics of Nitrogenous fertilizers **(5mks)**

(b) Discuss the guidelines that should be followed when planning a crop rotation programme **(10mks)**

(c) Explain the importance of a nursery in crop propagation **(5mks)**

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KCSE 2022 MOCKS

SERIES 002

NAME……

SCHOOL…… **INDEX NO**……

SIGN…… **DATE**……

443/2

AGRICULTURE

PAPER 2

Time: 2 Hours

INSTRUCTIONS TO CANDIDATES

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

(b) *This paper consists of three sections A, B & C*

(c) *Answer ALL the questions in Section A and B and any Two questions from section C. -*

FOR EXAMINERS USE ONLY

SECTION	QUESTION	MAXIMUM MARKS	CANDIDATES SCORE
A	1-22	30	
B	23-27	20	
C		40	
TOTAL SCORE			

SECTION A (30 MARKS)

Answers ALL the questions in this section in the spaces provided.

1. Give a reason why irish potatoes should not be fed to non-ruminants **(½ mk)**

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2. List four advantages of natural mating **(2mks)**

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3. Outline four factors that may influence the respiration rate of a boar **(2mks)**

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4. State one method of increasing ploughing depth when using disc plough **(1mk)**

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5. Give two reasons why Jersey breed is better suited for marginal areas than fresian breed **(1mk)**

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6. List two factors associated to the animals that determine the amount of feed that an animal consumes. **(1mk)**

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7. Name the type of breeding system represented below

Arshire × Boran Dam ⟶ F1 heifer X Hereford sire **(½ mk)**

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8. What safety measures should be observed when using a cross cut saw **(1mk)**

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9. Give two reasons for treating timber for fencing **(1mk)**

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10. State any three reasons for carrying out castration in cattle **(1 ½ mks)**

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11. Differentiate between whole milk and skim milk **(1mk)**

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12. State three factors considered in selection of a suitable site for a poultry house (1 ½ mks)

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13. State three function of fats and oils in animals body **(1 ½ mks)**

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14. Name three calf diseases brought about by wet condition within the calf pen **(1 ½ mks)**

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15. State four advantages of farm mechanization **(2mks)**

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16. Name four sources of power in the farm beside tractor **(2mks)**

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17. What is the cause of soft shells in eggs? **(1mk)**

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18. Why are additives necessary when making sillage **(1 ½ mks)**

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19. What function is accomplished by droppers in a barbed wire fence **(1mk)**

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20. What is the role of an attendant during the time of furrowing in pigs **(1 ½ mks)**

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21. State two functions of queen in a bee hive **(1mk)**

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22. State four signs that would show that a cow died of anthrax **(2mks)**

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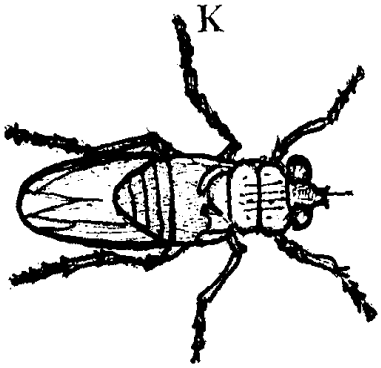
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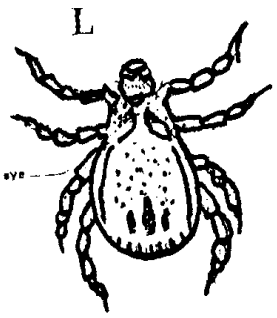
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SECTION B (20 MARKS)

Answer all the questions in the spaces provided

23. The diagram below illustrates parasites which transmit diseases in livestock. Study them carefully and answer the questions below





(a) Identify the specimen K and L

K..... **(½ mk)**

L..... **(½ mk)**

(b) In each case name one disease transmitted by the parasite K and L in cattle

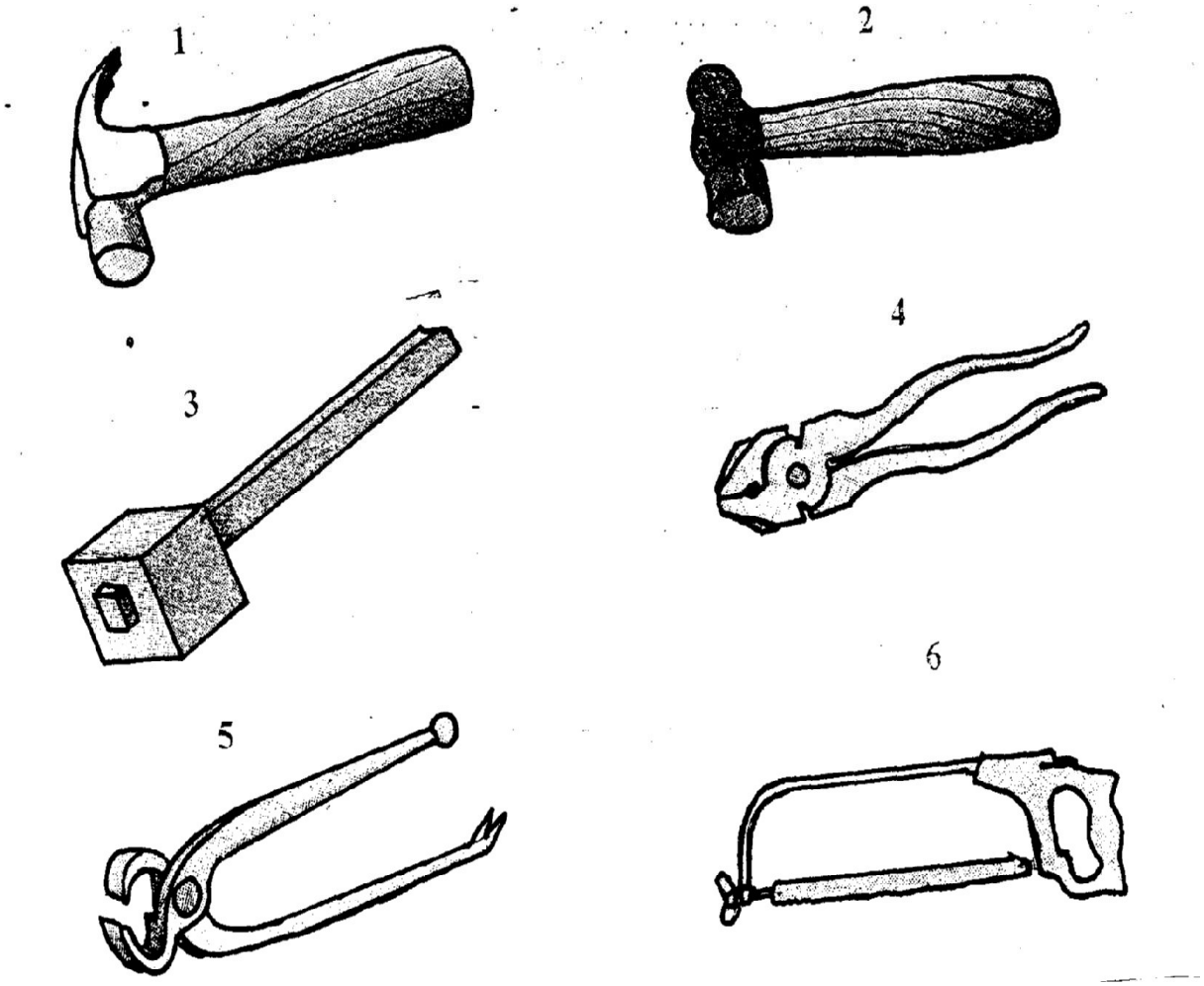
K..... **(½ mk)**

L..... **(½ mk)**

(c) Name the causative organism of the disease transmitted by K **(½ mk)**

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24. Study the farm tools labeled 1-6 and answer questions that follow



(i) Name the tools labelled 1-6 **(3mks)**

1……

2……

3……

4……

5……

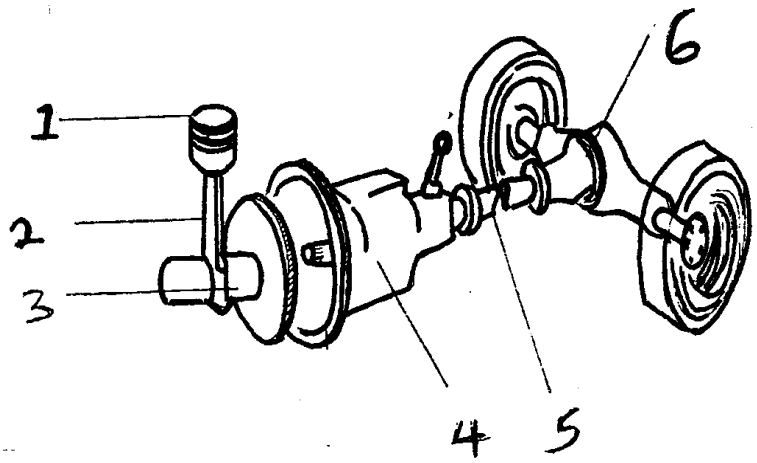
6……

(ii) What is the function of the tool labelled 1 and 2

1..... **(½ mk)**

2..... **(½ mk)**

25. Study the diagram below that shows the power transmission mechanism of a tractor engine



(i) Label parts numbered 1-6 **(3mks)**

1……

2……

3……

4……

5……

6……

(ii) What technical term is used to refer to attaching an implement to a tractor **(½ mk)**

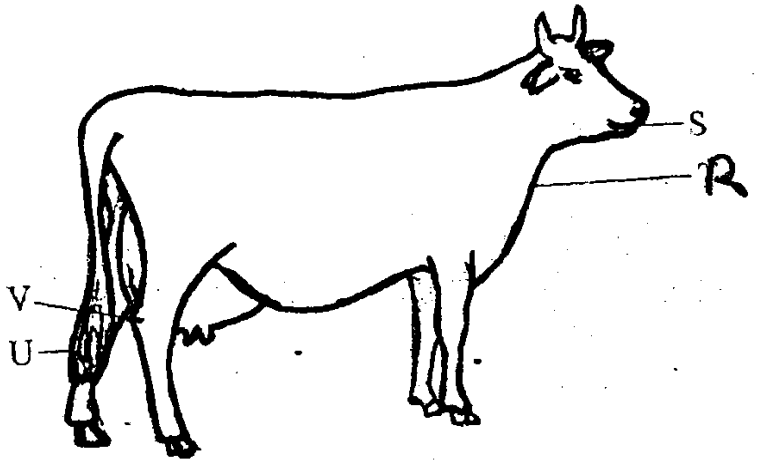
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(iii) Name two types of linkage on a tractor **(1mk)**

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26. Study the diagram below of a dairy cow and answer the questions that follows



(i) Identify the parts labelled S, R, U, V **(2mks)**

S.....

R.....

U.....

V.....

(ii) Indicate on the diagram with letter T two areas commonly inhabited by ticks **(1mk)**

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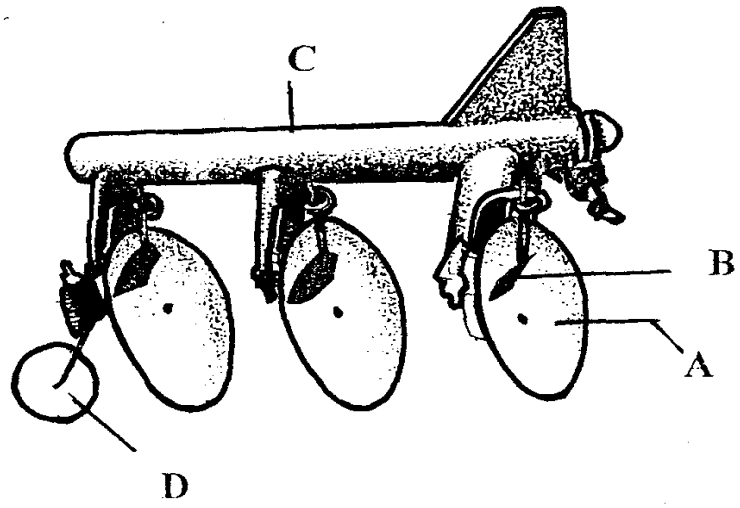
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(iii) State two characteristics that qualify it as a good milk producer **(2mks)**

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27. The diagram below shows a farm implement .Study it and answer the following questions



(i) Name the part labelled A,B, C, and D **(2mks)**

A.....

B.....

C.....

D.....

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

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(iii) State two maintenances on the implement **(1mk)**

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SECTION C

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

28. **(a)** **(i)** Describe the extraction of honey from the combs using heat method **(7mks)**

(ii) State three factors affecting the quality of honey **(3mks)**

(b) State the main components of a tractor fuel system and their functions **(10mks)**

29. (a) Explain five daily maintenance services on a tractor and state the part involved. **(10mks)**

(b) (i) Describe the characteristics of a poor layer, which should be considered during Culling **(7mks)**

(ii) Outline the control measures against roundworms **(3mks)**

30. (a) Explain the factors that a farmer should consider when constructing a farm structure **(10mks)**

(b) Explain the predisposing factors of mastitis disease in cattle **(10mks)**

KCSE 2022 MOCKS

SERIES 002

NAME……

SCHOOL…… **INDEX NO**……

SIGN…… **DATE**……

565/1

BUSINESS STUDIES

Paper 1

Time: 2 Hours

INSTRUCTIONS TO CANDIDATES

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

FOR EXAMINERS USE ONLY.

Qs No.	1	2	3	4	5	6	7	8	9	10	11	12
Marks												
Qs No.	13	14	15	16	17	18	19	20	21	22	23	24
Marks												

Qs No.	25
Marks	

Total Marks

1. State **four** characteristics of services. **(4mks)**

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2. Outline **four** reasons why most developing countries rely on extractive Level of production **(4mks)**

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3. Highlight **four** benefits to a business that uses e-mail in communication. **(4mks)**

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4. Mention **four** factors that influence entrepreneurship practices in Kenya. **(4mks)**

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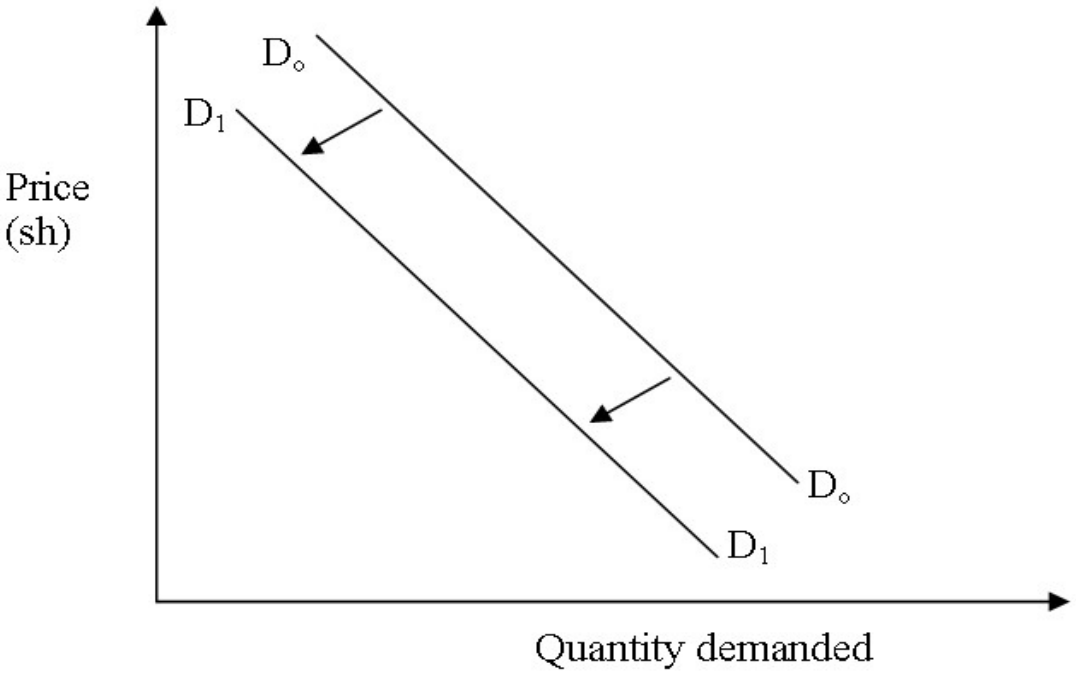
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5. Classify the following factors of a business as either internal or external business environment. **(4mks)**

(Use a tick)

Factor	Internal	External
(a) Employees		
(b) Tools and equipments		
(c) Inflation		
(d) Political factor		

6. The diagram below shows a shift of the demand curve of a commodity Yfrom D_oD_o to D_1D_1.



Outline **four** factors that may have caused the shift in the demand curve. **(4mks)**

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7. Outline **four** circumstances under which producers may prefer to sell goods directly to the consumer. **(4mks)**

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8. State the type of unemployment to which each of the following statements relate. **(4mks)**

Statement	**Type of unemployment**
a) Worker's full capabilities are not completely utilized.	
b) High demand for labour during Peak Period	
c) Demand for labour declines due to decrease in the supply of goods and services	
d) Exists in the period after a person looses a job and goes out in search of another.	

9. **State** the books of original entries in which the following documents are used. **(4 mks)**

(a) Incoming Invoice……..

(b) Incoming Receipt…….....

(c) Outgoing Credit Note…….

(d) Outgoing Invoice……...

10. Write the following abbreviations in full. **(4mks)**

(i) G.D.P

……

(i) N.N.P

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(i) G.N.P

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(i) D.P.I

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11. The document shown was issued by Jimcar traders to Mueni

Jimcar Traders Box 5 Nakuru To. Mueni Box 20 Kericho	No. 012 Date: 20th June 2010	
We have credited your account as follows. To copies of receipt books returned by you to us. Sign_____ Total	Amount Sh	Cts
	15,000	00
	15,000	00

Outline **four** circumstances under which the above document may be issued. **(4mks)**

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12. The following balances were extracted from the books of Loliondo enterprises as at 6th Jan 2009.

	Sh.	**(4mks)**
Land	150,000	
Prepaid Insurance	85,500	
Discount received	5,500	
Sales	5,000	
Purchases	18,000	
Capital	311,000	
Return Inwards	20,000	
Return outwards	6,000	
Creditors	1,500	
Bank	55,000	

Required: Prepare a trial balance.

13. Highlight **four** negative effects of development to an economy. **(4mks)**

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14. The following information relates to Rokito traders for the year ended 31st December 2011.

	Sh.
Fixed Assets	5,000,000
Current assets	650,000
Net Profit	300,000
Current Liabilities	650,000
Sales	2,000,000
Closing stock	100,000
Opening Stock	200,000

Gross Profit Margin was 20%

(4mks)

Calculate

(a) Current ratio

(b) Gross profit mark-up

(c) Rate of stock turnover

(d) Capital employed

15. Outline **four** differences between **Savings account** and **Current account** as provided by commercial banks.

Savings account	Current account
(i)	
(ii)	
(iii)	
(iv)	

16. The inflation rate in Kenya moved up from 6.4% to 9.5%. State four positive outcome of this change. **(4mks)**

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17. Name the **four** ways through which consumers can be cheated in their dealings with traders **(4mks)**

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18. The following correspondence has been received in the mail room, state the department to which each correspondence would be sent. **(4mks)**

Correspondence	**Department**
(i) An invoice from a creditor	
(ii) A cataloque from a supplier	
(iii) A letter of application for job	
(iv) A complaint from a customer	

19. Outline **four** circumstances under which a sole – proprietorship may be dissolved. **(4mks)**

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20. Wanjau started a business with sh. 60,000 as at 1st Jan 2010. During the year profits and additional investments were sh. 50,000 and 60,000 respectively.

At the end of the year Wanjau remembered that she had taken goods for her personal use and that as at 31st Dec.2010 her capital was sh. 19,500.

Determine the value of goods that Wanjau had taken for her personal use. **(4mks)**

21. Highlight **four** factors that may be considered by an insurance firm before determining Premiums to be charged for life assurance policy. **(4mks)**

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22. State **four** circumstances under which it would be appropriate to use signs to communicate in carrying out business activities.

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23. Identify **four** limitations of human porterage as a means of transport.

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24. State **four** factors to consider before incurring public expenditure.

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25. Give **four** current trends in product Promotion. (4mks)

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KCSE 2022 MOCKS

SERIES 002

NAME……

SCHOOL…… **INDEX NO**……

SIGN…… **DATE**……

565/2

BUSINESS STUDIES

Paper 2

Time: 2 Hours

INSTRUCTIONS TO CANDIDATES

1. *This paper consists of **SIX** questions*
2. *Answer any **FIVE** questions.*
3. *Write your answers in the answer booklet provided.*
4. *All questions carry equal marks.*
5. *This paper consists of 4 printed pages*
6. *Candidates should check the question paper to ascertain that all the pages are printed as indicated and no questions are missing*

Answer any FIVE questions.

1. **(a)** Explain **five** reasons why it is important for a business person to prepare a business plan. **(10marks)**

(b) Explain **five** features that differentiate a perfect competition market from a monopoly market structure. **(10marks)**

2. **(a)** Explain **five** features that would make a producer to build his own warehouse rather than rely on a public one. **(10marks)**

(b) As at 1st July 2008 the cash book of Emori enterprise showed the following balances: Cash sh.20, 000 and a bank overdraft sh. 8,600.

During the Month the following transactions took place.

3/07/08: Nafula settled her account of sh. 16,000 by cheque of sh. 15,000

6/07/08: Paid rent by cash sh. 8,000

10/07/08: Deposited sh. 6,000 into the business bank account from the cash till

15/07/08: Settled Wakulis account of sh. 20,000 and he allowed a discount of 1% by cheque.

18/07/08: Deposited sh. 28,000 in the bank from private sources.

21/07/08: Cash sales sh. 12,000

24/07/08: Otieno a debtor settled his account by cheque of sh. 8,000 having been allowed a discount of 20%.

26/07/08: Purchased furniture of sh. 5,200 paying by cheque.

28/07/08: Received sh. 3,600 cash from Nduta.

30/07/08: Banked the cu crilable cash except sh. 1,600.

Required:

Draw up a three – column cash book. **(10marks)**

3. **(a)** Explain **five** challenges that may be experienced by a new entrepreneur who is intending to start a business in Kenya. **(10marks)**

(b) Ijara investiment operates a whole sale business. The following transactions took place in the Month of may 2010.

May 3: Sold goods on credit to Ayimba sh. 60,000.

May 8: Purchased goods on credit from mjuaji stores sh. 120,000.

May 12: Returned goods to Mjuaji stores worth sh. 6,000.

May 16: Purchased goods on credit from Mjuaji stores sh. 160,000.

May 22: Sold on credit to Mafala retailers sh. 150,000.

May 23: Bought a new motor vehicle from Mashariki motors worth sh. 3,200,000.

May 24: Ayimba returned goods worth sh. 10,000.

May 29: Sold equipment worth sh. 840,000 on credit to chap limited.

Required:

Record the above transactions in the relevant books of original entry for Ijara Investments.

(10marks)

4. **(a)** Explain **five** importance of National Income statistics to an economy. **(10 marks)**

(b) Explain **five** principles of an efficient tax system. **(10marks)**

5. (a) Explain any **five** circumstances under which a producer will find it necessary to transport goods by train. **(10 marks)**

(b) Explain **five** advantages of being a member of an Economic block such as the East African

Community (E.A.C) to a country like Kenya. **(10 marks)**

6. (a) Explain **five** ways in which the government may positively influence business activities to a given area. **(10 marks)**

(b) Despite announcement by the government that the country has achieved 6% economic growth this has not been translated to economic development.
Discuss **five** indicators of undevelopment currently being experienced in Kenya.
(10 marks)

KCSE 2022 MOCKS

SERIES 002

NAME……

SCHOOL…… **INDEX NO**……

SIGN…… **DATE**……

101/1

ENGLISH

PAPER 1

(FUNCTIONAL SKILLS)

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 the examination in the spaces provided above.*

(c) *Answer ALL questions in this question paper.*

(d) *All your answers must be written in the spaces provided in the question paper.*

FOR EXAMINER'S USE ONLY

Question	Maximum score	Candidate score
1	20	
2	10	
3	30	

TOTAL SCORE	60	

1. You have been invited by your best friend, who attained an aggregate mean grade of A, to a party to celebrate his/her good performance in last year's KCSE. Your friend has also asked you to assist in preparing a one course meal for ten guests.

(a) Write a congratulatory note that you will give to your friend. **(5marks)**

(b) Write a recipe that your friend will use to prepare the meal to be eaten that day**. (15mks)**

FOR KCSE RESOURCES &MARKING SCHEMES CONTACT 0746 222 000

2. CLOZE TEST (10MKS)

That Kenya is one of the (1)_____tourist destination in Africa is indisputable .The country (2)_____ of beautiful national parks, game reserves and a (3)_____ cultural heritage, among other attractions.(4)_____a good proportion of hotels and restaurants (5)_____ world class standards. This is in (6)_____to its strategic location in the world map(7)_____hospitable nature of its citizens. Even though (8)_____ factors are already being exploited (9)_____ earn the country revenue, a worrying trend (10)_____ the focus on mass tourism.

3. (a) ***Read the following oral poem and answer the questions that follow***

Death is a witch

(Solo) Ah, what shall I do,Abaluya?
It's wrong!

(Chorus) Today I will say
Death is a witch, my people
It snatched my child
I will remain alone

(Solo) Ah, what shall I really do,Abaluhya?
It's very wrong!

(Chorus) Today I will say
Death is a witch, my people
It snatched my child
I will remain alone

(All) My child, my child, i cry
What shall I do? I cry
What shall I do? I cry (×2)

Questions

(i) Identify THREE features of oral performance that make this poem memorable **(3mks)**

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(ii) If you were to perform this poem to an audience, what preparation would you consider to ensure that your presentation is effective **(4mks)**

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(iii) How would you perform the first line of the chorus **(3mks)**

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(b) Using a stress marker, identify the stressed syllable in each of the following words **(3mks)**

(i) Technology

(ii) Prefix

(iii) Photograph

(c) Identify the underlined sound that is odd in each of the following **(3mks)**

(i) Genre gel gesture June

(ii) Thin than theatre thought

(iii) Chaise raise gaze mace

(d) When you are in a group discussion, how would you know that its your turn to speak **(3mks)**

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(e) Consider the following interview between the manager of a company and Mr. Rotich and then answer the questions that follow.

Manager: How are you Mr. Rotich ? Have a seat and feel at home.

Rotich: (Oh God. I really need a job). Thank you, Sir

Manager: You applied for the job of accounts clerk?

Rotich: Yes, Sir (I wonder whether he is going to give it to me)

Manager: Do you know the duties of an accounts clerk? Did you read our advertisement in the newspaper?

Rotich: (Looking absent-minded; fiddling with his fingers and avoiding eye contact) Excuse me, Did you say something about newspaper? Yes I read newspapers, but not everyday you know they are expensive. Once in a while I borrow from friends.

Manager: You're obviously not listening I asked you a question about our advertisement and the requirement for the job.

Rotich: (Oh God I need a job badly, I don't even have somewhere to stay)

Yes, yes you talked about listening.

Yes, It is important to listen to your boss.

Manager: Mr.Rotich , this is the end of my interview. You'll hear from us in due course.

Rotich: Thank you sir, I hope you will consider me for the job.

(i) Identify the short-coming in Rotich's listen skills **(4mks)**

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(ii) Identify the specific listening skills Rotich could have used during the interview **(5mks)**

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(f) Explain the pun in the following statement **(2mks)**

(i) Rose is the flower of my life

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(ii) I saw the head

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KCSE 2022 MOCKS

SERIES 002

NAME……

SCHOOL…… **INDEX NO**……

SIGN…… **DATE**……

101/2

ENGLISH

Paper 2

COMPREHENSION, LITERARY APPRECIATION AND GRAMMAR

2 ½ HOURS

Instructions to candidates

(a) *Write your **name, index number** and the **name** of your school in the spaces provided above.*

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

(c) *Answer **all** questions in this question paper.*

(d) *Answers to **all** questions **must** be written in the spaces provided in this booklet.*

For Examiner's Use Only

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

1. COMPREHENSION

1. *Read the passage below and then answer the questions that follow.*

A lot of students think that learning is only in class. If students use two extra steps, most students will not forget what they learned in class. To achieve effective learning, students needed to follow two extra steps in the three strategic learning processes.

The key to success is by following these three strategies. Review is essential to student success. Unless content is reviewed by students shortly after it is learned, it will soon be forgotten. To avoid forgetting what you learned, it is recommended to review daily.

It is also recommended to reduce large volumes of notes into point form and to paraphrase what you have learned. Other helpful tips include creating concept maps and diagrams; creating fact, concept or vocabulary cards and using visualization to better connect to what you learned. These are all important tools to helping students better understand and memorize lesson content.

The key to achieving academic success cannot be directly **correlated** to one specific area. Rather it requires students to be overall rounded in many different aspects. This includes attending class regularly to keep pace with the class. Falling behind in studies or homework can be **detrimental** to academic success and can induce stress onto students. Participating in class activities and discussions are also vital parts of learning and applying concepts learned. On the other hand, taking good, concise notes will always help in the long run when reviewing for tests and exams. To sum it all up, strategic learning is the password for many academic achievements. Being exposed to knowledge is the first step in the journey, the fact that young scholars can learn and be a part of history is a phenomenal step in furthering their search to success. Reviewing notes, in the way the young individual wishes, by him/herself, or with a good friend, this will help him/her to understand what has been learned in a way s/he understands. Lastly practice is a great way to memorize what has been learned, when practice achieves its full potential, the individual won't only be entitled for a good mark, but also a way to view, understand and think of things. Those three attributes will help scholars become more successful, but it's important to one as it is to the other, and each and every person should find the learning strategies **effectual** for him/ herself, and in extremely **exceptional** occasions even invent or innovate new strategies.

Questions

(a) What does the writer fault in the students thinking according to the first paragraph?

(2 mks)

(b) Make notes on the **three** strategies that are key to success. **(3mks)**

(c) Unless content is reviewed by students shortly after it is learned, it will soon be forgotten
Begin*: if……)* **(1 mk)**

(d) The key to achieving academic success cannot be directly **correlated** to one specific area.
(1mark) ***Add a question tag.***

(e) Identify and explain the tone of the passage. **(3 mks)**

(f) How, according to the passage, does practice help memorise what has been learned?
(3marks)

(g) Name three helpful tips to success. **(3mks)**

(h) Explain the meaning of the following words and phrases as used in the passage. **(4marks)**

(b) detrimental-

(c) correlated -

(d) effectual-

(e) exceptional-

2. ***Read the excerpt below and then answer the questions that follow.***

There was, however, a dark spot in the whole affair. Women friends from Nasila who had visited her in the past had asked her very intrusive questions regarding her daughters. At that time she dismissed them as busybodies who enjoyed intrusion into other people's affairs. But it now dawned on her that those could be the mothers of her would be sons-in-law. The words they used to describe the status of her daughters came back to haunt her like demented spirits of a past that was better forgotten; *IntoiyeNemengalana* they had called them contemptuously.

On his part, Parsimei Ole Kaelo sat quietly beside his wife, his mind roaming the distant past in reminiscence. He knew that he had worked his fingers to the bone over the years, preparing for that day when he was no longer going to be employed. He was on his way to opening up his business. Not that he felt any particular excitement or pleasure; he was a man to whom disappointment came more easily and naturally than contentment. And that latter attribute fired his ambition to always strive for the stars. It was characteristic of him that, surrounded by what other men would have considered evidence of a well-earned successful life, he felt nothing but the need to strive even harder to achieve better results.

He had a contentious mind that seemed to question every aspect of his life. Although he was blessed with a shrewd brain and a pugnacious obstinacy that had stood him in good stead in his struggle to rise through the ranks, from a clerk to the coveted position of Commercial Manager of the Agribix Ltd, he still saw only, the greater successes of others. Even on the family front, he felt cheated by nature, for although it had been his prayer to get at least three boys, he had ended up with two girls. But even more obnoxious was the fact that despite all his achievements, it seemed to him that his younger brother, Simiren, who remained in Nasila, had been more appreciated and was considered the cultural head of the Kaelos by the community. That hurt him. But it did not worry him. Since childhood he had been aware,

without self-pity, that no one really liked him. That, too, did not bother him since in his mind, to pursue the easy and worthless admiration of others was a sign of weakness of character.

Nature had not, however, been totally inconsiderate. It rewarded him with a gem in the form of his wife-Jane Milanoi. When he first saw her at a church service at Nasila, he was stunned. She was then hardly eighteen. Her body had now ripened to a sensual womanhood completely at odds with her childlike face. She wore her jet black hair in braids that accentuated her wide eyes. Her breasts were full and heavy, her waist slender, her hips wide and seductively curved. And the dress she wore, a simple red frock, fitted well her tall shapely figure. From the moment he saw her, he had been obsessed. And against all odds and despite all efforts, he was still so obsessed twenty-two years later. His marriage to her had been a great success.

His two daughters occupied separate parts of his heart. Taiyo, his eldest, was his pride. When she was born twenty-years earlier, his heart was enthralled. She was the proof of his fatherhood. When his wife got pregnant the second time, he prayed for a healthy baby boy who would carry the Kaelo's name to the next generation. But that was not to be. Against his expectation, and to his utter disappointment, nature had given him another baby girl. From the moment she was born, mute and helpless, he detested her. The very sight of her enraged him. Her arrival and her continued stay in her father's home, remained unwelcome and detested. And right from her cradle, baby Resian instinctively detected the absence of love from her father. She grew up sullen, bewildered and resentful. As a result, her nature was darkened by melancholy. Self-doubt made her awkward and very difficult to deal with. And that made him detest her even more.

(a) Jane Milanoi expects a lot when she gets to Nasila. Highlight these expectations as described just before this excerpt. **(4marks)**

(b) Discuss **three** themes evident in the excerpt. **(6marks)**

(c) Discuss **two** character traits of Parsimei Ole Kaelo as brought out in the excerpt. **(4marks)**

(d) Identify and explain two stylistic devices used in the excerpt. **(4marks)**

(e) Explain what happens immediately after this excerpt. **(4marks)**

(f) Ole Kaelo seems not to be happy with Resian. From what happens in the excerpt and soon after this excerpt, what causes this resentment? **(2marks)**

(g) Self-doubt made her awkward and very difficult to deal with. **(1marks)**

Rewrite by using 'not easy'

3.Read the song below and then answer the questions that follow.

There is no needle without piercing point
There is no razor without trenchant blade
Death comes to us in many forms
with our feet we walk the goats earth
with our hands we touch God's sky
Some future day in the heat of noon,
I shall be carried shoulder high
Through the village of the dead
When I die, don't bury me under forest trees,
I fear their thorns
Bury me under the great shade trees in the market,
I want to hear the drums beating,
I want to feel the dancer's feet.

QUESTIONS

(a) With a reason, classify the song above. **(2marks)**

(b) Why does the singer choose not to be buried under forest trees? **(2marks)**

(c) Where does the speaker want to be buried? Why? **(3marks)**

(d) Identify and explain one economic and two social activities evident in the oral song. **(6 mks)**

(e) Explain the meaning of the following word as used in the poem. **(1mk)**
Trenchant

(f) Identify and explain two features of style from the above poem. **(6mks)**

4.GRAMMAR

(a) ***Rewrite the following sentences based on the instruction given after each.*****(2 marks)**

(i) He understood why people had been laughing after he realized the ugliness of his headgear. (***Rewrite using present participle***).

(iii) The President-elect was sworn in only after the Supreme Court had validated the
Presidential result. (***Begin:*** **Not until...**)

(b). (i) The maid had prepared supper by the time we got home.
(Rewrite to remove gender bias). **(1 mark)**

(ii) I have been studying in this school for four years complained the student but I have never scored one hundred per cent in any subject. (*Punctuate correctly)* **(1 mark)**

(iii)Chinua Achebe one of Africa's greatest writers passed on three months ago. (***Rewrite using parenthesis***). **(1 mark)**

(c.) ***Use the correct form of the word given in the brackets.*** **(3 mks)**

(i) Sports persons need to arrive in the camp two days early in order to..... (climate)

(ii) Pope Francis I took over the .....after Pope Benedict XVI resigned. (Pope)

(iii) No single female candidate won the .....seat in the just concluded election. (Governor)

(d). *Fill the blanks with the most suitable prepositions.* **(3 marks)**

(a) He was sentenced to life imprisonment .....the law.
(b) Unemployed youth often subscribe .....illegal gangs.
(c) They attended the party dressed.....smart casual.

(e). *Using the words in brackets, complete the following sentences with the most appropriate phrasal verbs.* **(3 marks)**

1. My parents managed to .....high school although with difficulty. (see)
2. I was .....by his childish behaviour during the academic parade. (take)
3. The new students could not .....their way to the dormitory. (make)

(f). His decision was a typical case of putting the cart before the ox. (***Correct the idiomatic expression***). **(1 mark)**

KCSE 2022 MOCKS

SERIES 002

NAME……

SCHOOL…… **INDEX NO**……

SIGN…… **DATE**……

101/3

ENGLISH

Paper 3

ESSAY BASED ON LITERARY TEXTS

2 ½ HOURS

Instructions to candidates

(a) *Write your **name, index number** and the **name** of your school in the spaces provided above.*

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

(c) *Answer **all** questions in this question paper.*

(d) *Answers to **three** questions **must** be written in the spaces provided in this booklet.*

For Examiner's Use Only

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

1) Imaginative composition (Compulsory) **(20 marks)**

Either

(a) Write a story which ends with the following words:
"……. I wish I had known earlier."

Or

(b) Write a story illustrating the saying,
"Those who live in glass houses should not throw stones."

2) Essays based on set Text

Either

(a) "Olarinkoi's behaviour is like that of a predator stalking its prey. "Write an essay that shows the truth of this statement in view of what befalls the Ole Kaelo daughters in Blossoms of the Savannah. **(20 Marks)**

Or

(b) "Desperation pushes individuals to do the unexpected. "Write an essay to support this statement using illustrations from **A Doll's House by Henrik Ibsen.** **(20 Marks)**

KCSE 2022 MOCKS

SERIES 002

NAME……

SCHOOL…… **INDEX NO**……

SIGN…… **DATE**……

102/1

KISWAHILI

Karatasi ya 1

(INSHA)

MUDA: SAA 1 ¾

Maagizo

1. *Jibu maswali **mawili***
2. *Swali la **kwanza** ni la **lazima***
3. *Kisha chagua swali la pili, kutoka hayo mengine matatu yaliyosalia.*
4. *Kila swali lisipungue maneno **400.***
5. *Kila swali lina alama **20***

KWA MATUMI ZI YA MTIHANI PEKEE.

1	*2*	*3*	*4*	*JUMLA*

Watahiniwa wanastahili kuona kuwa maswali yote yako na hakuna yaliyoachwa

1. Wewe ni katibu wa tume iliyoteuliwa kufanya utafiti kuhusu dhuluma dhidi ya wanaume katika Jamii. Andika ripoti ya uchanguzi wenu.

2. Andika insha itakayothibitisha matumizi ya methali :

Sikio la kufa halisikii dawa.

3. Eleza juhudi zinazofanywa na serikali ili kukomesha uharibifu wa mazingira nchini.

4. Andika insha itakayoanza kwa,

``Buum,mlipuko huo ulitapakaza vifusi kote, wingu jeusi la moshi lilitanda...

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SERIES 002

NAME……

SCHOOL…… INDEX NO……

SIGN…… DATE……

102/2

KISWAHILI

Karatasi ya 2

MUDA: SAA 2 ½

MAAGIZO

1. *Andika **jina lako** na **namba yako** katika nafasi ulioachiwa hapo juu.*
2. *Weka **sahihi yako** na **tarehe** ya mtihani katika nafasi ulizoachiwa.*
3. *Jibu maswali yote.*
4. *Majibu yaandikwe katika nafasi zilizoachwa wazi katika kijitabu hiki cha maswali.*

Kwa matumizi ya mtihani pekee.

SWALI	UPEO	ALAMA
1	15	
2	15	
3	40	
4	10	

Jumla	**80**	

1. UFAHAMU (ALAMA 15)

Soma kfungu hiki kisha ujibu maswali.

Lugha imekuwa kikwazo kikubwa katika kukuza teknolojia ya habari na mawasiliano (TEKNOHAMA) barani Afrika. Lugha ambazo zimekuwa zikitumiwa ni za kimagharibi kama vile Kijerumani, Kifaransa na Kiingereza. Idadi kubwa ya Waafrika, hasa wanaoishi vijijini, hawazifahamu lugha hizi.

Uamuzi wa Shirika la Microsoft wa kutumia lugha ya Kiswahili katika programu za kompyuta kuanzia mwaka 2005 ni mchango mkubwa. Kuzinduliwa kwa mradi huu ni tukio la kipekee kuimarisha teknolojia sehemu za mashambani. Mradi huu umewawezesha wananchi takribani milioni 150 wa janibu za Afrika Mashariki kufaidi huduma za tarakilishi.

Utekelezaji wa mradi huu halikuwa jambo jepesi. Kwanza, ilibidi Shirika Ia Microsoft chini ya uongozi wa Bill Gates kulishawishi Bodi lake Ia wakurugenzi. Bodi liliposhawishika kuwa Kiswahili ni lugha inayotumiwa na mamilioni ya watu liliidhinisha kuzinduliwa kwa mradi. Hatua iliyofuatia ilikuwa kuteua maneno 700,000 ya kimsingi ya Kiingereza ambayo yangetafsiriwa kwa Kiswahili.

Hatua iliyofuata ilikuwa ushirikiano na dola pamoja na mashirika ya kibiashara na taasisi za kielimu ulimwenguni. Ilipobainika kuwa matumizi ya lugha ya Kiswahili yangehamasisha uwekezaji katika vituo vya mtandao vijijini, ushirikiano katika kuendesha mradi huu uliafikiwa bila shida. Mradi huu ulichukua muda wa miezi 18 kukamilika. Uliwashirikisha wahusika katika uwanja wa teknolojia ya habari, mawasiliano, elimu, biashara na idara za Kiswahili katika vyuo vikuu vya Afrika Mashariki. Vyuo vikuu hivi ni pamoja na Dar es Salaam, Nairobi, Kenyatta na Makerere,

Wataalamu walioshirikishwa walisaidia katika kubuni faharasa ya istilahi za Kiswahili 3,000. Hizi ni zile ambazo zinafaa kwa matumizi ya kompyuta ya kawaida na ya kila siku. Mradi huu umeshangiliwa na **wakereketwa** na wapenzi wa Kiswahili katika nyanja zote. Wasomi, wanariadha,

wanamuziki, watalii, wafanyabiashara, wanasiasa, wafuasi wa dini mbali mbali na wakulima; wote wamefurahia hatua ya Kiswahili kuingizwa kwenye mtandao.

Watu ambao walikuwa hawawezi **kuturisha** tarakilishi kwa sababu ya kutojua Kiingereza sasa hawana kisingizio. Matumizi ya Kiswahili yatapanua na kuimarisha mawasiliano baina ya watu wanaoishi vijijini na pembe zote za ulimwengu.

Jambo Ia kutia moyo zaidi ni kuwa sasa vyuo vikuu vinavyotoa masomo kwa kutumia mitandao vimepewa idhini ya kutumia programu hizi. Walimu na wanafunzi wanapata habari moja kwa moja kwa Kiswahili bila kutafsiri. Kuna uwezekano sasa wa kusambaza mafunzo katika nyanja na viwango vyote kwa mfumo wa elimu ya mbali.

Katika ulimwengu wa utandawazi, tukio kama hili lina manufaa makubwa. Wananchi wa vijijini wanaweza kupata habari na maarifa kutoka pembe zote za dunia na kuhusu masuala tofauti tofauti kwa lugha wanayoielewa barabara.

Kusambaa kwa matumizi ya **ngamizi** vijijini kutaimarisha biashara inayofungamana na teknolojia ya mawasiliano. Hali hii itainua maendeleo ya kiteknolojia na kiwango cha maisha vijijini. Bila shaka mwachano uliopo baina ya sehemu za mijini na vijijini utapungua.

Haya ndiyo maendeleo anayokamia kila mja wa siku hizi. Lililopo ni serikali kupania kupanua na kusambaza muundo mbinu kama umeme na simu katika sehemu zote za nchi. Pamoja na haya, kuna haja ya kupunguza bei ya ngamizi na vipuri vyake ili kuwatia motisha watu kununua kompyuta kwa wingi. Ikumbukwe kuwa lengo Ia kuanzisha mradi huu lilikuwa kuisaidia serikali kupanua na kusambaza matumizi ya huduma za kompyuta na mtandao katika shule, vituo vya kijamii na maeneo ya makaazi.
Huduma hizi ni msingi wa elimu, biashara na mawasiliano ya kisasa.

Maswali

(a) Eleza hatua zozote **nne** zilizotekelezwa ili kuingiza Kiswahili katika mtandao. **(ala.4)**

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(b) Lugha imekuwa kikwazo kikubwa katika kukuza teknolojia ya habari na mawasiliano barani Afrika.Thibitisha kauli hii. **(ala.2)**

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(c) Taja faida **tatu** za mradi wa kutumia Kiswahili katika ratiba ya tarakilishi. **(ala.3)**

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(d) Serikali inahitaji kufanya nini zaidi ili kufanikisha mradi huu? **(ala.3)**

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……

……

(e) Eleza maana ya maneno yafuatayo kama yalivyotumiwa katika taarifa. **(ala.3)**

i) Wakereketwa

……

……

ii) Kuturisha

……

……

……

iii) Ngamizi

……

……

……

UFUPISHO

Soma kifungu kifuatacho kisha ujibu maswali yanayofuata.

Katika karne hii na ya kesho, urafiki ni ngome kuu duniani ambayo huhifadhi maslahi ya kila rafiki. Rafiki mwema humpenda mwenzake si kwa sababu ni tajiri ama ana cheo kikuu nchini. Rafiki mwadilifu huridhika na hali aliyonayo rafikiye ; akiwa ni tajiri au ni masikini, ana cheo, hana. Rafiki mwema huwa mwadilifu wakati wowote. Wakati wa neema hushirikiana na rafikiye katika furaha na wakati wa shida hushirikiana naye katika huzuni na taabu zote zinazomkabili.

Sahibu mwema hutoa alichonacho kumkomboa rafiki yake, huwa radhi kabisa kufilisika kwa ajili yake. Mahali pa finyo hujasiri kuingia ili kumkomboa rafikiye, hushughulika zaidi kuliko wana ndugu wa toka nitoke. Kwa vyovyote hula naye tamu na chungu pamoja, mkono kwa mkono katika maisha yao yote hadi mmoja wao akaitoka dunia. Urafiki wa namna hii ndio uletao baraka ya Mungu, kuwashukia viumbe hao kama umande wa asubuhi.

Urafiki ni lazima sana katika maisha ya wanadamu. Urafiki ni mfano wa mishipa ipitishayo damu mwilini ili kurutubisha kila sehemu ya mwili. Ingawa ni bora kuwa na marafiki wengi lakini kila

marafiki wanapozidi, ni hatari ya kuangukia kwenye marafiki wadanganyifu-hasidi. Pasi na shaka, ni heri maadui kuliko marafiki wadanganyifu. Hivyo basi, tukiwa na rafiki walio kinyume cha wema na upole wa kulinda haki za wanadamu na wasiomcha Mungu ni lazima tuwaepuke. Ingawa ni hivyo, vile vile sheria inatukataza tusisikilize na kujali ubaya wa mtu yeyote pasipo kuhakikisha. Huenda ikawa ni uvumi tu usiokuwa na msingi wowote. Ikiwa rafiki ni mbaya, hakosi atajulikana kwani mtungi mbovu haukawii kuvunjika. Lazima tuwapende watu wote ili kutimiza haki za kibinadamu na kuchukia matendo maovu. Rafiki waovu si vema kuwaacha katika maangamizi ya ubaya wao bali ni lazima tuwaambie waziwazi ili wapate kuongoka. Ukimsamehe rafiki, unaponya donda lake moyoni. Hivyo ni bora kuliko kumtazama na hali anazidi kukosa.

Maswali

(a) Kwa maneno yasiyozidi 60, fupisha aya ya kwanza na ya pill. **(ala.7)**

Nakala chafu

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Nakala safi

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(b) Taja mambo muhimu yanayoghusiwa na mwandishi katika aya ya tatu. (maneno 50-5 5)

(alama 5)

Nakala chafu

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Nakala safi

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MATUMIZI YA LUGHA

(a) Akifisha sentensi ifuatayo;

Rashid mama ulinipata wapi monika nilikuzaa mwanangu. **(ala.2)**

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(b) Tumia neno '**kimya**' katika sentensi kama:

(i) kielezi **(ala.1)**

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(ii) kihisishi **(ala.1)**

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(c) Andika sentensi ifuatayo katika usemi halisi;

Mtoto alisema kuwa angewatembelea kwao mwezi ambao ungefuata. (**ala.3)**

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(d) Tofautisha maana ya sentensi zifuatazo

Gari Ia Juma limeibwa

Gari la Juma limeibiwa **(ala.2)**

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(e) Onyesha namna mbili za kuandika kitenzi **'cheza'** katika hali ya kuamuru. **(ala.2)**

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(f) Kwa kutumia mifano katika sentensi, onyesha matumizi **mawili mawili** ya alama hizi za uakifishaji.

(i) Dukuduku **(ala.2)**

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(ii) Parandesi **(ala.2)**

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(g) Tunga sentensi ukitumia nomino zifuatazo pamoja na kivumishi — **ingine.**

i) Dau **(ala.1)**

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(ii) Urembo **(ala.1)**

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(h) Andika sentensi ifuatayo katika **mazoea.**

Ua linalomea vizuri linietiwa rnbolea. **(ala.1)**

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(i) Tunga sentensi kutofautisha jozi hizi kimaana. (ala1)

(i) Kua

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(ii) Kuwa **(ala.1)**

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(j) Taja sauti zozote nne zinazotamkiwa katika **ufizi.** **(ala.2)**

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(k) Kwa kutolea mifano taja a aina za **mofimu**. (ala.2)

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(l) Watoto au vizalia wa viumbe hawa huitwaje. (ala.2)

(i) Paka

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(ii) Nzige

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(m) Bainisha aina za nomino zilizotumika katika sentensi ifuatayo;

Kucheza kwa mwanafunzi kulimpendeza Mwalimu Juma. **(ala.3)**

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(n) Eleza matumizi ya "KU" katika sentensi hii.

Kucheza huku hakufai **ala.2)**

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(o) Andika kwa udogo **(ala.2)**

Ndege huyu alimla kifaranga

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(p) Onyesha **kishazi huru** na **tegemezi** katika sentensi hii

Ijapokuwa kulikuwa na baridi kali niliondoka kwenda sokoni. (ala.2)

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(q) Changanua sentensi ifuatayo ukitumia **matawi.**

Mwanafunzi hodari anayechezea shule ya Hekima amepewa zawadi. (ala.4)

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(r) Weka shadda panapofaa ili kubainisha maana tofauti ya neno **'walakini'** **(ala.1)**

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4. ISIMU JAMII

"Nakwambia ndugu msikilizaji hapa mambo yamechacha kwelikweli. Hawa wachezaji wa Manyuu hawacheki na watu leo. Wameamua kuishambulia timu ya cheusi bila huruma. Kumbuka kwamba hii ni mara yao ya... Lo! Anauchukua mpira pale, mchezaji nambari tisa... Matiksta.
Matiksta, Matiksta….."

(a) Taja sajili inayorejelewa na dondoo ulilosoma **(ala.2)**

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(b) Huku ukitoa mifano, eleza sifa **nne** zinazohusishwa na sajili uliyotaja hapo juu. **(ala.4)**

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(c) Taja mambo **manne** yanayopelekea kufifia/kufa kwa lugha. **(ala.4)**

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MWISHO

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102/3

KISWAHILI

Paper 3

Karatasi ya Tatu

MUDAA; MASAA 2 ½

MAAGIZO

1) *Andika jina na nambari yako kwenye nafasi ulizoachiwa hapo juu.*
2) *Tia sahihi yako kisha uandike tarehe ya mtihani.*
3) *Jibu maswali yote.*
4) *Andika majibu yako katika nafasi ulizoachiwa katika kijitabu hiki cha maswali.*
5) *Majibu yako yaandikwe kwa lugha ya kiswahili*

SEHEMU A: RIWAYA

Assumpta K. Matei: ***Chozi la Heri***

1. LAZIMA

Riwaya ya Chozi la Heri inayasawiri matatizo ya wanajamii. Jadili. (al. 20)

SEHEMU B: TAMTHILIA

P. Kea: *Kigogo*

*Jibu swali la **2** au la **3***

2. "Huku ni Sagamoyo, naomba kukumbusha kuwa serikali na katiba ni mambo mawili tofauti kabisa."

a) Eleza muktadha wa dondoo hili. **(al. 4)**

b) Eleza sifa **tatu** za mzungumzaji. **(al. 3)**

c) Fafanua umuhimu wa mzungumziwa. **(al. 3)**

d) Onyesha ukweli wa kauli katika dondoo hili. **(al. 10)**

3. a) Onyesha namna maudhui ya elimu yalivyoshughulikiwa katika tamthilia ya Kigogo. **(al. 10)**

b) Eleza mbinu ambazo jamii ya Sagamoyo ilitumia kupambana na uongozi mbaya wa Majoka. **(al. 10)**

SEHEMU C: HADITHI FUPI

A. Chokocho na D. Kayanda: *Tumbo lisiloshiba na Hadithi nyingine*

*Jibu swali la **4** au la **5**.*

Alifa Chokocho: *"Masharti ya Kisasa"*

4. "Kweli mwalimu mkuu ana kazi nyingi na nyingine lazima aende usiku usiku kuzipunguza. Lakini leo ni leo …."

Eleza muktadha wa dondoo hili. (al. 4)

a) Taja na utolee mfano mbinu zozote **mbili** za lugha katika dondoo hili. (al. 4)

b) Eleza matukio yoyote **sita** yaliyotokea baada ya kauli hii. (al. 12)

5. Huku ukirejelea hadithi zifuatazo eleza namna unyanyasaji umeshughulikiwa.

a) Tumbo lisiloshiba (al. 4)

b) Shibe inatumaliza (al. 4)

c) Mame Bakari (al. 4)

d) Kidege (al. 4)

e) Tulipokutana tena (al. 4)

SEHEMU D: USHAIRI

Jibu swali la 6 au la 7.

6. Angawa mdogo, dagaa, amekomaa Kaanga kidogo, dagaa, atakufaa
Kalia kinaya, dagaa, h'ondoa njaa

Wa kwako udogo, kijana, sio balaa
Na sio mzigo, kijana, bado wafaa
Toka kwa mtego, kijana, sinyanyapaa

Nasaha kidogo, kijana, ukubwa jaa
Jikaze kimbogo, kijana, acha kukaa
Chimbua mhogo, kijana, usibung'aa

Na wake udogo, dagaa, hajambaa
Kuliko vigogo, dagaa, hajambaa
Hapati kipigo, dagaa, hauna fazaa

Maisha si mwigo, kijana ushike taa
Sihofu magego, kijana, nawe wafaa
Kazana kidogo, kijana, kugaaga

Maswali

a) Lipe shairi hili anwani mwafaka. (al. 2)

b) Eleza arudhi zilizofuatwa katika kutunga shairi hili. (al. 4)

c) Onyesha jinsi malenga alivyotumia uhuru wake. (al. 3)

d) Tambua bahari katika shairi hili kwa kutegemea: (al. 3)

i) Vipande vya mishororo

ii) Mpangilio wa vina

iii) Idadi ya mishororo

e) Andika ubeti wa tatu kwa lugha ya nathari. (al. 4)

f) Tambua mbinu za lugha zilizotumika katika shairi. (al. 2)

g) Eleza toni ya shairi hili. (al. 2)

7.

Eti
Mimi niondoke hapa
Niondoke hapa kwangu
Nimesaki, licha ya risasi
Vitisho na mauaji, siondoki

Mimi
Siondoki
Siondoki siondoki Niondoke hapa kwangu!

Kwa mateke hata na mikuki
Marungu na bunduki, siondoki
Hapa Siondoki Mimi
ni pahame!
Niondoke hapa kwangu!
Fujo na ghasia zikizuka
Na kani ya waporaji, siondoki

Haki
Siondoki Kwangu
siondoki Niondoke hapa kwangu!
Nawaje; waje wanaokuja
Mabepari wadhalimu, siondoki

Kamwe
Siondoki
Ng'oo hapa kwangu!
Katizame chini mti ule!
Walizikwa babu zangu, siondoki

Sendi Nende wapi?
Si hapa kitovu changu
Niondoke hapa kwangu
Wangawa na vijikaratasi
Si kwamba hapa si kwangu, siondoki

Katu
Siondoki
Sihitaji karatasi
Niondoke hapa kwangu

Yangu mimi ni ardhi hii

Wala si makaratasi, siondoki

Maswali

a) Shairi hili ni la aina gani? Kwa nini? (al. 2)

b) Taja masaibu anayopitia mzungumzaji. (al. 4)

c) Eleza toni ya shairi hili. (al. 2)

d) Eleza muundo wa shairi hili. (al. 3)

e) Tambua matumizi ya mbinu ya usambambe. (al. 2)

f) Andika ubeti wa tano kwa lugha nathari. (al. 4)

g) Tambua idhini moja ya mtunzi. (al. 1)

h) Eleza maana ya maneno yafuatayo kama yalivyotumika katika shairi. (al.2)

i) karatasi

ii) nimesaki

SEHEMU E: FASIHI SIMULIZI

8. a) Eleza maana ya ngomezi. (a. 2)

b) Fafanua sifa **nne** za ngomezi. (al. 8)

c) Eleza majukumu ya ngomezi. (al. 5)

d) Ungekuwa ukitafiti kipera cha ngomezi, ni changamoto zipi ungekabiliana nazo? (al. 5)

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SERIES 002

NAME……

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313/ 1

CHRISTIAN RELIGIOUS EDUCATION

PAPER 1

TIME : 2 ½ HOURS

Kenya National Examination Council (K.C.S.E)

INSTRUCTIONS TO CANDIDATES

1. This paper consists of six questions
2. Answer any **FIVE** questions

FOR OFFICIAL USE ONLY

QUESTION	1	2	3	4	5	6
CANDIDATES'S SCORE						

QUESTIONS

1. **a)** Describe the African traditional view of evil **(8 marks)**

b) Outline the responsibilities given to the human being in the Genesis stories of creation **(6 marks)**

c) In what six ways are human beings a threat to the environment **(6 marks)**

2. **a)** In what ways was Abraham's faith in God manifested **(8 marks)**

b) Show how the circumcision rite was significant to Abraham and his descendants **(5 marks)**

c) Explain seven importance of covenants in modern life **(7 marks)**

3. a) Outline five roles of judges in Israel **(5 marks)**

b) Explain five consequences of King Solomon's failure as king of Israel **(10 marks)**

c) What lessons can christians learn from King Solomon **(5 marks)**

4. **a)** Give six characteristics of false prophets as depicted in the old testament **(6 marks)**

b) State Amos's teaching on the Day of the Lord **(8 marks)**

c) How do Christians prepare for the second coming of the Christ **(6 marks)**

5. **a)** State four symbolic actions used by the prophet Jeremiah to illustrate God's Judgment and punishment for Judah **(8 marks)**

b) What problems did Nehemiah face during his mission of rebuilding the Jerusalem wall **(6 marks)**

c) Identify five ways in which Christians can help the suffering in the society **(5 mks)**

6. **a)** Give seven reasons why initiations is practiced in traditional African communities **(7 marks)**

b) What is the importance of marriage in traditional African communities **(7 marks)**

c) State six reasons why some Christians oppose the paying of dowry **(6 marks)**

KCSE 2022 MOCKS

SERIES 002

NAME……

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313/ 2

CHRISTIAN RELIGIOUS EDUCATION

PAPER 2

TIME : 2 ½ HOURS

INSTRUCTIONS TO CANDIDATES

1. This paper consists of six questions
2. Answer any **FIVE** questions

FOR OFFICIAL USE ONLY

QUSTION	1	2	3	4	5	6
CANDIDATES'S SCORE						

1. **a)** Explain ways in which Jesus fulfilled the Old Testament prophesies about the Messiah **(7 marks)**

b) From the infancy stories(Luke 1&2) explain four occasions when people are given divine revelation that Jesus is the promised messiah **(8 marks)**

c) State five ways in which chrisitians spread the gospel of Christ **(5 marks)**

2. **a)** Describe the call of the first disciples of Jesus as recorded in Luke 5:1-11 **(8 mrks)**

b) Narrate the healing of a woman who touched Jesus' cloak as recorded in Luke 8:43-48 **(7 marks)**

c) State five impacts of Jesus' miracles in his ministry **(5 marks)**

3. **a)** Relate the triumphant entry of Jesus into Jerusalem(Luke 19:28-40) **(8 marks)**

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

c) In what six ways do Christians misuse their wealth today. **(6 marks)**

4. **a)** Explain six teachings of Jesus on the role of the Holy spirit **(6 marks)**

b) Explain how the unity of believers is expressed in the church as the body of Christ **(7 marks)**

Give six ways a modern Christian can help curb disunity in the church today **(6 marks)**

5. **a)** Give six reasons why sexual immorality among the youth was rare in traditional African society **(8 marks)**

b) State the factors which have led to prostitution in Kenya **(5 marks)**

c) State seven Christian ethics that help foster responsible sexual behaviour **(7 m)**

6. **a)** Explain ways in which inventions in medicine have undermined human dignity**(8 mks)**

b) Give six reasons why the church in Kenya condemns addiction to drugs **(6mks)**

c) Suggest six ways Christians can help to fight drug abuse **(6 marks)**

KCSE 2022 MOCKS

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NAME……

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311/1

HISTORY AND GOVERNMENT

Paper 1

Time 2 ½ HOURS

INSTRUCTIONS TO CANDIDATES

1. *This paper consists of three sections; A, B and C*
2. *Answer all the questions in section A, three questions from section B and two questions from section C*
3. *Answers to all the questions must be written in the answer booklet provided.*
4. *This paper consist of 2 printed pages*
5. *Candidates should check the question paper to ascertain that all the pages are printed as indicated and that no questions are missing.*

SECTION A (25 MARKS)

Answer ALL questions in this section.

1. What was the base of the political organization among the cushites during the pre-colonial period **(1mk)**

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……

2. Give one way in which the knowledge of iron working helped in the migration of the Bantu **(1mk)**

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3. State one way in which the monsoon winds led to the development of trade between Kenyan Coast and the outside world **(1mk)**

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4. Give two reasons why the Portuguese attempts to introduce Christianity to the coastal People failed between 1500 – 1700 A.D **(2mks)**

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5. When is one entitled to Kenyan citizenship by descent **(1mk)**

……

6. Identify the treaty that ended the scramble for and partition of East Africa **(1mk)**

……

7. Name one community that offered mixed reaction to the British in Kenya **(1mk)**

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8. State two reasons why the colonial government established local native councils in Kenya **(2mks)**

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9. State two functions of the governor during the colonial period **(2mks)**

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10. State two ways in which the sywnnerton plan affected the African farmers during the Colonial period in Kenya. **(2mks)**

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11. Give two objectives of missionary education in Kenya during the colonial period **(2mks)**

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12. State one role of the civilians during the struggle for independence in Kenya **(1mk)**

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13. Give one reason why the 1957 elections are important to the history of Kenya **(1mk)**

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14. What major political change that was introduced during the Limuru conference of 1966 **(1mk)**

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15. Give two categories of land ownership in Kenya according to the New constitution **(2mks)**

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16. State two social challenges facing the implementation of free education in Kenya **(2mks)**

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17. Name two institutions that will have control of public revenue and expenditure **(2mks)**

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SECTION B: (45 MARKS)

Answer any THREE questions from this section

18. **(a)** Outline five economic consequences of the long distance trade in Kenya during the pre-colonial period **(5mks)**

(b) Describe thefeatures of Swahili culture **(10mks)**

19. (a) State five reasons why company rule failed in the British protectorate of Kenya **(5mks)**

(b) Discuss the results of the Wanga collaboration with the British **(10mks)**

20. (a) State five reasons why the British constructed the Kenya Uganda railway**(5mks)**

(b) Explain Five impact of the colonial land policies in Kenya **(10mks)**

21. (a) State Five roles played by women in the struggle for independence in Kenya **(5mks)**

(b) Explain Five factors that facilitated long resistance by Mau Mau movement **(10mks)**

SECTION C (30 MARKS)

Answer Any TWO questions from this section.

22. (a) Identify Five factors that promote National Unity **(5mks)**

(b) Explain Five effects of conflicts in the society **(10mks)**

23. (a) Name Three categories of correctional institutions in Kenya **(3mks)**

(b) Explain Six ways in which reforms in the Kenyan correctional institutions are Promoting human rights **(12mks)**

24. (a) Outline the composition of the cabinet in Kenya **(3mks)**

(b) Discuss the functions of the civil service in Kenya **(12mks)**

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311/2

HISTORY AND GOVERNMENT

Paper 2

Time 2 ½ HOURS

INSTRUCTIONS TO CANDIDATES

1. *This paper consists of three sections; A, B and C*

2. *Answer all the questions in section A, three questions from section B and two questions from section C*

3. *Answers to all the questions must be written in the answer booklet provided.*

4. *This paper consist of 2 printed pages*

5. *Candidates should check the question paper to ascertain that all the pages are printed as indicateadn d that no questions are missing.*

SECTION A (25 MARKS)

Answer ALL questions in this section.

1. State **Two** limitations of relying on oral tradition as a source of information on history **(2mks)**

2. Give **Two** evidence of the past **(2mks)**

3. Which of the pithecines or hominids was also known as proconsul **(1 mk)**

4 **Two** forms of picture writing during the ancient time **(2 mks)**

5 **Two** uses of Bronze during the pre-colonial period **(2 mks)**

6. **Two** discoveries of Sir Isaac Newton **(2mks)**

7. Give **one** example of regional trade in Africa **(1mk)**

8. State **Two** ways in which the wheel promoted early transport in Mesopotamia **(2mks)**

9. Name the company that was used by the British to administer West Africa

10. (1Which African leader signed the Lochner's treaty of 1890 **(1mk)**

11. Identify **one** way in which the 1870 – 71 Franco-prussian war contributed to the scramble and partition of Africa **(1 mk)**

12. **Two** Economic effects of direct rule in Zimbabwe **(2mks)**

13. Identify Two priviledges which members of British parliament enjoy **(2mks)**

14. State **one** goal of the New Partnership for Africa Development (NEPAD) **(1mk)**

15. State **one** function of the security council of the U.N.O **(1mk)**

16. State **One** functions of the Lukiiko in Buganda **(1mk)**

17. State **One** social effect of the second world war **(1mk)**

SECTION B (45 MARKS)

Answer Any THREE questions from this section.

18. **(a)** Identify **Five** physical changes that occurred in early man as they evolved from Ape like creature to modern man **(5mks)**

(b) Explain any **five** effects of early agriculture in Egypt **(10mks)**

19. Highlight **Five** advantages of space exploration **(5mks)**

(b) Discuss ways in which agrarian and industrial development has led to the development of urban centres **(10mks)**

20. (10a) mks) Mention **Five** reasons why Lewanika of the Lozi collaborated with the British **(5mks)**

(b) Explain **Five** reasons why the Shona and Ndebele were defeated by the British **(10mks)**

21. (a) Explain **Three** objectives of the Arusha declaration in Tanzania (**3mks)**

(b) What social challenges have African states faced since independence **(12mks)**

SECTION C (30 MARKS)

Answer Any TWO questions in this section

22. (a) What factors facilitated the growth of Asante Kingdom? **(5mks)**

(b) Describe the political organization of the Asante in the 19th century

23. (10a) mks) State **Five** functions of the cabinet in India **(5mks)**

(b) Describe the functions of the federal government in Unites States of America **(10mks)**

24. (a) State **Three** factors for the rise of Pan-African movement **(3mks)**

(b) Why was the Manchester Pan-African Congress of 1945 regarded as the turning

point in the history of the movement **(12mks)**

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312/1

GEOGRAPHY

Paper 1

Time: 2 ½ HOURS

INSTRUCTIONS TO CANDIDATES

1) *This paper has Two sections: A and B • Answer ALL the question in section A.*

2) *In section B answer question 6 and any other two questions*

3) *All answer must be written in the answer booklet provided*

4) *Candidates should check the question paper to ascertain all pages are printed*

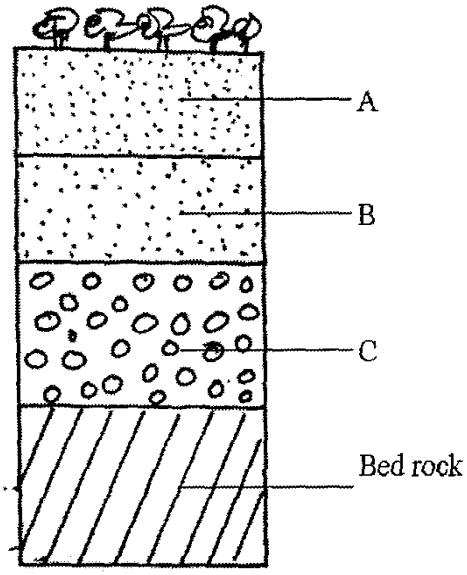
SECTION A

1. (a) State **two** theories associated with the origin of the Earth and Solar system. **(2 mks)**

(b) State **three** effects of the revolution of the Earth. **(3 mks)**

2. (a) Give **two** components of soils. **(2 mks)**

(b) The diagram below shows a simple soil profile. Name the horizontal A, B, C. **(3 mks)**



3. (a) Give **two** ways through which minerals ores occur. **(2 mks)**

(b) Explain **two** factors influencing the exploitation of minerals. **(4 mks)**

4. (a) Give **three** processes by which the atmosphere is heated. **(3 mks)**

(b) State **two** factors that influence the amount of insolation received by Earth. **(2 mks)**

5. (a) Differentiate between **Earthquakes** and **Earth tremors.** **(2 mks)**

(b) State **two** human causes of Earthquakes. **(2 mks)**

SECTION B

ANSWER QUATION 6 AND ANY OTHER TWO IN THIS SECTION

6. (a) Study the map of Nkubu (1:50,000) sheet 1222/2 provided and answer the following questions:

(i) Measure the length of Mitunguu-Meru all — weather (loose service) road in the North — East corner of the map. Give your answer in KMs. **(2 mks)**

(ii) Calculate the area of the forest to the West of Easting 40. Give your answer in square KM. **(2 mks)**

(iii) Give **two** man-made features found on Grid square 4186. **(2 mks)**

(iv) Give **six** figure grid reference of a trigonometrical station (other) to the East of Rune swamp. **(2 mks)**

(b) Draw a rectangle measuring 12cm by 8cm to represent the area bounded by easting 54 and 60 and Northings 95 and 99.

On it show the following features

- a swamp
- River mariaria
- Quarry
- Meru-Mitunguu road **(5mks)**

(c) (i) Citing evidence from the map. Give **three** economic activities carried out in the area covered by the map. **(3 mks)**

(ii) Explain **two** factors which have influenced the distribution of settlement in the area covered by the map. (4 mks)

(d) Describe the relief of the area covered by the map. **(5 mks)**

7. (a) (i) Define **mass wasting** **(2 mks)**

(ii) Name three forms of slow mass wasting. **(3 mks)**

(b) State **two** conditions which may influence occurrence of land slides. **(2 mks)**

(c) Explain **four** factors which cause soil creep. **(8 mks)**

(d) Explain **five** factors of mass wasting on physical and human environment**.** **(10 mks)**

8. (a) (i) Define the term **artesian basin.** **(2 mks)**

(ii) State **four** factors influencing the development of a Karst scenery **(4 mks)**

(b) (i) Give **four** underground features in Karst scenery. **(4 mks)**

(ii) Describe briefly how the following features in Karst scenery are formed:

- Polse **(3mks)**

- Doline **(3 mks)**

(c) (i) Give **three** sources of ground water. **(3mks)**

(ii) Explain **three** significance of resultant features in limestone areas to human activities. **(6 mks)**

9. (a) What is river capture? **(2 mks)**

(b) (i) Give **three** types of meanders at the lower course of a river. **(3 mks)**

(ii) State **three** factors influencing the rate of river erosion. **(3 mks)**

(c) (i) Give **three** processes of river erosion. **(3 mks)**

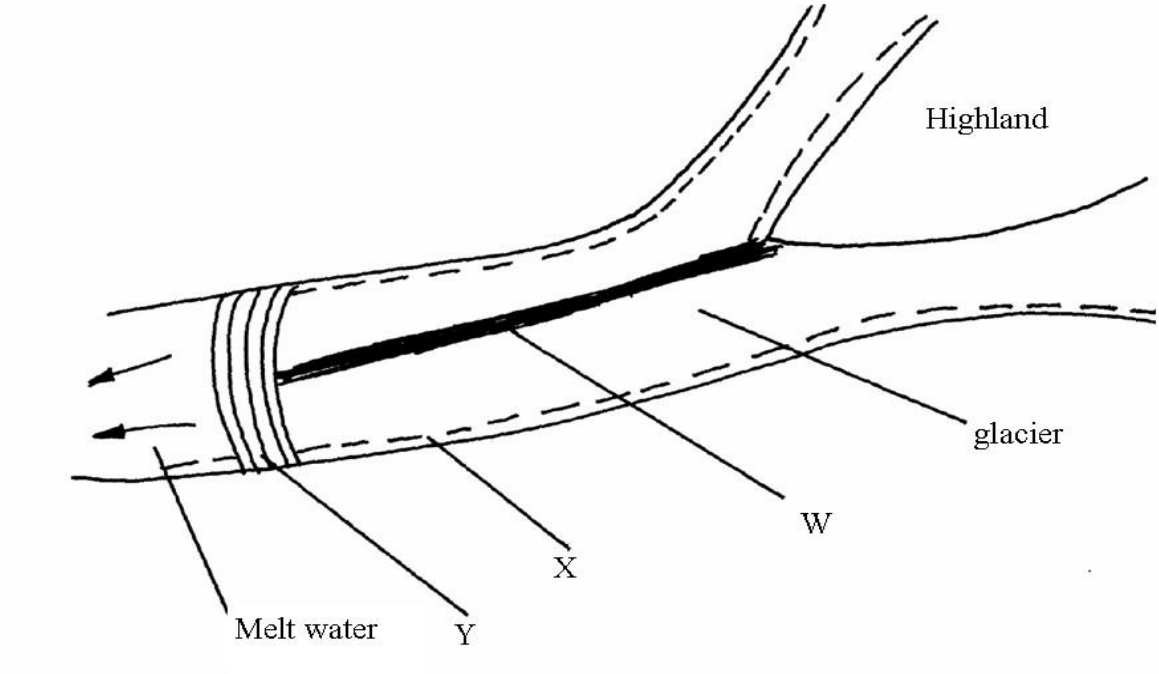
(ii) Describe **four** processes through which a river transport its load. **(8 mks)**

(d) Explain **three** negative influence of rivers on human activities. **(6 mks)**

10. (a) (i) Give **two** ways through which ice moves outwards from the area of accumulation. **(2 mks)**

(ii) State **three** factors influencing Glacial erosion. **(3 mks)**

(b) (i) The diagram below shows types of moraine carried by glacier.
Name the parts labeled **W, X, Y.** **(3 mks)**



ii) Describe **two** ways through which glacial erosion takes place. 4 mks)

(c) plain **three** positive significance of glaciations to human activities. 6 mks)

(d) Students of Kusumek Sec. School are to carry out a field study on snow capped Mt. Kenya.

(i) State **two** ways in which the students would prepare themselves for the field study.

(2 mks)

(ii) Give **three** methods they would use in recording the data collected. (3 mks)

(iii) State **three** problems they are likely to face in the course of field study. (2 mks)

KCSE 2022 MOCKS

SERIES 002

NAME……

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312/2

GEOGRAPHY

Paper 2

Time: 2 ½ HOURS

INSTRUCTIONS TO CANDIDATES

(a) *This paper has Two sections: A and B* •

(b) *Answer ALL the question in section A.*

(c) *In section B answer question 6 and any other two questions*

(d) *Candidates should check the question paper to ascertain all pages are printed*

SECTION A

Answer All Questions In This Section

1. (a) State **three** climatic conditions favouring the growing of oil palm in Nigeria**. (3 mks)**

(b) Name **two** products that are manufactured from palm oil. **(2 mks)**

2. (a) State **two** advantages of solar energy. **(2 mks)**

(b) Give disadvantages of biomass as a source of energy. **(2 mks)**

(c) Name **one** area where thermal power is produced in Kenya. **(1 mk)**

3. (a) Differentiate between **a metropolis** and **cosmopolitan** city. **(2 mks)**

(b) State **three** economic factors that account for the distribution of major urban centres in East Africa. **(3 mks)**

4 (a) State **two** situations that lead to the imposing of quotas **(2 mks)**

(b) Identify **three** importances of foreign trade to Kenya. **(3 mks)**

5. (a) Give **three** reasons why Pan African mill for (pulp and paper) is situated at Webuye. **(3 mks)**

(b) State **two** problems associated with the Juakali sector in Kenya. **(2 mks)**

SECTION B

Answer Questions 6 and any other two questions in this section

6. The data below represents the population of four districts in Kenya.

Kiambu	470 .000
Nyeri	390.000
Kirinyaga	350.000
Thika	650.000
Total	1,860.000

(a) (i) Using the above data to draw a pie chart to represent the population in the four districts. Use a radius of 5 cm. Show your calculations. **(5 mks)**

(ii) List **two** other statistical methods that can be used to represent this data**.** **(2 mks)**

(iii) List **three** advantages of using a pie chart to represent data. **(2 mks)**

(c) List **four** ways in which the population in Kenya differs from that of Sweden. **(8 mks)**

7. (a) (i) Differentiate between **transport** and **communication.** **(2 mks)**

(ii) State **three** modern means of communication used in Kenya. **(3 mks)**

(b) Explain **four** factors hindering the development of road transport in Kenya. **(8 mks)**

(c) (i) Name **two** canals found along the St. Lawrence seaway. **(2 mks)**

(ii) State **four** reasons why the St. Lawrence Seaway project was set up. **(4 mks)**

(iii) Explain **three** advantages of pipeline transport. **(6 mks)**

8. (a) (i) What is **Industrialization.** **(2 mks)**

(ii) Name a town in Kenya where of the following Industries is located.

- Motor vehicle assembly
- Paper manufacturing
- Oil refining **(3 mks)**

(b) State the differences between **heavy** and **light** Industries. **(6 mks)**

(c) Explain **four** problems of Industrialization in Kenya. **(8 mks)**

(d) State **six** benefits of Industrialization to Kenya. **(6 mks)**

9. (a) (i) Differentiate between **visible** and **invisible** exports. **(2 mks)**

(ii) Name **three** invisible exports from Kenya. **(3 mks)**

(b) (i) Apart from the Economic Community for West African states (ECOWAS) name **two** other regional trading blocks in Africa. **(2 mks)**

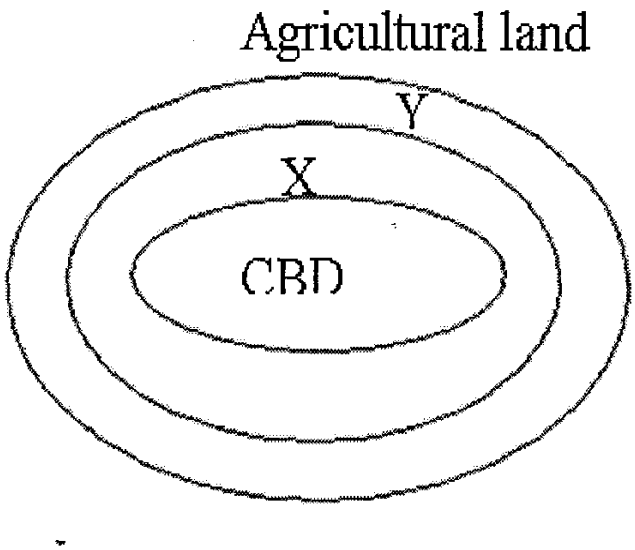
(ii) Identify **three** member countries of SADC **(3 mks)**

(iii) Explain **four** economic benefits of the Economic Community of West African States (ECOWAS) **(8 mks)**

(c) (i) State **five** problems facing regional trading blocks in Africa. **(5 mks)**

(ii) Name **two** members of the East African Community. **(2 mks)**

10. The diagram below represents the functional zones of an urban centre. Use it to answer Questions a (i), (ii) and (iii).



(a) (i) Name the zones marked **X** and **Y**. **(2 mks)**

(ii) List **three** functions of the Central Business District. **(3 mks)**

(iii) State **two** ways in which the residents of the zone labeled agriculture land benefit from urban centre. **(2 mks)**

(b) State **four** factors that contribute to the emergence of slums in urban areas in Kenya. **(4 mks)**

(c) **Explain** the measures that could be taken to control the following problems in Urban centres of Kenya.

(i) High crime rate **(2 mks)**

(ii) Water pollution **(2 mks)**

(d) Explain **five** factors that led to the growth of Kisumu town**.** **(10 mks)**

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SERIES 002

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MATHEMATICS

PAPER 1

2 ½ HRS

INSTRUCTIONS TO CANDIDATES

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

(b) *This paper consists of TWO sections. Section I and Section IL*

(c) *Answer ALL the questions in section 1 and only FIVE questions from Section 1]*

(d) *All answers and working must be written on the question paper in the spaces provided below each question.*

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

(f) *Marks may be given for correct working even if the answer is wrong.*

(g) *Non- programmable silent calculators and KNEC mathematical tables may be used except where stated otherwise.*

FOR EXAMINERS USE ONLY

Section I

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

Section II

17	18	19	20	21	22	23	24	TOTAL

GRAND TOTAL

SECTION 1 (50 MARKS)

Answer all the Questions)

1. Evaluate without using mathematical table or calculator.

$$\frac{0.021 \times 0.246 \times 1.75}{11.48 \times 0.014}$$

Expressing the answer as a fraction in it's simplest form. **(2 marks)**

2. The sum of all but one of the internal angles of pentagon is 400^0. Find the number of degrees in the remaining angle. **(2 marks)**

3. (a) Find the L.C.M of (x—1), $x^2 - 1$ and $x^2 + 2x + 1$ **(1 mark')**

(b) Hence or otherwise simplify **(2mks)**

$$\frac{1}{x+x2} + \frac{x-1}{2x+1-1}$$

4. Mariga on arrival to Kenya to play for the country against Sychelles converted 6000 Euros into Kenya shillings. During his three day's stay he spent Ksh. 260,000.He converted the remaining amount into US dollars. How many US dollars did he get?

(Use the exchange rate below)

	Buying	Selling
1 US dollar $	96.20	96.90
1 Euro C	112.32	112.83

(3mks)

5. The gradient of the of the curve $y = ax^2 + bx$ at the origin is equal to 8. Find the value of a and

(b) if the curve has a maximum turning point at x = 4 **(4mks)**

6. Find the value of Find the value of **(3 marks)**

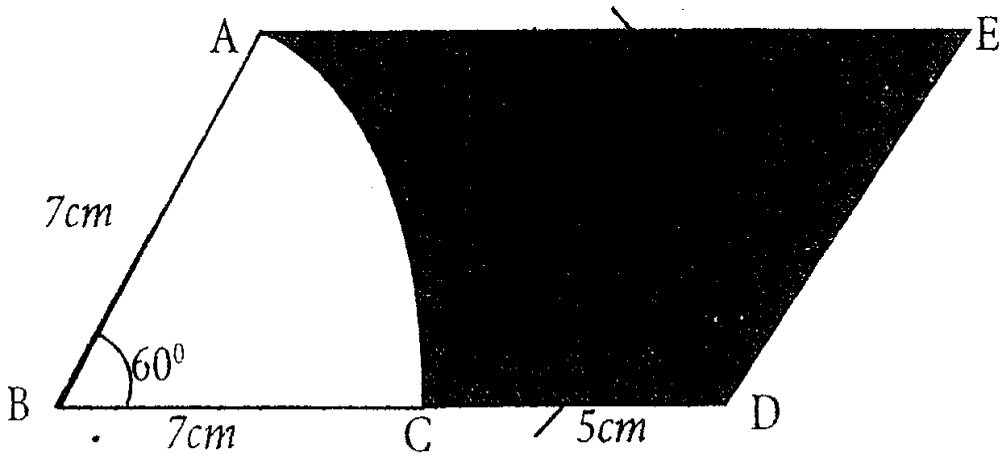
$\sqrt{4}2 \times \sqrt{32x\sqrt{2}}$

7. A cylindrical iron pipe is 2.lm long and 12cm in external diameter, the metal is 1cm thick and its density is 7.8g,/cm^3. Taking pie as 3 ½ find its mass. **(3 ½ Marks)**

8. A right angled isosceles triangle has area of 4 square units. Find he perimeter of the triangle leaving your answer in surd form. **(3 marks)**

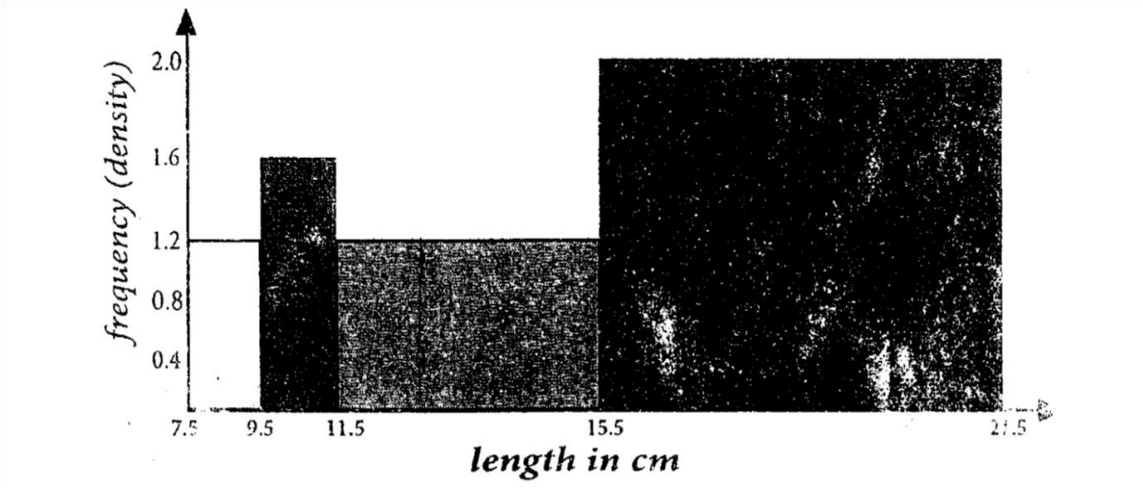
9. In the figure below, AC is an arc of a circle centre B, angle ABD = 60^0, AB =BC=7cm and CD=5cm. If AE is parallel to BD and AB is parallel to ED.

Calculate the area of the shaded region. **(3 marks)**



10. A two digit number is such that the difference between the ones digit and the tens digit is 2. If the two digits are interchanged, the sum of the new and the original number is 132. Find the original number. **(3 marks)**

11. The figure below shows a histogram.



Complete the frequency distribution table below. **(4mks)**

Length x cm	Class width	Frequency density	Frequency
$7.5 \leq x < 9.5$		1.2	24
$9.5 \leq x < 11.5$			

$11.5 \leq x < 15.5$			
$15.5 \leq x < 21.5$			

12. Construct a line PQ 7.5cm. Using a line inclined 30° at point P to line PQ, locate point R which divides line PQ in the ratio 2:3. **(3 marks)**

13. A father was three time as old as his son fifteen years ago and four times as old as his son nineteen years ago. When was the father twice as old as the Son? **(4 Marks)**

14. Calculate the area of the segment cut off from a circle of radius 10cm by a chord which subtends an angle of 2.1c at the centre. **(4 marks)**

15. A submarine sails due North from point A for 170km to a point B. 1 changes its course to N 52^0 W and sails to a point c If C is N 18° W of A., calculate the distance from C to A.

(3 Marks)

16. The position vector S of points A and B are **a** and **b** respectively. Determine the modulus Of **AB** if **a** = 2**i** + 4**j** ± 3**k** and **b**= 2**i**÷3**j** **(3marks)**

SECTION II

17. Ruhu, Toru, and Lwamawa contributed a total of Kshs. 8041950.00 for their joint campaigns ahead of 2012 general elections. The ratios of their contributions were Ruhu to Toru 5:4 and Lwamawa to Toru 2:3.

a) How much did each contribute? **(4 Marks)**

b) Ruhu further contributed Kshs. 875,000.00 towards the campaigns kitty. in response, Toru and Lwamawa increased their contributions in the ratios 10:9 and 11:6 respectively. How much did Toru and Lwamawa further contribute **(3 marks)**

c) The three agreed that if they win elections they would share the 15 cabinet positions amongst them in the ratio of their contributions. How many cabinets positions did Lwamawa get? **(3 Marks)**

18, Use ruler and a compass only for all constructions in this questions.

a) Construct a triangle ABC such that angle BAC ___7°, AB 7cm and BC= 8cm. **(2 marks)** 75

b) Construct a perpendicular from B to meet AC at M. Measure BM and hence calculate the area of triangle AC. **(3 marks)**

c) Construct a line DE parallels to AC and mid-way between AC and B to meet BM at D. With DM and MC as sides, construct a rectangle DECM **(2 marks)**

d) A point P lies inside the rectangle and close to M than E. It is also nearer side AC than AB. Shade the region in which P lies. **(3 mark)**

19. A rectangular tank whose internal dimensions are 2.04m by 1.68m by 26.4 m is seven – eighth full of milk

a) If the tank is made of metal of thickness 3mm. Calculate the external volume of the tank in m^3 when closed. **(3 Marks)**

b) Calculate the volume of milk in the tank in cubic metres. **(2 marks)**

c) The milk is to he packed in small packets. Each packet is in the shape of a right - Pyramid on an equilateral triangular base of side 19.2cm. The height of each packet is 13.6 cm. Full packets obtained are sold at Kshs. 35 Per packet. **Calculate;**

i) The volume of milk, in cubic centimeters contained in each packet to 4 significance figures. Hence find the number of full packets**. (4 marks)**

ii) The exact amount that will he realized from the sale of all the packets of milk.

(3 marks)

20. a) If P,Q and R are the points (2,-4), (4,0) and (1,6) respectively. Use the vector method to find the co-ordinates of points S given that PQRS is a Parallelogram **(3 marks)**

b) The positions vectors of point A and B are a and b respectively. C is another point with Positions vector $\mathbf{c} = {}^{3}/_{2}\,\mathbf{b} - ½\,\mathbf{a}$. **(1mk)**

Express in terms of **a** and **b**

i) $\overrightarrow{AC}$

ii) $\overrightarrow{AB}$. Hence show that A,B and C are collinear **(3marks)**

jjj) Determine the ratio A B:BC **(1 mark)**

c) Find the co—ordinates of the point Q which divides the line PR in ratio 3 :2 given the co – ordinates of P and Q are (3,-1) and (4,3) respectively.

21. The distance between town Manchester and Barcelona is 60 km.A car and a lorry travel from Manchester to Barcelona. The average speed of the Lorry is 20 km/h, less than that of the takes the car. The Lorry takes $1\ ^1/_6$ hrs more than the car to travel from Manchester to Barcelona.

a) If the speed of lorry is x km/h, find x. **(5mks)**

b) The lorry left Manchester town at 7:15 am. The car left Manchester town later and overtook the lorry at 11:15 am.

i) Calculate the time the car left town Manchester **(3 marks)**

ii) Distance yet to he covered by y lorry as the car arrives at Barcelona. **(3 marks)**

22. The vertices of triangle PQR are P(O,O), Q(6 0) and R(2,4)

a) Plot these points on the grid provided below. **(1 mark)**

b) Triangle $P^1Q\ ^1R^1$ is the image of a triangle PQR under an enlargement scale factor ½ and centre (2,2). Write down the coordinates of triangle $P^1Q\ ^1R^1$ and plot on the same grid.

(2 marks)

c) Draw triangle $P^{11}Q^{11}R^{111}$ the image of triangle $P^{11}Q^1R^1$ under a positive quarter turn about the point (1,1)

d) Draw a triangle $P^{111}Q^{111}R^{111}$ the image of triangle $P^1Q^{11}R^{11}$ under reflection in the line y = l. (3 marks)

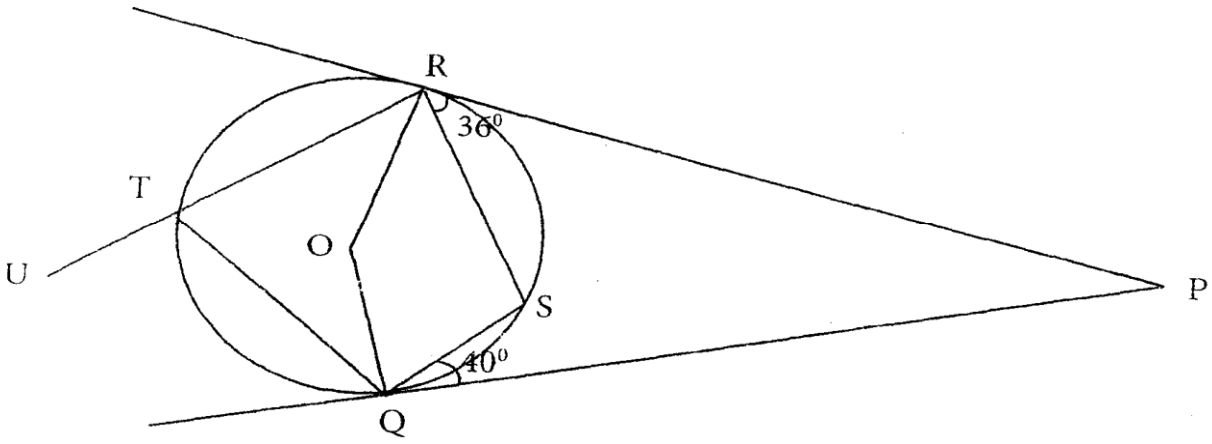
e) Describe fully a single transformation which maps triangle P^{11} Q^{11} R^{11} onto triangle P^1 Q^1 R^1

23. a) Find the equation of the perpendicular bisector of the line AB where A is (3,9) and B is (7,5) in the form $ax + by \pm c = 0$. **(4 marks)**

b) The perpendicular bisector of line AB in (a) above intersects the line joining the points (2,4) and (-3,1) at C. Find the co-ordinates of C.

c) The line through (2,4) and (-3,1) makes an angle θ with the positive X-axis. find the value of $6.^{\theta}$ (3mks)

24. In the figure below, 0 is the centre of the circle. PQ and PR are tangents to the circle at P and R respectively Angle PQS = 40^0 and angle PRS 30° RTU is a straight line. (3mks)



Find with reasons the angles

1) QRS **(2marks)**

ii) RTQ **(2 marks)**

iii) RPQ **(2 marks)**

iv) Reflex angle QOR **(2 marks)**

v) TRO given that TR =TQ (2 marks)

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SERIES 002

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MATHEMATICS

Paper 2

Time: 2 ½ Hours

INSTRUCTIONS TO CANDIDATES

*(a) Write your **NAME** and **INDEX** number in the spaces provided above.*
*(b) Write the **DATE** of examination in the spaces provided above.*
*(c) This paper consists of **TWO** sections. Section **I** and Section **II**.*
*(d) Answer **ALL** the questions in section **I** and 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.
*(f) Show **ALL** the steps in your calculations, giving your answers at each stage in the spaces below each question.*

FOR EXAMINER'S USE ONLY

SECTION 1

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

17	18	19	20	21	22	23	24	TOTAL

SECTION II

GRAND TOTAL

SECTION A (50 MARKS)

All Questions In This Section

1. If A = 2.3, B = 8.7 and C = 2.0. Find the percentage error in $\frac{A+B}{C}$ **(3 mks)**

2. Simplify $\frac{2\sqrt{5}}{\sqrt{3-\sqrt{5}}}$ leaving the answer in the form a + b$\sqrt{c}$, where a, b and c are rational numbers**.(2ks)**

3. Starting from seven minutes to noon the minutes hands of a clock moved so that the clock is showing 27 minutes to one.

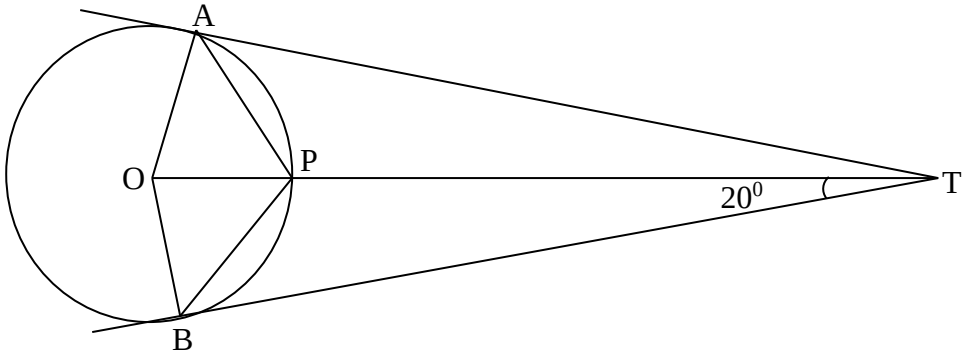
(a) Find the angle through which the minute hand moved. **(2 mks**)

(b) Given that the minute hand is 6.37cm long. Find the length of the arc it describes in that time.

(2 mks)

4. In the figure below TA and TB are tangents to the circle centre O. Given that $\angle ATB = 20^0$. Find $\angle PAT$.

(3 mks)



5. In a school the form three students are 90. The ratio of boys to girls is 7:2. Find the number of girls required to join the existing class so that the ratio of boys to girls is 5:4. **(3 mks)**

6. A wire 180cm long was used to make a model of a triangular-based prism. The cross-section has side of length 10cm each. Calculate the volume of the resulting prism. **(4 mks)**

7. Find the value of x given that $\text{Log}_2 (x^2 - 2) - \text{Log}_2 (\frac{1}{2} x + 5) - 1 = 0$ **(3 mks)**

8. Write down the first four terms of the expression of $(2 - \frac{1}{4}x)^9$ in ascending powers of x giving your answer in simplest forms. Hence find the value of $(1.975)^8$ to the nearest 3 d.p. **(3 mks)**

9. Determine the centre and the radius of the circle given by equation. **(3 mks)**

$x^2 + y^2 - 6x + 4y - 12 = 0$

10.(a) Draw line MN = 7cm and show the locus of a point P which is such that $\angle MPN = 90^0$. **(1 mk)**

(b) On the locus of P in the diagram in (a) above, construct the locus of T which is such that it is equidistant from M and N. **(2 mks)**

11.A box contains 3 red balls, 7 blue balls and 2 green balls. A ball is taken at random. What is the probability of it being neither red nor green. **(2 mks)**

12. In an examination there are two papers each with total marks of 50. To pass the examination a candidate must score at least 20 marks on each paper and at least 50 marks on the two papers combined. If x and y represent marks on paper I and paper II respectively. Write down three inequalities representing the above information. **(3 marks)**

13. The gradient of a curve at the point (x,y) is $5x + \frac{3}{x^2}$ if it passes through (1,2). Find its equation.

(4 mks)

14. A ship sails due North from latitude 20^0S for a distance 1440nm. Find the latitude of the point it reaches. **(3 mks)**

15. Find x if Cos x = $\frac{\sqrt{3}}{2}$ for $-180^0 \leq x \leq 180^0$. **(3 mks)**

16. Given that $\underset{\sim}{x} = 3\underset{\sim}{i} + 2\underset{\sim}{j} - 4\underset{\sim}{k}$, $\underset{\sim}{y} = 3\underset{\sim}{i} + 5\underset{\sim}{j} - 2\underset{\sim}{k}$ and $\underset{\sim}{z} = -4\underset{\sim}{i} + 3\underset{\sim}{j} + 5\underset{\sim}{k}$ and that $\underset{\sim}{p} = 4\underset{\sim}{x} - 2\underset{\sim}{y} + 3\underset{\sim}{z}$. Find the magnitude of p to 4 S.F **(4 mks)**

SECTION II (50 Marks)

Answer any Five Questions in this section

17. An amount of money was shared among five businessmen. Njoroge, Mwanzia, Ahamed, Wanyama and Kiprotich. Njoroge got $\frac{3}{8}$ of the total while Mwanzia got $\frac{2}{5}$ of the remainder. The remaining amount was shared equally among the other three of which each received KSh. 600.

(a) How much was shared among the five. **(3 mks)**

(b) Determine how much Mwanzia got. **(2 mks)**

(c) Njoroge, Mwanzia and Kiprotich invested their money and earned a profit of KSh. 1200. A third of the profit was left to maintain the business and the rest was shared according to their investment. Calculate how much each got. **(5 mks)**

18. Three consecutive term of a geometric progression are 3^{2x+1}, 9^{x} and 81 respectively.

(a) Calculate the value of x. **(3 mks)**

(b) Find the common ratio. **(1 mk)**

(c) Calculate the sum of the first 4 terms of this series. **(3 mks)**

(d) Given that the fifth and the seventh terms of the G.P form the first two consecutive terms of an arithmetic sequence, calculate the sum of the fist 20 terms of the sequence. **(3 mks)**

19. The equation of a curve is given by $y = 3\cos x - 4\sin x$.

(a) Complete the table below correct to 1 d.p (2 mks)

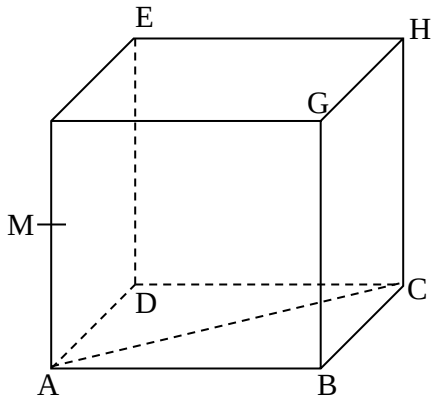
x	0	30	60	90	120	150	180	210	240	270	300	330	360
y	3			-4			-3			4			3

(b) On the grid provided, draw the graph of $y = 3\cos x - 4\sin x$ for $0 \leq x \leq 360$ (4 mks)

(c) Use your graph to solve. $3\cos x = 4\sin x - 1$ **(2 mks)**

(d) Find the range of values of x for which $3\cos x - 4\sin x + 4 < 0$ **(2 mks)**

20. The figure below shows a cube of side 10cm. M is the midpoint of AF.



Find

(i) length HM **(2 mks)**

(ii) the angle HM and ABCD. **(4 mks)**

(iii) angle between HM and MC **(4 mks)**

21. P varies directly as the square of Q and inversely as R.

(a) (i) Given that P = 2 when R = 5 and Q = 4, find the equation connecting P Q and R. **(2 mks)**

(ii) If P = 4.5 and R = 5. Find the positive value of Q. **(3 mks)**

(b) If Q increases by 5% and R decreases by 10%. Find the percentage change in P. **(5 mks)**

22. A particle moves such that its displacement S metres after t seconds from a fixed point is given by $S = 3t^3 - 6t^2 + 4t + 5$. Determine

(a) The displacement of the particle at t = 2. **(1 mk)**

(b) The velocity of the particle when t = 3. **(3 mks)**

(c) The displacement of the particle when the particle was momentarily at rest. **(3 mks)**

(d) The acceleration of the particle when t = 1.5 seconds. **(3 mks)**

23. A number of students were asked to cut 30cm length of binding wire without measuring. Later 100 pieces are collected and measured correct to the nearest 0.1cm and the data filled on the table below.

Length (cm)	28.0–28.4	28.5-28.9	29.0-29.4	29.5-29.9	30.0-30.4	30.5-30.9	31.0-31.4	31.5-31.9
	5	8	30	x	10	20	10	4

(a) Calculate the value of x **(1 mk)**

(b) State the model class **(1 mk)**

(c) Using 29.7 as working mean, calculate

(i) the mean. **(4 mks)**

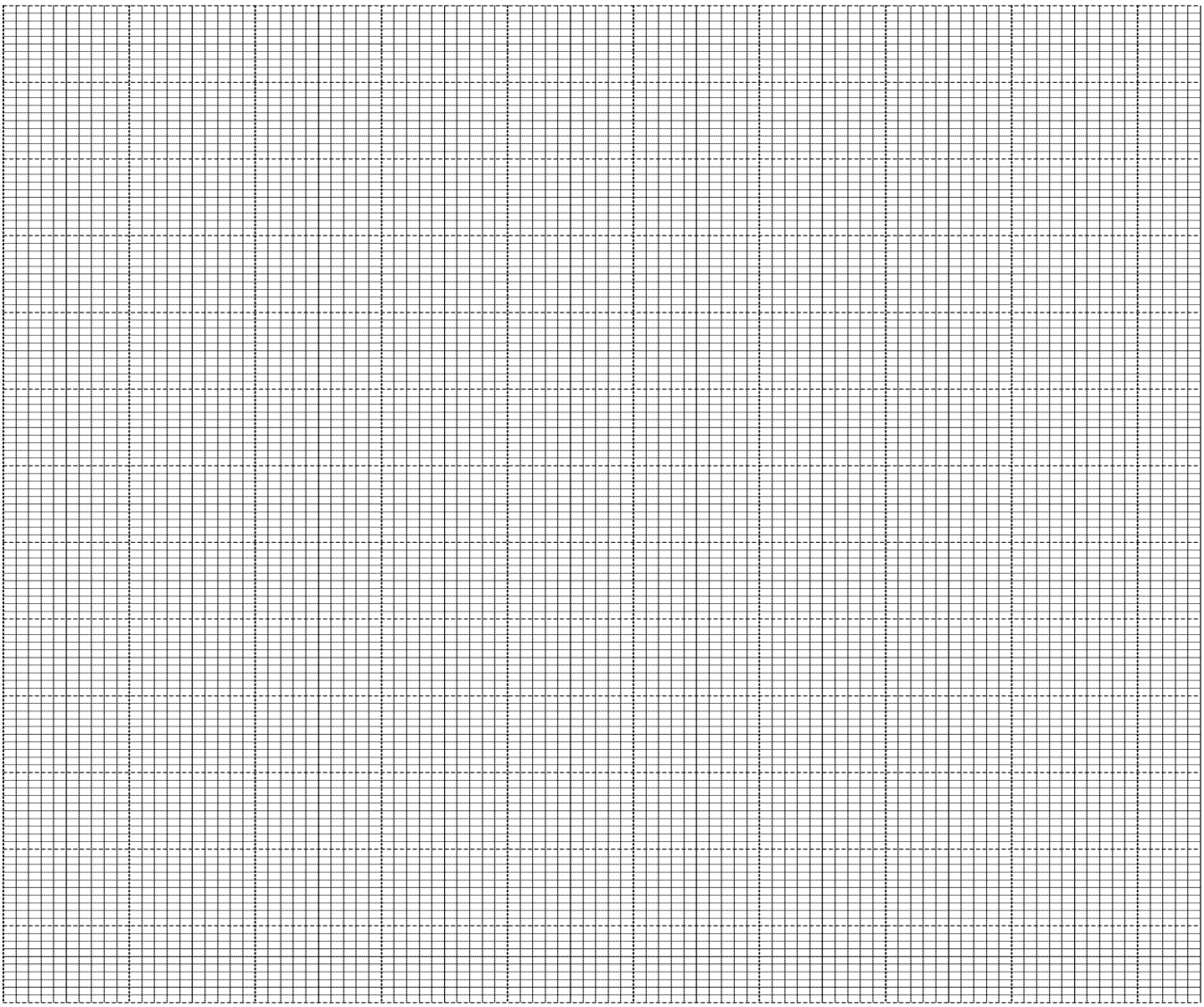
(ii) the standard deviation. **(4 mks)**

24. Two quantities p and n are connected by the equation $P = AK^n$, where A and K are constant. The table below shows corresponding values of n and p.

n	2	4	6	8	10
P	9.8	19.4	37.4	74.0	144.4

(a) State the linear equation connecting p and n. **(2 mks)**

(b) On the grid provided, draw a suitable straight line. **(6 mks)**



(c) Use your graph to estimate the value of A and K. **(2 mks)**

KCSE 2022 MOCKS

SERIES 002

NAME……

SCHOOL…… **INDEX NO**……

SIGN…… **DATE**……

451/1

COMPUTER STUDIES

PAPER 1

TIME 2 ½ HOURS

INSTRUCTIONS TO CANDIDATES:

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

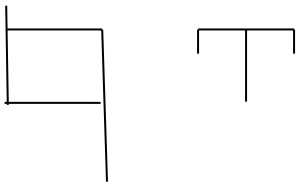
(b) *This paper consists of* ***TWO*** *sections* ***A*** *and* ***B****.*

(c) *Answer* ***ALL*** *the questions in section* ***A.***

(d) *Answer question* ***16*** *and any other* ***THREE*** *questions from section* ***B****.*

SECTION	QUESTIONS	CANDIDATE'S SCORE
A	1-15	
B	16	
	17	
	18	
	19	
	20	
	TOTAL SCORE	

1. You are provided with two types of DTP tools **(2mks)**



(R) **(Q)**

a) Identify tool.

i) R……

ii) Q……

b) State **two** methods of transforming an object in DTP **(1mk)**

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2. What precaution would you take in the computer room incase the user complain of backaches. **(2mks)**

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3. Differentiate between COM ports and LPT ports **(2mks)**

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4. Threats to the safety of computer systems take many forms such as; White collar crime, natural disasters and carelessness. Give one way as to how each of these forms of threats can be controlled. **(3mks)**

White collar.	
Natural disaster.	
Carelessness.	

5. Give three reasons why primary storage devices are not used for secondary storage. **(3mks)**

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6. Explain briefly how Electronic Funds Transfer (EFT) and Electronic Point of Sale (EPOS) is Used to facilitate business in supermarkets in Kenya **(2mks)**

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7. Describe two situations in which speech recognition devices may be useful as a method of data entry **(2mks)**

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8. Some of the storage disks available are; Zip disks, $3^1/_2$ inch floppy disks, DVDs, $5^1/_4$ inch floppy disks. Arrange these devices in an ascending order of storage capacity

(2mks)

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9. List the two categories of system software. **(1 mark)**

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10. Describe **three** disadvantages of using monolithic program. **(3mks)**

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11. Differentiate between Value parameter and actual parameter in relation to number system.

(2 mks)

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12. a) What is utility software? **(1mk)**

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b) Give two examples of utility software. **(1mk)**

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13. A firm operates an order system that coordinates orders, raw materials and inventory across its three factories. Currently the orders are processed manually at each factory and communicated to the others over phone. The management intends to computerize their operations. State the first two computer professionals who will be required and their roles. **(2mrks)**

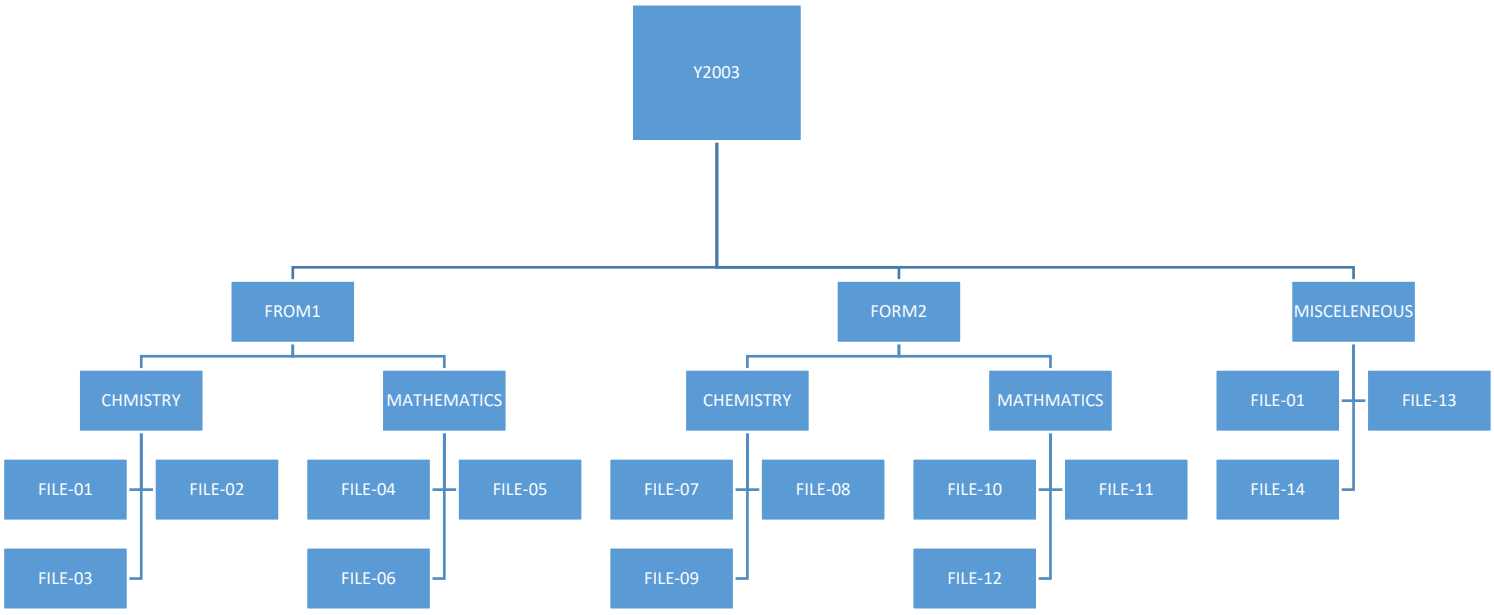
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14. An operating system organizes files in directories as shown in the chart below. Study it and answer the questions that follow.



i. What is the name of this file structure? **(2mrk)**

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ii. One of the files in miscellaneous has a file name similar to one in CHEMISTRY in form 1. Describe what happens if all the contents of chemistry are copied to miscellaneous. **(2mks)**

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15. Perform the decimal subtraction 14_{10} - 6_{10} using Regular binary **(3mks)**

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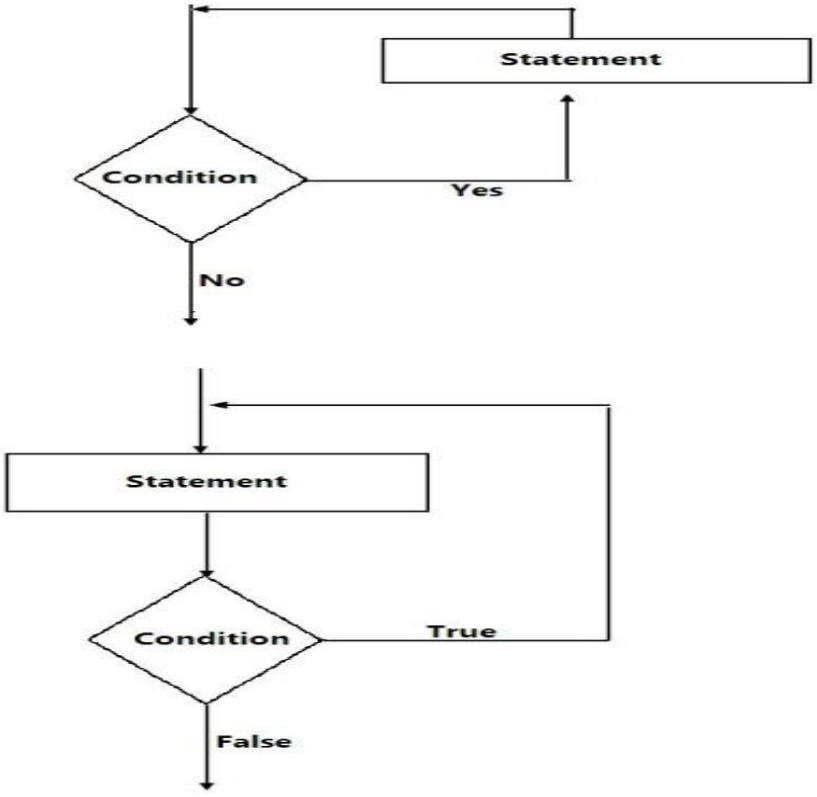
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SECTION B (60 MARKS)

Answer questions 16 (Compulsory) and any other three questions from this section

16.a) Consider the module flow charts extracts below



b) State the looping structure demonstrated in above diagram **(2mks)**

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c) Define the following terms as used in computer programming.

(i) Structured programming **(1mk)**

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(ii) Constants **(1mk)**

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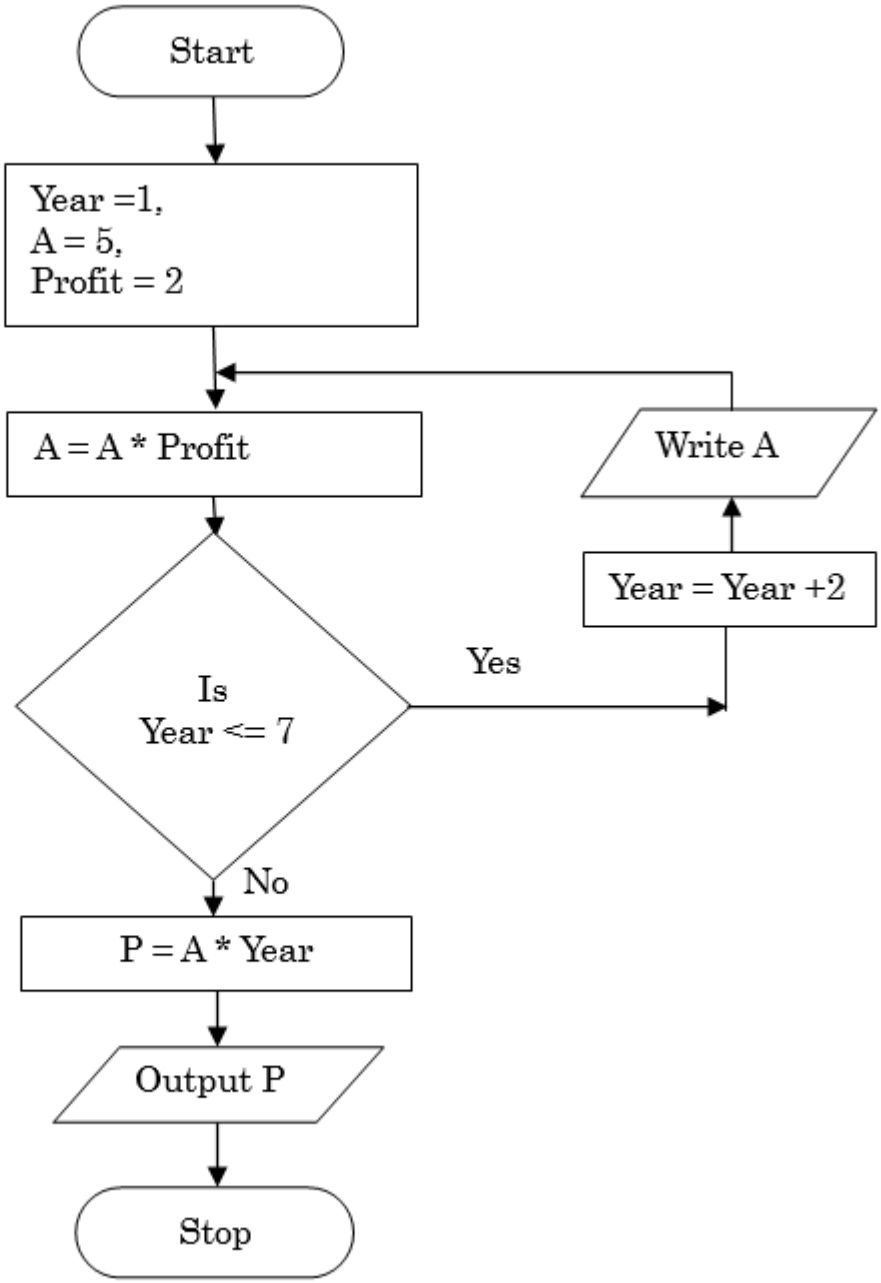
……

(iii) Variable **(lmk)**

……

……

e) Study the flowchart below and answer the question that follows



f) List the various outputs from the flowchart above. Show your working. **(4 marks)**

g) Write a pseudocode for the flowchart. **(6 marks)**

17. (a) i) List **two** devices used in wireless communication. **(2 marks)**

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ii) Explain any **three** communication devices. **(6 marks)**

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(c) i) Describe the term data integrity **(2 marks)**

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ii) State four benefits in which data may lose integrity **(2mks)**

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(d) i) What is meant by computer aided manufacturing? **(1 mark)**

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ii) Give two examples of computer aided design software. **(2marks)**

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18. a) What is information superhighway? **(2mks)**

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b) Answer the following questions.

Define the following web related terms (3mks)

i. Web browser.

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ii. Hyper link.

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iii. Hyper text document.

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c) i) Name two methods of paper orientation. **(2mks)**

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ii) Give two reasons why it's important to preview a document before printing. **(2mks)**

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iii) What is done during page setup in Microsoft Word **(3mks)**

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e) Explain the following terms as used in spreadsheet charts

Data series,

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……

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Axis

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……

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Legend.

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19. a) State three data representation codes used in computers. **(3mks)**

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b) Write 1 in two's complement notation in byte form. **(3mks)**

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c) Describe two ways in which a computer can represent a positive and negative number.

(2mks)

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d) A particular computer stores numbers in a single 8-bits word. How would it represent 0.3125_{10}?

(2mk)

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……

e) What is a Radix of a number system? **(2mks)**

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……

f) Using a well labeled diagram Explain how data is represented in a CD-ROM **(3mks)**

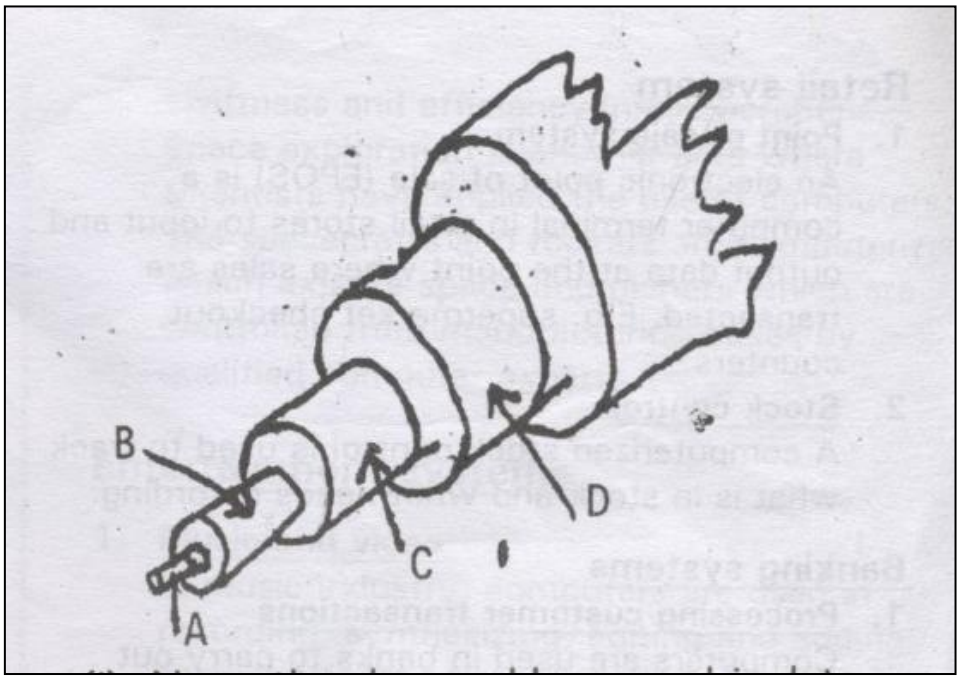
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20. Study the diagram below and answer the question that follows.



a. Name the above cable as used in data communication media. **(1mk)**

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b. Name the part labeled A, B, C and D. **(3 mks)**

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c. What is the importance of part labeled D? **(2mks)**

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d. Highlight three advantages of the above cable. **(3mks)**

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e. Why is fiber optic becoming the number one choice for local area networks? **(3mks)**

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i) What is an expert system? **(3mks)**

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KCSE 2022 MOCKS

SERIES 002

NAME……

SCHOOL…… **INDEX NO**……

SIGN…… **DATE**……

451/2

COMPUTER STUDIES

PRACTICAL

TIME: 2 ½ Hours.

INSTRUCTIONS TO THE CANDIDATES

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 4 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.*

NAME	BASIC PAY	DEPARTMENT	AGE	STATUS
Marren	16000	Computer	34	Single
Wezo	17000	Computer	44	Married
Dave	19000	Finance	33	Divorced
Charles	21000	Research	33	Single
Davy	23000	Research	25	Single
Thomas	25000	Computer	26	Married
Ann	27000	Finance	28	Married
Susan	29000	Finance	29	Divorced
Tina	31000	Research	24	Divorced
Andrew	33000	Computer	40	Single
Hardy	35000	Finance	20	Married
Selly	37000	Finance	43	Single
Kimani	10000	Research	15	Single
Chep	15000	Finance	35	Divorced
Eddie	35000	Computer	25	Married
Moses	59000	Research	33	Single
Miriam	70000	Finance	56	Divorced
Maurice	32876	Computer	70	Divorced
Alphine	43876	Research	98	Divorced
Cazy	48098	Research	32	Single
Langat	6500	Computer	12	Single
Phenny	29000	Finance	70	Single
Hilda	32000	Computer	13	Married

1. (a) Create a database called **Employees** and create a table named **Dept**. and enter the following Data. (5 marks)

(b) Create queries to determine.

i. Number of people with basic salary greater than 32,000/= .Save the query as **basic** (5 Marks)

ii. Number of people with basic salary less than 45,000/= **AND** come from computer Department. Save the query as **computer.** (5 Marks)

iii. Names of people who are either married or single .save the query as **Status** (4 Marks)

iv. Those whose salary fall between 25,000/= and 50,000/=.**Salary** (3 Marks)

v. Those whose name begin with letter M or end in letter S. Save the query as **Names** (3Marks)

(c) (i) Create a query to compute the new salary if there is an increment of basic pay by 16%. Save the query as **Salary increment.** (7 Marks)

(ii) Filter using query those who earn above 33000/= and aged between 39 and 70. Save the query as **Ages** (5 Marks)

(d) (i) Create a datasheet form using form wizard in the **Dept** table above. Save as **Form** (3 Marks)

(ii) Create a form in design view using the **Dept** table above on the form and calculate the Total basic salary for the whole table, add current date and time on the form header. Save the form as **Form B** (5 Marks)

(iii) Create a report from **Dept** table using design view to display all the data in the table the title of the report should be **Employee details**. Save the report as **EmployeeReport** and print it. (5Marks)

2. The worksheet below is a sample of the IEBC registration data across the country

THE NATIONAL IEBC CENTER

VOTER REGISTRATION AS PER COUNTY 2017

COUNTY	Registered	Target		%	Remarks

	Male	female	Population	Non registered voters	registered	
BUNGOMA	200,000	150,000	600,000			
KIAMBU	230,000	312,000	457,000			
NAIROBI	450,230	352,252	1,320,254			
KISUMU	258,368	122,356	658,870			
MASABA	325,620	104,520	700,658			
KITUI	123,863	80,588	325,789			
EMBU	136,222	150,520	356,102			
NYERI	253,666	210,000	492,250			
Total						
Average						

a. Create a workbook to store information and save it as IEBC MAIN (15 marks)

b. Use the formulae to compute:

i. None registered voters per county (4 marks)

ii. The percentage (%) of registered voters per county in 2 decimal places (6marks)

c. Use the IF function to declare the following remarks about the % registered per county. (6marks)

"Above expectation" above 90%

"Met Expectations" 70%- 89%

"Below Expectations" <70 %

d. Use a function to count the number of counties whose % registered is:

i) Below expectations in cell G18 (2 marks)

ii) Use the function to fill the totals and averages in the table (2 marks)

iii) Format the workbook as follows

i. Bold the title and center it across the page in a merged cell font size "14", Times New Roman

ii. Apply border to the cell in the worksheet as follows

-Double line for the outer border**,**

-Dotted lines for the horizontal inside border

-Dashed lines for the vertical inside border. (6marks)

f. Rename the current worksheet as "VOTERS" (2marks)

g. Copy the entire VOTERS worksheet to a blank sheet and rename the new sheet as NATIONAL REGISTER. (2marks)

h. Insert your name, date and index number as a header in each sheet (3marks)

i. Print VOTER and NATIONAL REGISTER (2 marks)

KCSE 2022 MOCKS

SERIES 002

NAME……

SCHOOL…… **INDEX NO**……

SIGN…… **DATE**……

441/1

HOME SCIENCE

Paper 1

THEORY

TIME: 2 ½ HOURS

INSTRUCTIONS TO CANDIDATES

1. *Answer ALL questions in section A on the spaces provided*
2. *Section B is compulsory. Answer all questions in this section on the spaces provided*
3. *Answer any two questions in section C on the spaces provided.*

FOR EXAMINER'S USE ONLY

Section	Questions	MAXIMUM SCORE	CANDIDATE'S SCORE
A	1-19	40	
B	20	20	
C		20	
		20	

		100	

SECTION A (40 MARKS)

Answer all questions on the spaces provided

1. Give two meaning of the term trimming as used in clothing construction. Give an example in each case. **(2mks)**

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2. Suggest 3 things to avoid when choosing clothes for a full figure **(3mks)**

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3. Suggest two advantages of drying clothes on the clothes line **(2mks)**

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4. Mention three reasons why the sick should be visited regularly **(3mks)**

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5. Name two forms of advertising **(2mks)**

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6. Give two stitches that may be used to neaten an overlaid seam **(2mks)**

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7. Mention three methods of controlling pollution in public places **(3mks)**

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8. State four methods of ventilating a room **(2mks)**

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9. Give three signs and symptoms of a person suffering from diabetes melitus **(3mks)**

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10. Mention two ways in which drugs may be abused **(2mks)**

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11. Give two qualities of a well made short crust pastry **(2mks)**

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12. Give three symptoms of keratomalacia **(3mks)**

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13. Mention two reasons for a material puckering during machining **(2mks)**

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14. Name three common methods of draining waste water at home **(3mks)**

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15. Name four textile fibres that are weak when wet **(2mks)**

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16. Give one reason for each of the following processes in needlework.

a) Snipping **(1mk)**

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b) Introducing fullness **(1mk)**

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c) Knife-edging **(1mk)**

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17. Give two essential immunizations before the age of one year **(1mk)**

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SECTON B

(COMPULSORY) 20 MARKS

18. Your mother is away on a business trip.

a) Explain how you will thorough clean an alluminium pan you will use for preparing lunch

(6mks)

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b) Explain how to launder your nylon nightdress you will use at night **(8mks)**

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c) Outline the procedure of laudering a dish cloth (6mks)

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SECTION C (40MKS)

Answer any 2 questions in this section on the spaces provides

19. a) "Wool is difficult to launder". Discuss this statement five points. (10 points)

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b) Explain five points to consider when entertaining guests. (10mks)

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20. a) By use of clearly illustrated diagrams explain the working of an open seam (10mks)

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b) Discuss five methods of conserving energy while cooking (5mks)

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c) Explain five principles of wise buying (5mks)

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21. a) Discuss five points to consider when selecting fasteners (6mks)

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b) Explain four properties that makes polyster suitable for making soft furnishings (4mks)

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c) Give two causes of each of the following faults in cake and pastry making

i) Heavy and close texture in creamed cakes (2mks)

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ii) Hard and tough pastry (2mks)

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d) What first aid would you give to a fellow student who had fallen into a state of shock due to receiving upsetting news. **(4mks)**

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e) Differentiate between bulimia and anorexia norvosa **(2mks)**

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KCSE 2022 MOCKS

SERIES 002

NAME……

SCHOOL…… **INDEX NO**……

SIGN…… **DATE**……

441/2

HOME SCIENCE

Paper 2

PRACTICAL

TIME: 2 ½ HOURS

INSTRUCTIONS TO CANDIDATES

1. *This paper consist of 4 printed pages*
2. *Candidates should check the question paper to ascertain that all pages are printed as indicated and that no questions are missing.*

A pattern of an apron 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 - Apron skirt

   B - Bib

   C - Waistband

   D - Frill

2. Plain light weight cotton fabric 75 cm long by 90cm wide
3. Sewing thread to match the fabric
4. A button 1.2cm diameter

THE TEST

Using the materials provided cut out and make up the apron to show the following.

a) The preparation of the bib

b) The attachment of the bib to the waistband

c) The preparation of the gathers on the frill.

d) Attaching the frill onto the skirt using an overlaid seam.

e) Working from the left hand side towards the centre ,neaten half of the overlaid seam using

overcastting stitches.

f) Machine hemming the left hand edge of the skirt.

g) Working of gathers on the skirt

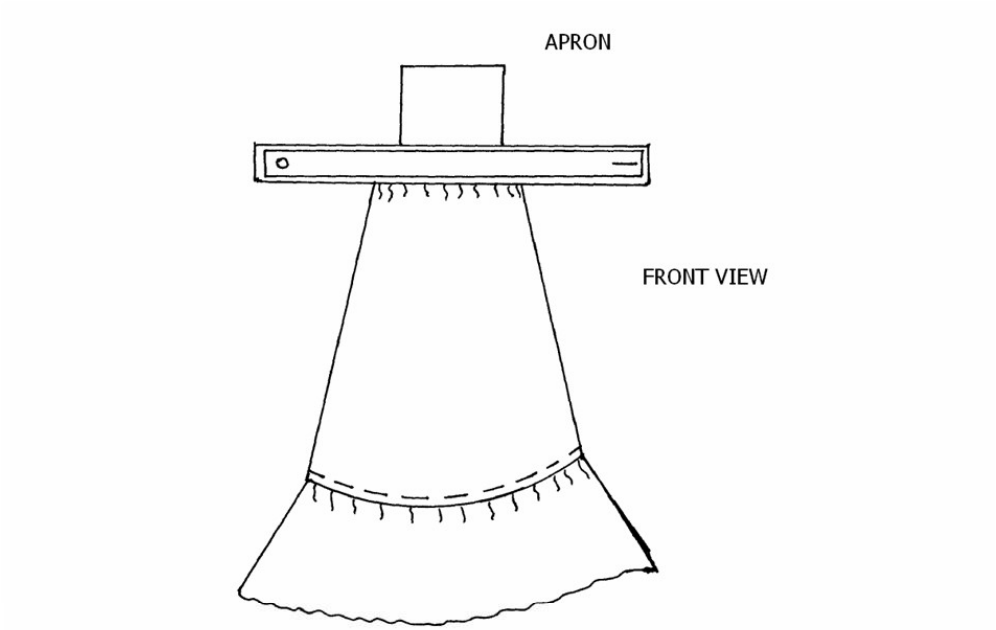
h) Machining skirt onto the overlap of the waistband.

i) Holding the underwrap onto the skirt using slip hemming stitches.

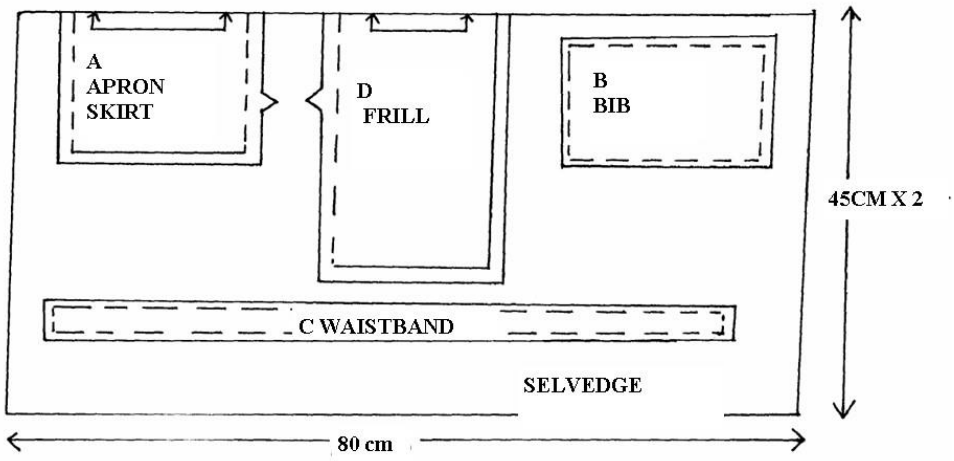
j) Working of the button holes.

k) Attaching of the button.

At the end of the examination firmly sew on your work, on single fabric, a label bearing your name and index number. Remove all pins and needles from your work then fold your work neatly and place it in the envelope provided. Do not put scraps of fabric in the envelope.



LAYOUT - NOT DRAWN TO SCALE



KCSE 2022 MOCKS

SERIES 002

NAME……

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441/3

HOME SCIENCE

Paper 3

PRACTICAL

TIME: 1 ¾ HOURS

PLANNING SESSION: 30MINUTES

PRACTICAL TEST SESSION: 1¼ HOURS

INSTRUCTIONS TO CANDIDATES

1. *Read the test carefully*
2. *Write your name and index number on every sheet of paper used*
3. *Textbooks and recipes may be used during the planning session as reference materials*
4. *You will be expected to keep to your order of work during the practical session 5. You are not allowed to carry additional notes to the practical session.*

You and your friend are going out for a picnic, Using the ingredient listed below, prepare cook and pack a suitable meal for lunch for the two of you. Include a nutritious refreshing drink.

Ingredients

Beef/liver

Rice/potatoes/spaghetti

Green leafy vegetable

Onions

Fat/oil

Salt

Sugar

Oranges/pineapples

Tomatoes

Roiko/beef cubes

PLANNING SESSIONS (30 MINUTES)

Use separate sheets of paper for each task listed below and a carbon paper to make duplicate copies.

Then proceed as follows

1. Identify the dishes and write down their recipes
2. Write down your order of work
3. Make a list of foodstuff, equipment and materials you will require to carry out the test.

KCSE 2022 MOCKS

SERIES 002

NAME……

SCHOOL…… **INDEX NO**……

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501/1

FRENCH

PAPER 1

(Listening Comprehension, Dictation & Composition)

TIME: 2 Hrs

Instructions to the candidates:

- ***(a)*** *This paper consists of three sections.*
- ***(b)*** *Ensure that all the three sections are clearly indicated.*
- ***(c)*** *This paper consists of* ***8*** *printed pages.*
- ***(d)*** *All your answers* ***must*** *be in French.*
- ***(e)*** *Answer all the questions in sections I and II.*
- ***(f)*** *In section III indicate the question that you will have selected e.g question* ***8a*** *or question* ***8b.***

For Examiner's Use Only

SECTION	MAXIMUM SCORE	CANDIDATE'S SCORE
I	15	
II	05	
III	15	
TOTAL SCORE	35	

SECTION 1 (15mks)

LISTENING COMPREHENSION

Write answers to Questions 1-6 in the spaces provided.

1. (a) Il s'agit d'une émission de télévision pour des

…….(½)

(b) On parle de combien d'émissions ?

……(½)

(c) A quelle heure peut-on suivre l'émission de la condition féminine ?

……(½)

(d) Michel Kamara est connu pour ses

…….(½)

2. (a) Dans cette annonce on parle de la compétition de …… qui est ouverte (½)

(b) Qu'est-ce qu'on doit donner avant le 30 novembre ?

…… (½)

(c) Pour avoir plus d'informations, il faut aller à

……..(½)

3. (a) Où est-ce qu'on fait cette annonce ?

…… (½) (b)

Elle s'adresse aux …… (½)

(c) Selon l'annonce, on recevra …….(½) pour avoir dépensé ……...

……. euros. (½)

4. (a) Qu'est-ce que Mathilde fête ?

…… (½)

(b) Combien de personnes y aura-t-il pour sa fête ?

…… (½)

(c) Que faisait Nathalie quand Mathilde a appelé ?

…… ……(½)

(d) Nathalie n'a pas pu rejoindre Mathilde au téléphone parce que la ligne

…….... (½)

(e) Donnez 2 détails sur le cousin de Nathalie

(i) …… (½)

(ii) …… ..(½)

5. (a) Où se trouve Francine ?

…… (½)

(b) (i) Quel moyen de transport utilisera-t-elle ?

……(½)

(ii) Avec qui ? ……(½)

(c) A quelle heure arrive-t-elle ?

…… (½)

6. (a) Où se passe la visite ?

……(½)

(b) Le /La guide s'appelle

……(½)

(c) Il y a …….. étages dans la nouvelle section. (½)

(d) (i) Le café se trouve au …… étage. (½)

(ii) On peut y acheter …….. (½)

(e) (i) On peut acheter …… au magasin du musée. (½)

(ii) Ce magasin est …… la sortie. (½)

SECTION II (DICTATION) (5mks)

7. Listen to the instructions before you start writing.

……

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SECTON III (COMPOSITION) (15mks)

Imaginative writing

In this section choose ONLY one question.

In 150 -180 words, write a composition in French beginning with:

EITHER

Beginning as follows :

8. (a) Il faisait froid ce soir-là …

OR

Ending as follows :

(b) . ……Je n'oublierai jamais ce soir-là.

……

……

……

KCSE 2022 MOCKS

SERIES 002

NAME……

SCHOOL…… **INDEX NO**……

SIGN…… **DATE**……

501/2

FRENCH

PAPER 2

(Reading Comprehension, Grammar and Functional Writing)

-2 hours 15 minutes

Instructions to candidates.

a. Write your name, school, class and admission number in the spaces provided above.

*b. This paper has **three** sections: **I, II, and III.***

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

d. Candidates should answer the questions in French.

For Examiner's Use Only

SECTION	MAXIMUM SCORE	CANDIDATE'S SCORE
I	15	
II	15	
III	10	
TOTAL SCORE	40	

SECTION I

(Reading Comprehension 15 marks)

Read the passages below and answer the questions that follow each passage.

1. PASSAGE 1

L'école publique est gratuite.

Elle est obligatoire de 6 à 16 ans.

Le système français est très centralisé avec des examens sous contrôle du ministère de l'Éducation nationale.

Le but de l'école est de donner une bonne culture générale.

Les lycéens peuvent apprendre jusqu'à trois langues étrangères, mais la plupart d'entre eux n'en étudient que deux.

Le baccalauréat est un examen passe par la majorité des jeunes.

Cet examen permet d'entrer à l'université.

QUESTIONS

1. Combien est-ce qu'on paie à l'école publique ?.....1pt

2. Quel examen vous donne la permission d'entrer à l'université ? ……1pt

3. Du texte, donnez un autre nom qui signifie « élèves »……..1pt

2. PASSAGE 2

JOURNÉE NOIRE

Aujourd'hui ce n'était pas mon jour !..En sortant de chez moi, je suis tombée sur la voisine du dessous qui m'a agressée à cause du bruit de la fête d'hier soir.

Dans la rue, à un passage piétons, un chien m'a mordue et son maitre m'a insultée, tout ça parce que j'avais marché sur la patte de l'animal !mais ce n'est pas fini…En allant au travail, dans le métro, un jeune m'a bousculée et en a profité pour me voler mon portable. Je suis allée au commissariat le plus proche pour faire une déclaration de vol, et là on m'a ignorée pendant une demi-heure avant de me rediriger vers une autre poste de police.

QUESTIONS

1. Pourquoi était-elle agressée par sa voisine ?.....1pt
2. Par quel moyen est-elle allée au travail ?.....1pt
3. Est-ce qu'elle avait été aidée au commissariat ?.....1pt

3. PASSAGE 3

249 Euros

Hôtel Paradis 4 étoiles ,1 semaine

Départs de toute la France du 26 septembre au 14 octobre

Hôtel de luxe situé au cœur de la palmeraie, à 15 minutes du centre-ville

Courts de tennis, terrain de golf, piscine, spa avec salle de fitness, soirées dansantes et folkloriques.

Visites guidées, circuits dans le désert.

QUESTIONS

1. Quand passera le départ ?.....1pt

2. D'après ce texte, auquel sport pouvez-vous participer dans l'eau ?.....1pt
3. Combien coûte cette réservation ?.....1pt

4. PASSAGE 4

Un réveil pour se lever

Une serviette pour se laver

Une chemise pour s'habiller

Un bol pour déjeuner

Des chaussures pour se promener

Un manteau pour se chauffer

Un bonnet pour se cacher

Mon cartable est prêt

Mes devoirs sont faits

Où est-ce que je vais ?

A l'école, pour enseigner

Questions

1. Qui parle ?.....1pt

2. Mentionnez deux habits dans le poème……..1pt

3. Où va cette personne ?.....1pt

5. PASSAGE 5

Je vais souvent à l'opéra, j'aime beaucoup les spectacles de danse contemporaine et bien sur les opéras .Comme je prends toujours une place à Galleria c'est assez loin, bien sur je ne vois pas très

bien la scène, les expressions des artistes sont invisibles, mais je me laisse charmer par la musique et l'ambiance du lieu. Je ne regrette jamais mon choix.

Questions

1. Où se trouve l'opéra ?……1pt

2. Pourquoi je ne vois pas bien ?.....1pt

3. Est -ce que j'ai des regrets ?.....1pt

SECTION II

Grammar (15 marks)

6. **Rewrite the sentences below as guided, making appropriate changes. Avoid unnecessary repetitions.**

1. As-tu regardé ces films fantastiques ?
   Oui, je…….. 1pt

2. Les ivoiriens parlent le français.
   Le français ……..1pt

3. Hier quand je suis sorti de la banque, j'ai vu un fou.
   C'est en……1pt

4. 'Nous sommes les invités de l'ambassade' Les touristes ont dit.
   Ils ont dit…… 1pt

5. Pierre prend des médicaments ?
   Oui, il…….1pt

6. Les élèves font du bruit dans la salle à manger ?

   Non,……..1pt

7. Les voleurs, ont-ils volé quelque chose ?

   Non,……1pt

8. Enfant : Je voudrais rendre visite à ma tantine Mathilde.

   Papa : Bien sûr, il faut……1pt

7. Complete the text below by filling each blank space with ONE appropriate word. (4 mk)

Je viens (i)……..prendre un boulot et je ne suis pas (ii)……diplômé. Vous savez, (iii)……France, la situation économique est (iv)……favorable que personne n'est au chômage De temps en (v)……..on voit dans les journaux, les appels (vi)…….poser des candidatures aux postes variés.

Tant (vii)…….pour moi, j'aurai mon diplôme (vii)……six mois.

8. Match the sentences in column A with those in Column B (3 points)

Il vend des fleures	Coiffeur
Il s'occupe des cheveux	Maître
On va chez lui quand on est malade	Femme d'affaire
Elle a beaucoup de magasins	Avocats
Ils représentent les criminels	Médecin
Il enseigne à l'école	Fleuriste
	Epicier
	Homme d'affaire

ANSWERS

1	2	3	4	5	6

SECTION III

Composition (10 marks)

9. **Write your composition in the spaces provided. Indicate clearly whether your choice is 9(a) or 9 (b)**

In 120 to 150 words, write in French on:

Either

a).Votre camarade de classe est allé en Belgique pour les vacances, écrivez lui une lettre en lui demandant de son séjour là-bas.

Or

b) Vous aimeriez avoir plus d'argent de poche, écrivez une lettre à votre père en donnant les raisons pour votre demande.

……

KCSE 2022 MOCKS

SERIES 002

NAME……

SCHOOL…… **INDEX NO**……

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314/2

ISLAMIC RELIGIOUS STUDIES

TIME: 2 HOURS

INSTRUCTIONS TO CANDIDATES:-

- *Answer ANY FIVE questions*
- *This paper consists of 2 printed pages. Candidates should check to ascertain that all pages are printed as indicated and that no questions are missing*

QUESTIONS

1 (a) Give qualities of a righteous person. **(5marks)**

(b)What are the preventive measures of HIV/AIDS in Islam **(8marks)**

(c)Identify the types of meat forbidden to Muslims in the Qur'an **(7marks)**

2 (a)Highlight reasons why divorce cases are rampant in the Muslim society **(8marks)**

(b)State the rights of a Muslim woman in Islam **(8marks)**

(c)How can Muslims express truthfulness **(4marks)**

3 (a)Explain ways which Muslims can use to conserve environment **(8marks)**

(b)State the conditions to be fulfilled for a Wasia (will) to be valid **(5marks)**

(c)Give Islamic teachings on debts (**7marks)**

4 (a)Discuss Sayyidna Umar Ibn al-Khattab's contributions to the cause of Islam **(8marks)**

(b)State the role played by Kabaka Mutesa I in the spread of Islam in Uganda **(7marks)**

(c)Give reasons why Islam took so long to spread from coast into the interior of East Africa

(5marks)

5 (a)Explain the contributions of Harun Ar-Rashid to the Abbasid dynasty **(10marks)**

(b)Discuss the factors that led to the fall of the Abassid dynasty **(10marks)**

6 (a)Discuss the contributions of Sheikh Abdullah Swalleh Farsy to the development of Islam in East Africa **(10marks)**

(b)Explain the achievements of Sheikh Qutb **(10marks)**

KCSE 2022 MOCKS

SERIES 002

NAME……

SCHOOL…… **INDEX NO**……

SIGN…… **DATE**……

314/2

ISLAMIC RELIGIOUS EDUCATION

TIME: 2 HOURS

INSTRUCTIONS TO CANDIDATES:-

- *Answer any five questions.*
- *This paper consists of 2 printed pages. Candidates should check to ascertain that all pages are printed as indicated and that no questions are missing*

Answer any five questions only.

1.

(a). Give social and spiritual importance of hajj. **(10mks) 1×10**

(b). While in the state of Ihram , state acts that are haram. **(7mks) 1×7**

(c). List down three important pre-requisties of hajj. **(3mks) 1×3**

2.

(a). Why did the Meccam oppose the teachings of Islam? **(10mks) 1×10**

(b). What were the effects of hijra? **(10mks) 1×10**

3.

(a). What were the achievements of Imam Ghazal. **(1×5mks) 1×5**

(b). Give titles of books written by Al –Ghazal. **(5mks) 1×5**

(c). Why did Imam Al-Ghazal went to seclucion? **(10mks) 1×10**

4.

(a). What are the roles of muslim child in a family. **(5mks) 1×5**

(b). Why is marriage important in Islam? (10mks) 1×10

(c). Who is a neighbour in Islam? **(5mks) 1×5**

5.

(a). Give factors that made it easier for Zayd to compile the Quran. **(10mks)1 ×10**

(b). Mention four rules to be observed when reading the Quran. **(4mks) 1×4**

(c). What are the advatages of translating the Quran. **(6mks) 1×6**

6.

(a). Why is hoarding discouraged in Islam? **(5mks) 1×5**

(b). How can Muslim stop prostitution. **(10mks) 1×10**

(c). How can Muslim foster unity. **(5mks) 1×5**

FOR MARKING SCHEMES

FOR KCSE MOCKS,KCSE POSTMOCKS,KCSE PREDICTIONS &REVEALED EXAMS

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