

FRM 1 MIDTERM 2 EXAM

ALL SUBJECTS

SERIES 2

KENYA EDUCATORS CONSULTANCY EXAMS



FOR MARKING SCHEMES:

CONTACT:

MR MACHUKI - 0724333200

OR

ORDER ONLINE AT:

www.kenyaeducators.co.ke

KENYA EDUCATORS CONSULTANCY

**KENYA CERTIFICATE OF SECONDARY EDUCATION
AGRICULTURE FORM ONE
MIDTERM 2 SET 2 2023 EXAM**

NAME: _____ STREAM _____ DATE: _____

INSTRUCTIONS TO CANDIDATES

1. Write your name and index number in the spaces provided.
2. This paper consists of three sections. Section A, B and C.
3. Answer all questions in section A and B in the spaces provided.
4. Answer ANY TWO questions in section C in the spaces provided.

FOR EXAMINERS USE ONLY

SECTION	TOTAL MARKS	STUDENTS SCORE

PERCENTAGE SCORE

SECTION A Answer all questions in the spaces provided in this section (30 MARKS)

1. State the influence of soil pH on mineral availability, plant growth and production. (3 marks)

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

2. State **two** ways of raising acidity or lowering soil pH. (2 marks)

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

3. State **four** properties of clay soil. (4 marks)

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

4. Define the following terms as used in agriculture. (3 marks)

(a) Soil Texture

.....
.....

(b) Soil profile

.....
.....

(c) Soil structure

.....
.....

5. State **three** forms of soil water. (3 marks)

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

6. Name **four** soil constituents. (4 marks)

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

7. State **four** biological agents of weathering. (4 marks)

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

8. State **three** aspects of light. (3 marks)

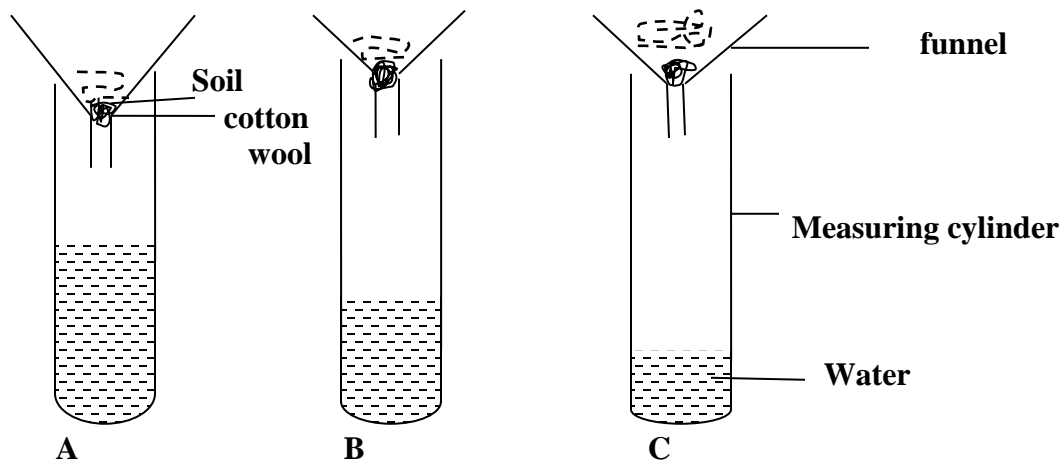
.....
.....
.....
.....

9. State **four** effects of high temperature on crops. (4 marks)

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

SECTION B (30 MARKS) answer all questions in this section in the spaces provided

10. An experiment was carried out as shown below. Study it and answer the questions that follow.



(a) What was the aim of the experiment? (1 mark)

.....

.....

(b) Identify the soil types **A**, **B** and **C**. (3 marks)

A

.....

B

.....

C

.....

(c) Give reasons why soil **B** is most suitable soil for crop production. (3 marks)

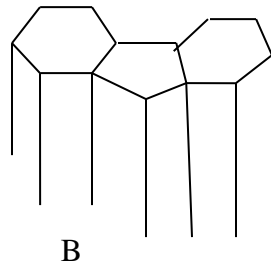
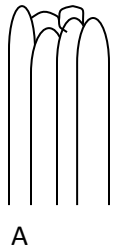
.....

.....

.....

.....

11. The figure below shows different soil structure.



(a) Identify the soil structure **A** and **B**.

(2 marks)

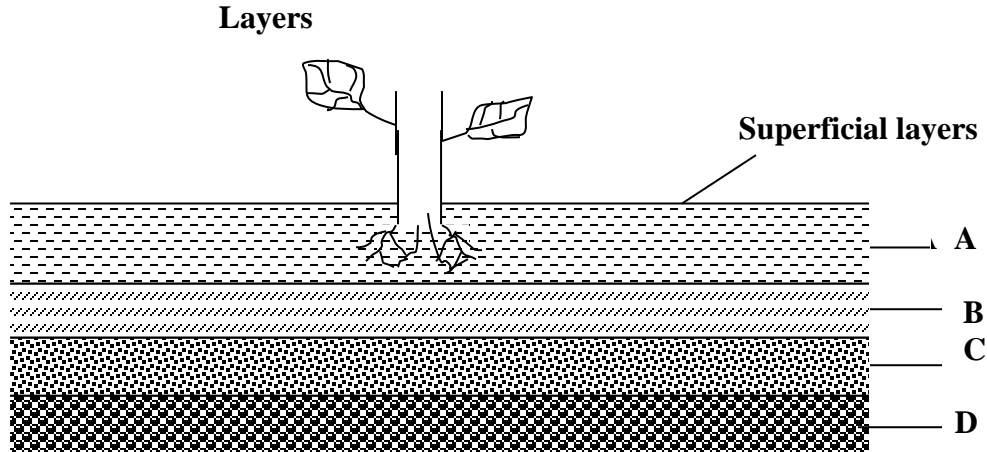
.....
.....

(b) State the influence of the above structures on crop production.

(2 marks)

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

12. The figure below shows varies soil



(a) Identify the property of soil shown above.

(1 mark)

.....
.....

(b) Name the soil layers **A** to **D**.

(4 marks)

.....

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

(c) State **four** properties of horizon **A**. (4 marks)

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

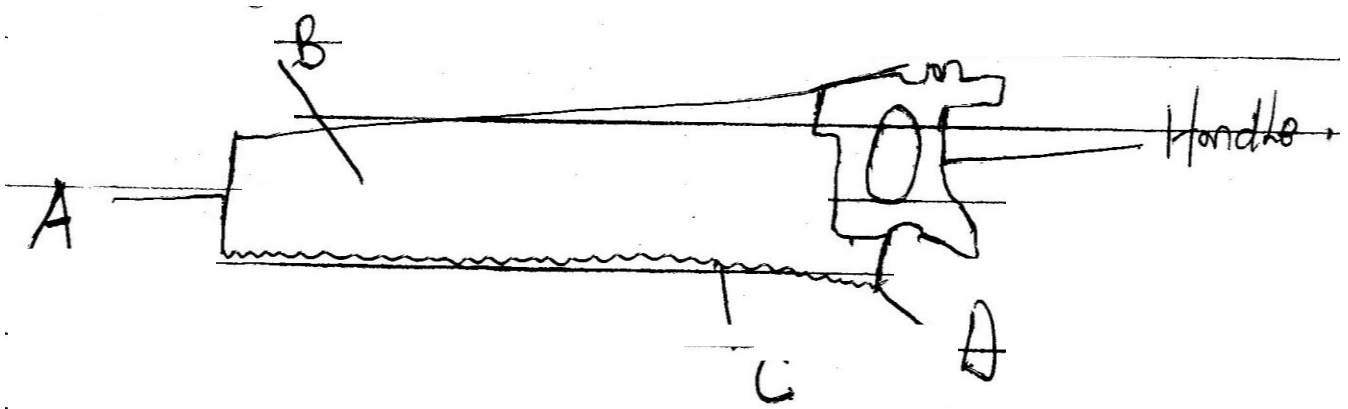
(d) Which layer are hardpans found? (1 mark)

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

(e) Why is Horizon **B** referred to as layer of accumulation? (1 mark)

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

13. The diagram below shows farm tool. Study it and answer the questions that follow.



(a) Name the tool.

(1 mark)

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

(b) Classify the tool.

(1 mark)

.....
.....

(c) Name the parts **A**, **B**, **C** and **D** on the diagram.

(4 marks)

A

.....

B

.....
.....

C

.....
.....

D

.....
.....

(d) State the care and maintenance of the tool above.

(2 marks)

.....

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

SECTION C (30 MARKS) Answer 2 questions in this section 14, 15 or 16.

14. (a) Explain **five** factors influencing soil formation. (10 marks)
(b) Describe **three** types of soil water (3 mark)
(c) List **two** functions of soil organic matter (2 mark)

15. (a) Explain five human factors influencing agriculture (10 marks)
(b) State three reasons for maintaining tools (3 marks)
(c) List **two** ways of maintaining a wheelbarrow (2 marks)

16. (a) Explain ways through which soil pH influences agriculture (10 marks)
(b) Describe **three** types of soil water (3 marks)
(c) List **two** functions of soil organic matter (2 marks)

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

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

KENYA CERTIFICATE OF SECONDARY EDUCATION

BIOLOGY FORM ONE

MIDTERM 2 SET 2 2023 EXAM

NAME: _____ STREAM _____ DATE: _____

Instructions to Candidates.

- a) Write your name and admission number in the spaces provided above.
- b) Sign and write the date of examination.
- c) Answer all the questions in this questions paper

Answer all questions in the spaces provided.

QUESTIONS	MAXIMUM	SCORE
1 - 31	80	

1. What is biology? (1 mark)

.....
.....

2. Give two skills gained by a student learning Biology. (2 marks)

.....
.....

3. Name the taxonomic unit with:

a.) The greatest number of organisms. (1mk)

.....
b.) The least number of organisms. (1mk)
.....

4. State two main branches of biology. (2 marks)
.....
.....

5. Define each of the following terminologies as used in biology: (2 marks)

a). Ecology
.....
.....

b). Anatomy
.....
.....

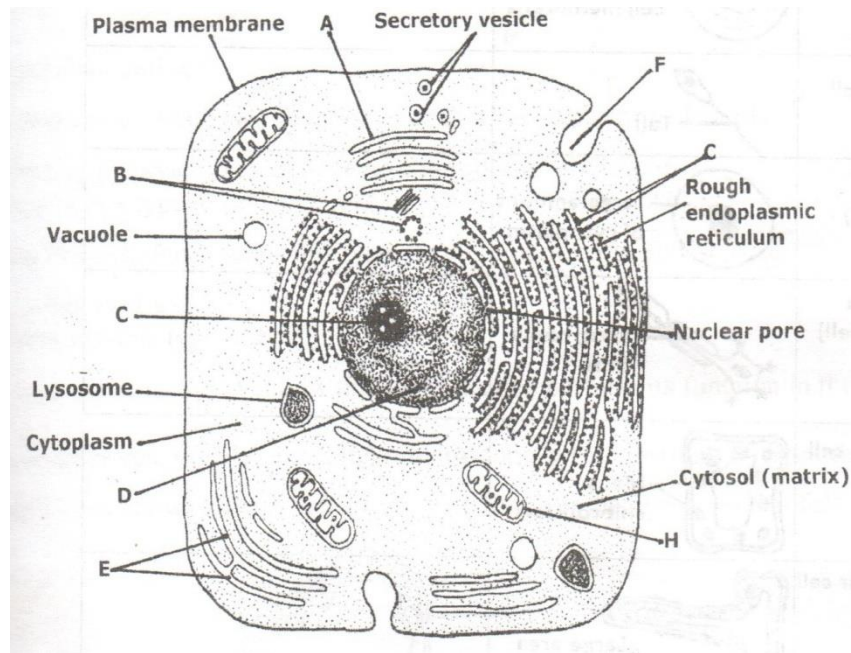
6. What characteristics of living organisms is represented by the following characteristics:

a) A cat producing kittens. (1mk)
.....

b) A girl dropping a hot pan. (1mk)
.....

c) The exhalation of carbon (IV) oxide. (1mk)
.....

7. The diagram below shows a cell as seen under a microscope.



a) i) Is this observation under a light or an electron microscope? (1 mk)

.....

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

.....

b) i) Is this an animal or a plant cell? (1 mk)

.....

ii) Give a reason for your answer in (b) (i) (1 mk)

.....

c) Name the parts labeled A, and D (2 mks)

A.....

D.....

d) State the functions of each of the parts marked E and H. (2 mks)

E.....

H.....

8. a) An electron microscope has a much greater resolving power than a light microscope. Explain the meaning of the term resolving power. (1 mark)

.....
.....

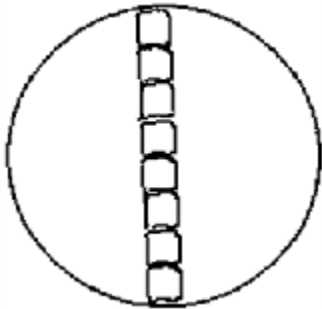
b) Give a reason why an electron microscope cannot be used to study live specimen. (1 mark)

.....
.....

9. What is taxonomy? (1mark)

.....
.....

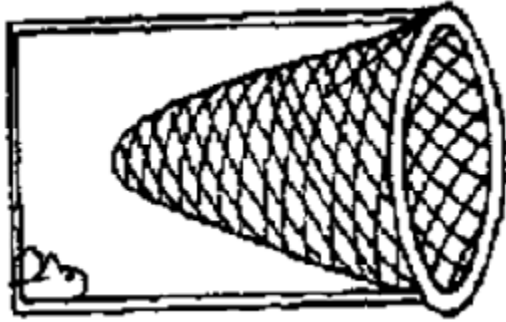
10. During a practical lesson to estimate the size of a cell, using the sketch below which some students observed, calculate the length of one cell in micrometers given that the field of view was 8mm wide. (3mks)



14. a) What is meant by the term Entomology. (1 mark)

.....

b) The diagram below represents a certain apparatus used by biology students.



(i) Name the apparatus above. (1 mark)

.....

(ii) State the use of the apparatus named in b) (i) above. (1 mark)

.....

15. Black jack (*Bidens pilosa*) belongs to the family Compositae.

What is it's:

Genus.

(1 mk)

.....

Species.

(1 mk)

.....

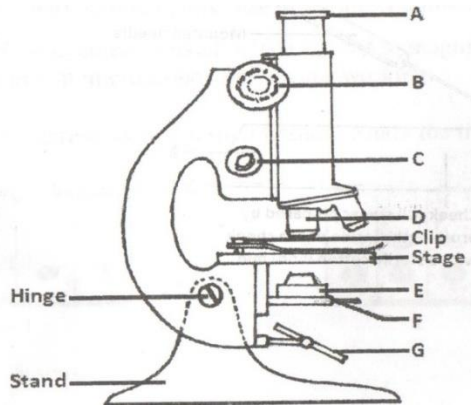
16. Differentiate between prokaryotic and eukaryotic cells.

(1 mk)

.....

.....

17. The diagram below represents the structure of a light microscope. Study it and answer the questions that follow.



a) Name the parts of the microscope labeled A, B, D and E. (4 mks)

- A.....
- B.....
- D.....
- E.....

b) State the functions of each of the parts marked C and G. (2 mks)

- C.....
-
- G.....
-

c) While trying to observe a specimen under a microscope, a student failed to see the field of view. Suggest two possible causes of this. (2 mks)

-
-

d) If a light microscope had an eye piece lens of X25 and an objective lens of X40, what would the total magnification be? (2 mks)

18. a). Give a reason why each of the following steps are followed when preparing cross sections of a leaf for examination under a microscope: (4mks)

i) Cutting very thin sections

.....
.....

ii) Using sharp razor blade (scalpel) during cutting.

.....
.....

iii) Placing the sections in water

.....
.....

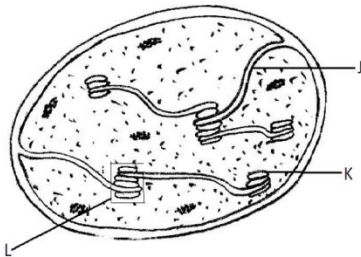
iv) Staining the sections with iodine before observing under a microscope.

.....
.....

19. Calculate the magnification of the drawing of the termite below given that the actual length of the termite is 0.9cm long .Show your working (2mks)



20. Below is a structure found in plants.



a) Name the organelle. (1 mk)

.....

b) What is the role of the organelle you have named in (a) above. (1 mk)

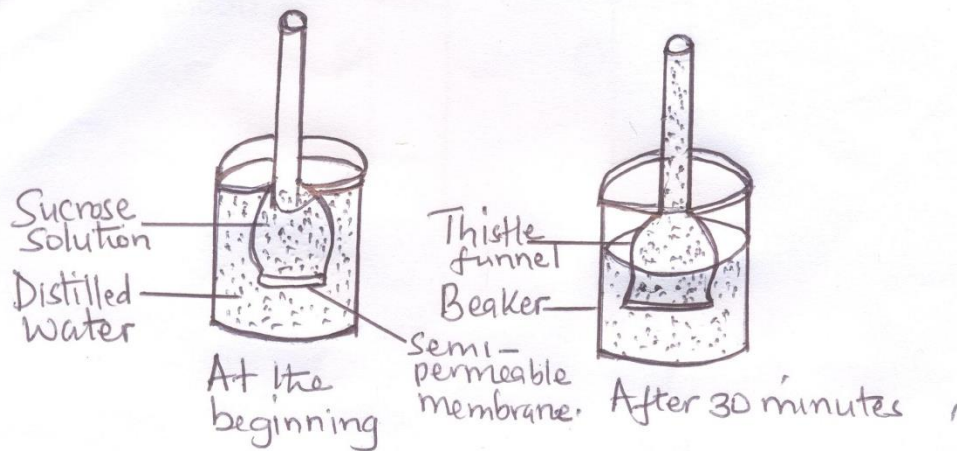
.....

c) Name the parts labeled J and L. (2 mks)

J.....

L.....

21. Students set up an experiment as illustrated below.



a) Name the physiological process that resulted in the observations made after 30 minutes. (1mk)

.....
b) State the importance of the physiological process investigated in plants. (1mk)

.....
.....

c) Explain the observations made after 30 minutes (2mks)

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

22. a) State the role of light in the process of photosynthesis. (1mk)

.....

b) Name one end product of dark reaction in photosynthesis. (1mk)

.....

23. Name the chemical reagents used in the following food tests: (2mks)

a) Test for starch

.....

b) Tests for reducing sugar

.....

24. State the significance of the following features to a leaf.

i) Extensive network of veins (1mk)

.....

ii) Tough leaf blade (1mk)

.....
iii) Strong and extended petiole (1mk)

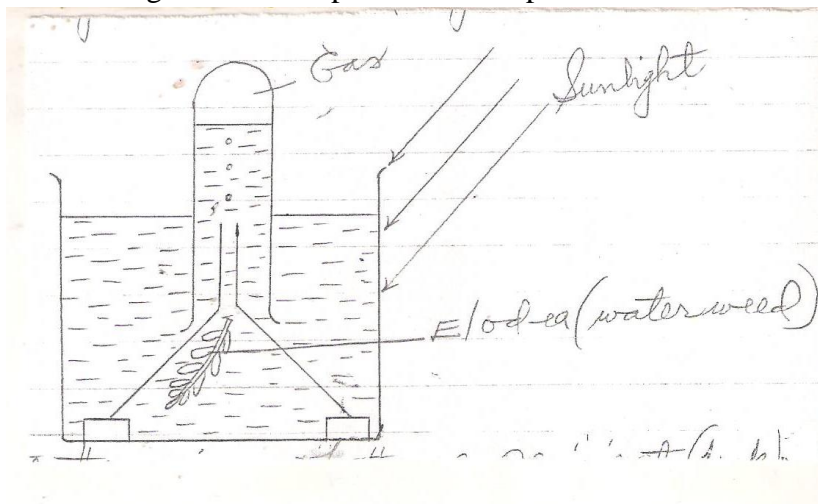
.....
iv) Presence of air spaces (1mk)

.....
25. State what would happen to an enzyme molecule if the temperature is:-

i) Raised above 40°c (1mk)

.....
ii) Lowered below 10°c (1mk)

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



a) State the aim of the experiment. (1mk)

b) Give two reasons for the use of a water weed (2mks)

.....
.....

27. State two properties of monosaccharide . (2mks)

.....
.....

28. What is the main function of monosaccharide in organisms? (1mk)

.....

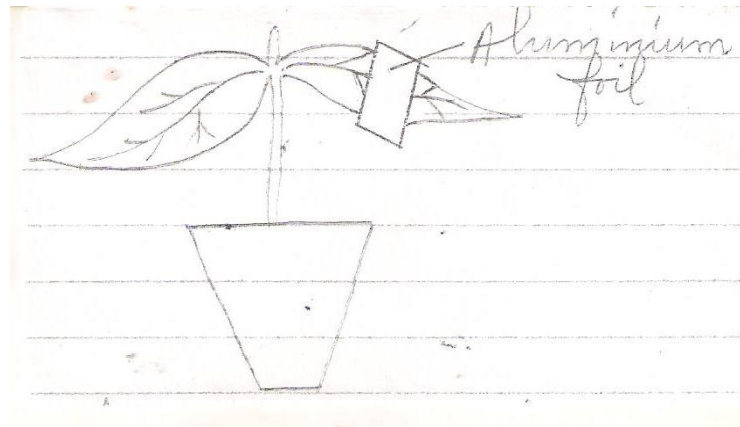
29. Explain why a mule, a product of mating between a horse and a donkey is sterile. (1mk)

.....

30. Explain how surface area to volume ratio idea may be applied to explain rate of diffusion in organisms. (2mks)

.....
.....

31. In an experiment to investigate a factor affecting photosynthesis, a leaf of a potted plant which had been kept in the dark overnight was covered with aluminium foil as shown in the diagrams below.



The set up was kept in sunlight for three hours after which a food test was carried out on the leaf.

a) Which factor was being investigated in the experiment? (1mk)

.....

b) i) State the result of the food test that was carried out. (1mk)

.....

.....

ii) Account for the results in (c) (i) above. (2mks)

.....

.....

.....

c) Why was is it necessary to keep the plant in darkness before the experiment? (1mk)

.....

.....



KENYA CERTIFICATE OF SECONDARY EDUCATION

BUSINESS STUDIES FORM ONE

MIDTERM 2 SET 2 2023 EXAM

NAME: _____ STREAM _____ DATE: _____

ANSWER ALL QUESTIONS

1. Define the term business studies (2mks)
.....
.....

2. State four disciplines of business studies (4 mks)
 - i).....
 - ii).....
 - iii).....
 - iv).....

3. Highlight four importance of learning business studies (4 mks)
 - i).....
 - ii).....
 - iii).....
 - iv).....

4. Highlight four reasons why a person may start a business (4mks)
 - i).....
 - ii).....
 - iii).....

- iv).....
5. State four characteristics of human wants (4mks)
- i).....
- ii).....
- iii).....
- iv).....
6. State four categories of business activities (4mks)
- i).....
- ii).....
- iii).....
- iv).....
7. Name four functions of an entrepreneur (4mks)
- i).....
- ii).....
- iii).....
- iv).....
8. Identify four functions of a modern office (4mks)
- i).....
- ii).....
- iii).....
- iv).....
9. Give four characteristics of land as a factor of production (4mks)
- i).....

ii).....

iii).....

iv).....

10. Classify the following resources as either renewable or non – renewable (4mks)

	Resource	Renewable	Non - renewable
i)	Solar energy		
ii)	Soda ash		
iii)	Gold		
iv)	Coal		

11. State four reasons that hinder geographical mobility of labor (4mks)

i).....

ii).....

iii).....

iv).....

12. State the term that fits the description given below (4mks)

	Description	
i)	Means used to produce goods and services	
ii)	Goods and services are limited in supply	

iii)	The value of forgone item by choosing one item instead of the other	
iv)	Physical tangible items which satisfy human wants	

13. Mention four factors which should be taken into consideration while buying office machines and equipment. (4mks)

- i).....
- ii).....
- iii).....
- iv).....

14. Outline four features of a good filing system (4mks)

- i).....
- ii).....
- iii).....
- iv).....

15. Give four reasons why a business file information (4mks)

- i).....
- ii).....
- iii).....
- iv).....

16. Name four factors outside the business which affects its operation (4mks)

- i).....
- ii).....

- iii).....
- iv).....

17. Identify four advantages of indirect production (4mks)

- i).....
- ii).....
- iii).....
- iv).....

18. List four sources of business ideas (4 mks)

- i).....
- ii).....
- iii).....
- iv).....

19. Give four factors that slow down entrepreneurial development in a country (4mks)

- i).....
- ii).....
- iii).....
- iv).....

20. List four methods used in an organization to reproduce information (4mks)

- i).....
- ii).....

iii).....

iv).....

21. State the factors of production and rewards for each factor. (4mks)

	Factor of production	Reward
i)		
ii)		
iii)		
iv)		

22. Explain 5 differences between goods and services (10 mks)

23. Identify four types of utility and in each case indicate a business activity associated with utility (8 mks)



KENYA CERTIFICATE OF SECONDARY EDUCATION

BUSINESS STUDIES FORM ONE

MIDTERM 2 SET 2 2023 EXAM

NAME: _____ STREAM _____ DATE: _____

ANSWER ALL QUESTIONS

1. Define the term business studies (2mks)
.....
.....
2. State four disciplines of business studies (4 mks)
 - i).....
 - ii).....
 - iii).....
 - iv).....
3. Highlight four importance of learning business studies (4 mks)
 - i).....
 - ii).....
 - iii).....
 - iv).....
4. Highlight four reasons why a person may start a business (4mks)
 - i).....
 - ii).....
 - iii).....

- iv).....
5. State four characteristics of human wants (4mks)
- i).....
- ii).....
- iii).....
- iv).....
6. State four categories of business activities (4mks)
- i).....
- ii).....
- iii).....
- iv).....
7. Name four functions of an entrepreneur (4mks)
- i).....
- ii).....
- iii).....
- iv).....
8. Identify four functions of a modern office (4mks)
- i).....
- ii).....
- iii).....
- iv).....
9. Give four characteristics of land as a factor of production (4mks)
- i).....

ii).....

iii).....

iv).....

10. Classify the following resources as either renewable or non – renewable (4mks)

	Resource	Renewable	Non - renewable
i)	Solar energy		
ii)	Soda ash		
iii)	Gold		
iv)	Coal		

11. State four reasons that hinder geographical mobility of labor (4mks)

i).....

ii).....

iii).....

iv).....

12. State the term that fits the description given below (4mks)

	Description	
i)	Means used to produce goods and services	
ii)	Goods and services are limited in supply	

iii)	The value of forgone item by choosing one item instead of the other	
iv)	Physical tangible items which satisfy human wants	

13. Mention four factors which should be taken into consideration while buying office machines and equipment. (4mks)

- i).....
- ii).....
- iii).....
- iv).....

14. Outline four features of a good filing system (4mks)

- i).....
- ii).....
- iii).....
- iv).....

15. Give four reasons why a business file information (4mks)

- i).....
- ii).....
- iii).....
- iv).....

16. Name four factors outside the business which affects its operation (4mks)

- i).....
- ii).....

- iii).....
- iv).....

17. Identify four advantages of indirect production (4mks)

- i).....
- ii).....
- iii).....
- iv).....

18. List four sources of business ideas (4 mks)

- i).....
- ii).....
- iii).....
- iv).....

19. Give four factors that slow down entrepreneurial development in a country (4mks)

- i).....
- ii).....
- iii).....
- iv).....

20. List four methods used in an organization to reproduce information (4mks)

- i).....
- ii).....

iii).....

iv).....

21. State the factors of production and rewards for each factor. (4mks)

	Factor of production	Reward
i)		
ii)		
iii)		
iv)		

22. Explain 5 differences between goods and services (10 mks)

23. Identify four types of utility and in each case indicate a business activity associated with utility (8 mks)



KENYA CERTIFICATE OF SECONDARY EDUCATION

CHEMISTRY FORM ONE

MIDTERM 2 SET 2 2023 EXAM

NAME: _____ STREAM _____ DATE: _____

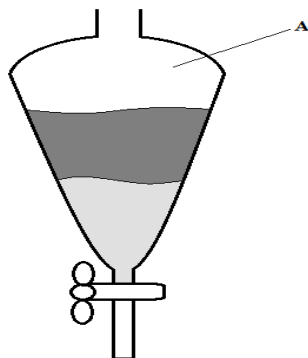
INSTRUCTIONS TO CANDIDATE

- Write your name in the space provided
- Answer ALL questions in the spaces provided

For examiners' use only

Question	Maximum Score	Candidate's Score
1 – 26	80	

1. The set up below was used to separate two immiscible liquids **B** and **C**. The density of **B** is 1.0 g/cm^3 while that of **C** is 2.83 g/cm^3 .



- a) Name apparatus A (1 Mark)

.....

- b) Which liquid was collected first? (1 Mark)

.....

2. One of the methods of preventing iron from rusting is by coating it with zinc metal.

- a) What is the name given to this method? (1 Mark)

.....

3. After use, a non-luminous flame is adjusted to a luminous flame. What is the primary reason for doing this? (2 Marks)

.....

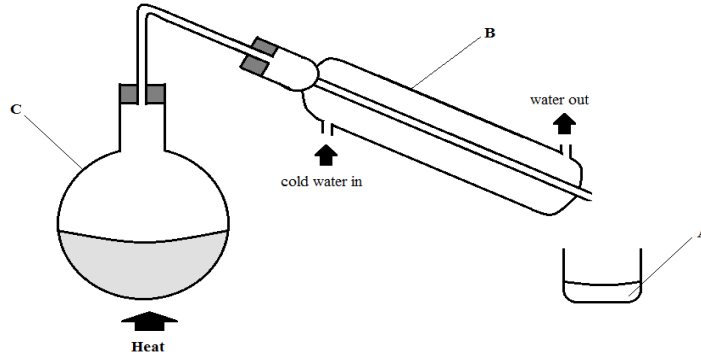
.....

4. Why should one avoid looking directly into flasks and boiling tubes when reactions are taking place? (1 Mark)

.....

.....

5. Consider the following setup



a) Name the parts/substances labelled

A(1 Mark)

B(1 Mark)

C(1 Mark)

b) Which method of separation is represented by the setup? (1 Mark)

.....

c) What type of mixtures is suitably separated by the setup? (1 Mark)

.....

d) What correction must be made on the setup to make it workable? (1 Mark)

.....

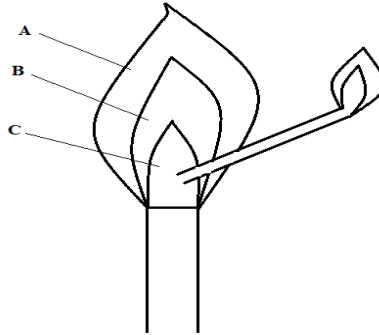
e) Which physical process leads to formation of A? (1 Mark)

.....

f) Describe a procedure you would follow to show that A no longer contains some dissolved solute. (2 Marks)

.....

6. The following is a Bunsen burner flame



a) Which flame is this? (1 Mark)

.....

b) What does this experiment show? (1 Mark)

.....

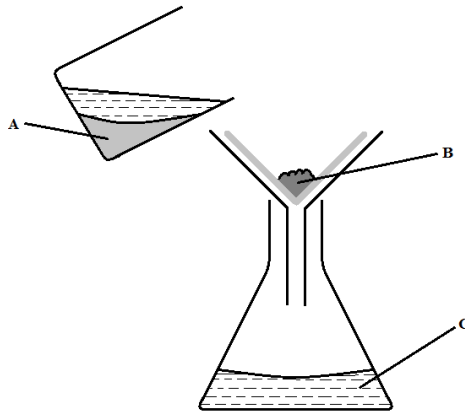
7. While arranging the preparation room of a laboratory, iodine crystals and some sodium chloride fell into a beaker of sulphur powder. Describe how the three substances can be separated. (3 Marks)

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

8. What is classification? (1 Mark)

.....
.....

9. Name the following

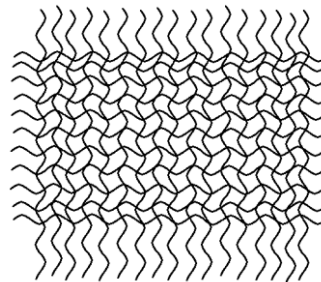
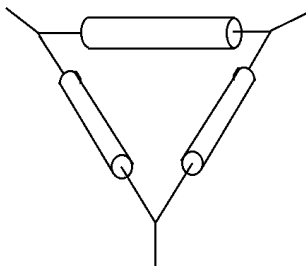


A (1 Mark)

B (1 Mark)

C (1 Mark)

10. Name the following apparatus and distinguish between their uses



Name _____

Name _____

(1 Mark)

Distinction in use

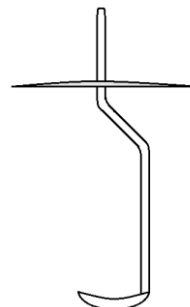
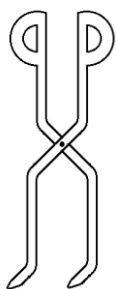
(2 Marks)

.....

.....

.....

.....



Name _____

Name _____

(1 Mark)

Distinction in use

(2 Marks)

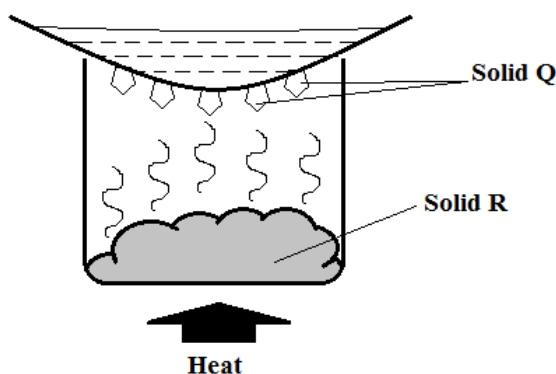
.....

.....

.....

.....

11. A mixture of two salts, iron (III) chloride and calcium chloride were heated strongly in apparatus assembled as follows. Study the diagram and answer the questions that follow.



a) If **Q** and **R** represent the two salts, identify **Q** and **R**.

Q (1 Mark)

R (1 Mark)

b) Why is **Q** collected as shown? (1 Mark)

.....

c) What is the purpose of the ice-cold water in the watch glass? (1 Mark)

.....

.....

12. Distinguish between:

a) Suspension and solution (2 Marks)

.....

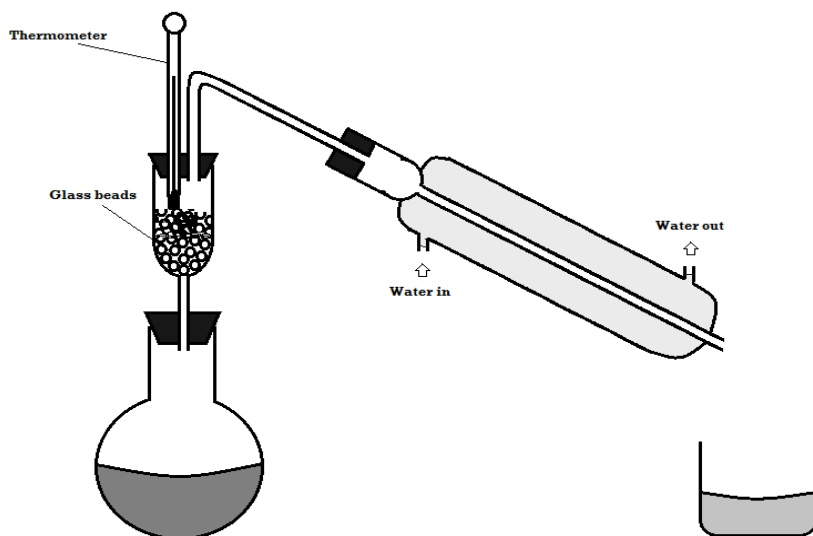
.....

b) Evaporation and crystallisation (2 Marks)

.....

.....

13. The setup below represents apparatus that may be used to separate a mixture of two miscible liquids X and D, whose boiling points are 80°C and 110°C respectively.



a) What principle does this method of separation use? (1 Mark)

.....

b) What is the role of the thermometer? (1 Mark)

.....

c) What is the role of glass beads in the setup? (2 Marks)

.....

d) Which liquid was collected first if conditions are made correct? (1 Mark)

.....

e) State a practical example of one area where the method of separation has been applied. (1 Mark)

.....

14. A luminous flame produces a lot of light. Explain. (2 Marks)

.....

15. When extracting oil from castor seeds, the seeds are crushed while adding small amounts of solvent. The resultant liquid mixture is decanted onto a watch glass and left out in the sun. Castor oil is obtained.

a) Why are the castor seeds crushed? (1 Mark)

.....
b) Name **one** suitable solvent that can be used in this experiment. (1 Mark)

.....
c) What is the role of the solvent? (1 Mark)

.....
d) Why is the liquid mixture on the watch glass left out in the sun? (1 Mark)

.....
e) Describe a procedure that would help a student verify that the final substance obtained is indeed oil. (2 Marks)

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

16. Sodium chloride can be separated from water through evaporation. The solution is preferably heated over a water bath. Why is direct heating not applied? (1 Mark)

.....
.....

17. A salt solution can be saturated by heating. State how one would determine that the solution is already saturated during the heating process? (1 Mark)

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

18. Solid particles with regular shape can be recovered by cooling a hot saturated solution.

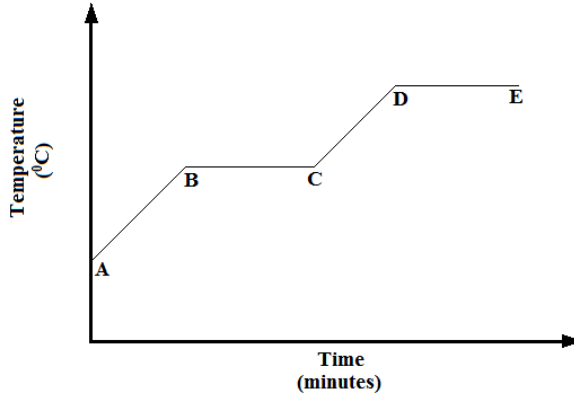
a) What name is given to this process? (1 Mark)

.....

b) Name **one** practical application of this process. (1 Mark)

.....

19. The curve shown below was obtained when ice was heated to boiling. Study it and answer the questions that follow:



a) State and explain what happens at **BC** as heating continues (2 Marks)

.....

b) On the **same axis**, draw a curve that would be obtained if table salt were added to ice and label it as **J** (1 Mark)

20. The Bunsen burner is a piece of apparatus used in the laboratory for heating purposes. State the role of the following parts:

a) The jet (1 Mark)

.....

b) The chimney (1 Mark)

.....

c) The collar (1 Mark)

.....

21. What happens in the almost colourless zone in a luminous flame? (2 Marks)

.....

22. Brine is made by mixing water and common salt. Give the names of the following: (3 Marks)

Solvent.....Solute

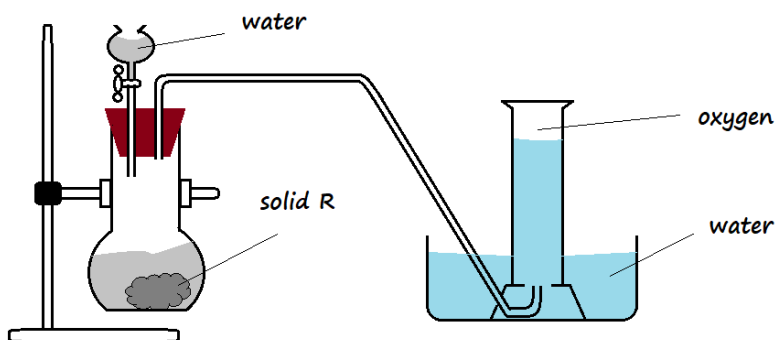
Solution

23. What should one do when a chemical gets onto their skin or in their mouth? (2 Marks)

.....

.....
.....

24. The diagram below is a set up for the laboratory preparation of oxygen gas.



a) Name **solid R** (1 Mark)

.....

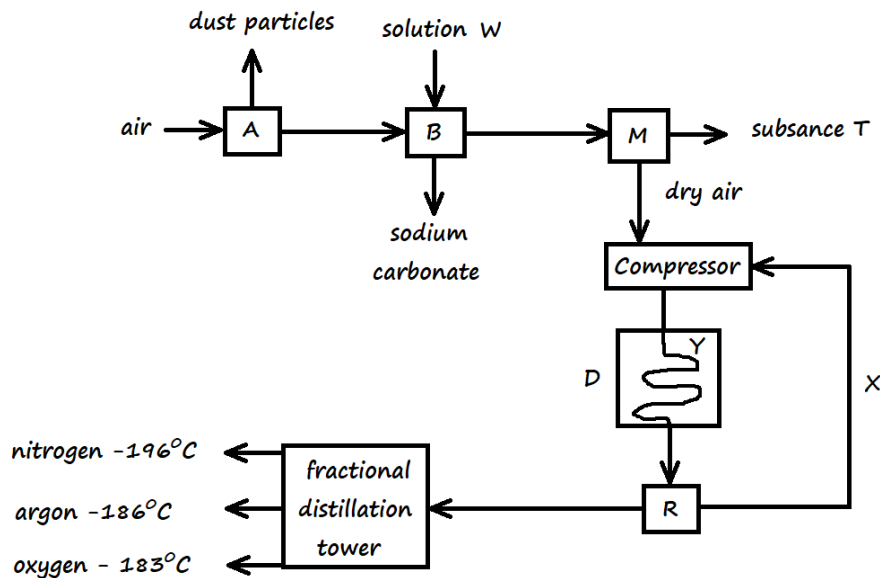
b) Write a **word equation** for the reaction that takes place in the flat-bottomed flask. (1 Mark)

.....

25. An iron can was painted to help prevent rusting. It was noted that a small scratch on the surface of the can turned brown fast. Explain this observation. (2 Marks)

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

The flow chart below describes a process that is used to produce oxygen gas in hospitals to help patients who have breathing problems. Study the chart and use it to answer the questions that follow.



a) What processes take place in chambers (2 Marks)

- A
- B
- M
- D

b) Name **substance T** (1 Mark)

.....

c) Explain why **part Y** in **chamber D** is curved (2 Marks)

.....

d) Give a possible identity of **solution W** (1 Mark)

.....



KENYA CERTIFICATE OF SECONDARY EDUCATION

COMPUTER STUDIES FORM ONE

MIDTERM 2 SET 2 2023 EXAM

NAME: _____ STREAM _____ DATE: _____

ANSWER ALL QUESTIONS

1. State four factors to consider when setting up a computer laboratory (4marks)

2. State four reasons why a mobile phone is considered as a computer(4marks)

3. Matelok Mixed secondary school bought new computers and installed them in the computer lab. Describe four actions the administration needs to take to ensure security of computers and programs (4marks)

4. Identify three logical operations performed Arithmetic Logic Unit (**3marks**)

5. Briefly describe the following types of special purpose memory

(a) Cache memory (**2marks**)

(b) Buffer (2marks)

6.

(a) State three functions of Uninterruptible Power Supply (**3marks**)

(b) Describe two effect of unreliable power supply to a computer (**2marks**)

7. Apart from traditional keyboard name any other four types of keyboard(**4marks**)

8. List four devices housed within the system unit (**4marks**)

9. Mention five disadvantages of using computers in an organization **(5marks)**

10. Give five ways of maintaining proper ventilation in a computer laboratory **(5marks)**

11.

(a) Apart from abacus name any four non-electronic computing devices **(4marks)**

(b) Represent 6754 using abacus **(4marks)**

12. Briefly describe five challenges experienced by users of the first-generation computers(5mks)

13. State three hardware technological difference between First generation computers and third Generation computer **(3marks)**

14. Mention three reasons to justify why most banks prefer the use of Magnetic Ink Character Recognition during cheque processing (3marks)

15. Use the diagram below to answer the questions that follow.



(a) Identify the device in the diagram above **(1mark)**

(b) Describe three application areas where the device stated in (a) above is used **(3marks)**

16. With an aid of a diagram distinguish between analog and digital data **(5marks)**

17. Briefly explain the following characteristics of a computer

(i) NO IQ **(2marks)**

(ii) High memory **(2marks)**

(iii) Diligent **(2marks)**

18.

(a) Mention three toggle keys found on a computer keyboard (3mks)

(b) Briefly describe the functions of Keys represented by the symbols shown below (3marks)

(i) 

(ii) 

(iii) 

19. State how computers are used in the following areas.

(a) Hospital (4marks)

(b) Banking (4marks)

(c) Horticultural farm (4marks)

20.

(a) List three examples of special purpose computers (3mks)

(b) Describe how computers are classified based on the data they process (3mks)



KENYA CERTIFICATE OF SECONDARY EDUCATION
CRE FORM ONE
MIDTERM 2 SET 2 2023 EXAM

NAME: _____ STREAM _____ DATE: _____

INSTRUCTIONS TO CANDIDATES:

- 1) Write your name and index number in the spaces provided above.
- 2) This paper consists of **SIX** questions.
- 3) Answer **all SIX** questions on the foolscaps provided.

For Examiner's Use Only

Questions	1	2	3	4	5	6	TOTAL
Score							

1 a) Outline **six** literary forms used in writing The Bible.

(6 marks)

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

b) State **six** ways in which the churches use the Bible to enhance Christian Faith. (6 marks)

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

2 a) Describe the consequences of the sin committed by Adam and Eve at the Garden of Eden? **(7 Marks)**

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

b) Differentiate between the biblical concept of sin and traditional African understanding of evil. **(8 Marks)**

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

c) Explain how errant members in traditional African society were punished. **(5 Marks)**

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

3 a) Explain **four** characteristics of a covenant demonstrated in the covenant between God and Abraham. **(7 Marks)**

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

b) Outline seven ways in which Abraham demonstrated his faith in God (7 Marks)

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

c) Give seven acts of faith in the life of a Christian today (6 Marks)

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

4 a) Outline the activities carried out by the Israelites on the night of the Passover (5 Marks)



b) State the conditions given to the Israelites during the renewal of the Sinai covenant.

(5 Marks)

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

c) How do Christians show their respect for God? (5 Marks)

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

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

5 a) Explain four reasons why Samuel was against kinship in Israel (8 Marks)

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

b) Give six failures of Solomon as king of Israel (6 Marks)

.....
.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

6 a) Describe the contest between Prophet Elijah and prophets of baal at mount

Carmel **(1 kings 18: 19- 40)**

(8 Marks)

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

b) State the attributes of God from the Mount Carmel contest. (6 Marks)

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....
.....

c) Identify the factors that lead people away from the worship of God in modern society.

(5 Marks)

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



KENYA CERTIFICATE OF SECONDARY EDUCATION

ENGLISH FORM ONE

MIDTERM 2 SET 2 2023 EXAM

NAME: _____ STREAM _____ DATE: _____

INSTRUCTIONS TO CANDIDATES

- The exam has **six** sections.
- All the sections are **compulsory**.
- Write your answers in space provided.
- The exam carries **100 marks**.

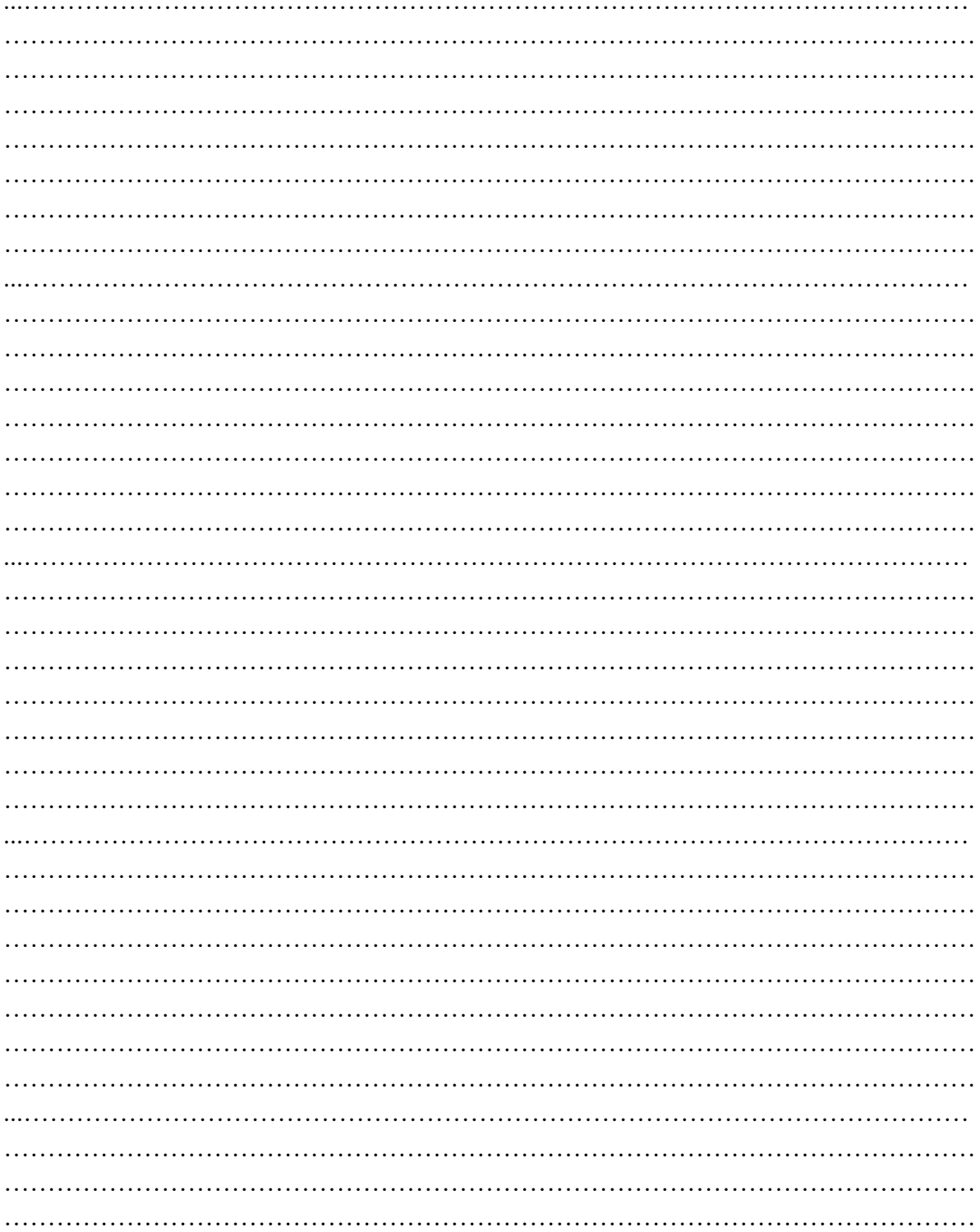
FOR EXAMINER'S USE ONLY

S/NO	SECTION	MAXIMUM MARKS	STUDENTS SCORE
1	Functional Writing	20	
2	Comprehension	20	
3	Cloze test	10	
4	Oral Skills	10	
5	Oral Literature	10	
6	Grammar	30	
Grand Total		100 marks	

1. FUNCTIONAL WRITING (20 marks)

A day after the school closes for April holiday, you are visiting your aunt for three days.

(a) Write a packing list of all the items you would carry with you to her place. (10marks)



2. COMPREHENSION (20MKS)

Read the passage below and then answer the questions that follow

Ever wondered what the difference between abortion and murder is? Or should we ask what the two have in common? Both involve cutting life short. In the case of abortion, it happens to be the equally precious life of unborn baby that is ended.

In Kenya, abortion is illegal except when the life of the pregnant woman is in danger. Violating this carries the severe penalty of between 14 years and life imprisonment. The truth of the matter, though, is that many illegal abortions are still taking place. How else can we explain the presence of the fetuses in polythene papers dumped in city streets?

Many such abortions are unsafe. They are done using all manner of gruesome paraphernalia: wires, knitting needles, sticks, herbs, chemicals, detergents and drugs. Many people performing them lack the necessary skills and training. The environment in which they are done are usually unsafe and do not meet minimum hygienic or health standards.

This sorry situation has led some to clamour for the legalization of abortion. They argue that as things stand, it is adolescents and poor women who are forced to seek the services of the quacks. The financially - endowed counterparts visit private clinics of qualified doctors for the same services. They therefore do not suffer the consequences of a botched abortion; infertility, excessive bleeding, perforated internal organs such as the bladder and intestines and, worst of all, death. The feeling is that legalization of abortion would make it safe for all women.

But what reason, other than the legal one, would make a woman want to terminate a throbbing life within her? Interruption of career and education, being too young to bring up a baby or being abandoned by the father of the baby are often cited. Another reason is that the pregnancy is as a result of rape or incest. Whatever the reason, the negative consequences of illegal abortion, safe or otherwise, far outweigh any benefits it is purported to have.

Apart from the physical effects of unsafe abortion already mentioned, there are physiological ones. They include headache, accelerated heart beat, dizziness, stomach upsets and disturbed sleep and concentration. Eating disorders resulting in excessive weight gain or loss sometimes occur.

At the psychological level, a woman who has carried out an abortion usually suffers from debilitating guilt.

She feels that she has gone against a mother's natural tendency. As a result of low-esteem, she feels worthless and undeserving of even getting another baby.

Depression may also set in, the victim may feel very sad and cry for a long spell. She may lose interest in life and want to commit suicide.

A mental illness called psychosis cannot also be ruled out. The sufferer exhibits very uncharacteristic behaviour and is not able to distinguish reality from fantasy.

There is also stigma at the social level. Not many people would proudly want to associate with one who has induced illegal abortion. A man seeking a marriage partner is likely to give such a woman a wide berth.

In sum, though illegal abortion may appear to solve the immediate problem of the one seeking it, it creates life-long complications.

- i. Provide an appropriate title for the passage (1mk)

.....
.....

- ii. Under what circumstance can abortion be legalized? (2mks)

.....
.....

- iii. According to the passage, how can we tell that illegal abortions are still taking place (2mks)

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

- iv. According to the first paragraph, is there a difference between murder and abortion? Support your answer. (2mks)

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

- v. Make notes on the reasons that make people procure abortion. (5mks)

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

vi. Why is the public fighting to legalize abortion? (2mks)

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

vii. What is the psychological effect of abortion? (2mks)

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

viii. Explain the meaning of the following words as used in the passage (4mks)

a) Tendency

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

b) Exhibits

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

c) Fantasy

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

d) Incest

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

3. CLOZE TEST (10 MARKS)

Fill in the blank spaces with the most appropriate word. (10 marks)

I had always lived (1)_____dread of water. When my friends(2)
_____swimming I always stayed away because my mother
(3)_____ made me promise her never to go for swimming and I
(4)_____keep this promise very well.(5) _____
this reason, I never (6)_____myself the opportunity to get any
kind of training. On this day, after, (7)_____a long time in the stream
trying (8)_____ vain to catch fish my friends pulled
(9)_____ their clothes and leapt into the stream
(10)_____ I stood on the bank watching them.

4. ORAL SKILLS. (10 MARKS)

(1) Identify the silent letters in the following words. (5mks)

- i) Calm -
- ii) Judge-
- iii) Scent -
- iv) Write -
- v) Wheel –

(2) For each of the following words write a word pronounced in the same way. (5mks)

- i) Mail -
- ii) There -
- iii) Allowed –
- iv) Flu -
- v) Story -

5. ORAL LITERATURE (10MKS)

1) State any 5 types of oral narratives. (5mks)

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

2) Identify two features of oral narratives. (2mks)

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

3) I have a house without a door. Answer- An egg.

i). Identify the above genre. (1mk)

.....

- ii). Give two functions of the above genre. (2mks)
-
-
-
-

6. GRAMMAR. (30 MARKS)

Identify the type of adverb used in each of the sentences below.(5mks)

- i) They stopped midway to buy food
.....
- ii) Children adjust to new situations quickly.
.....
- iii) You should never go for an engagement late.
.....
- iv) They cook pancakes daily.
.....
- v) He talked to the teacher rudely.
.....

(2) Fill in each of the gaps in the following sentences with the correct form of the adjectives given in brackets. (5mks)

- i) My dress isthan yours.(smart)
- ii) Jackson is the boy in our school.(tall)
- iii) My school was thein the county Music Festivals. (good)
- iv) Deborah is theof the three athletes. (fast)
- v) The form ones werethan the form fours during the talk.(attentive)

3. Fill in the spaces in the following sentences with the correct prepositions. (5mks)

- i) The lame girl asked God to have pity her.
- ii) Father complimented Sarah her neat appearance.
- iii) She brightened when she was shown the title deed.
- iv) I bought the plotMaseno.
- vi) The thief jumpedthe wall and into the sewage.

4. Rewrite the following sentences putting the verb in brackets in the past perfect aspect. (5mks)

i) When Jack arrived at the hotel, the meeting (has) ended.

.....

ii) She (use) up all her savings by the time the baby was born.

.....

iii) Jeff (write) down the address and posted the letter.

.....

iv) She (take) out a brush and painted the whole house red when I got home.

.....

v) After an hour, we (prepare) your cheque.

.....

5) Fill in the blanks in the sentences below using the words in brackets.(5mks)

a) The classa debate this morning. (contacted/ conducted)

b) The Permanent Secretary isto holiday tuition.(oppressed/ opposed)

c) Collo'ssmelt of alcohol. (breath/ breathe)

d) We could noton him tothe information on time. (relay /rely)

6) Pick out the nouns from the sentences given and indicate what type they are. (5mks)

a) The chairs were repaired.

.....

b) River Nzoia broke its banks.

.....

c) Alice stood at the door.

.....

d) Her arrogance is disturbing.

.....

e) There is plenty of soup.

.....

END



KENYA CERTIFICATE OF SECONDARY EDUCATION

FRENCH FORM ONE

MIDTERM 2 SET 2 2023 EXAM

NAME: _____ STREAM _____ DATE: _____

Instructions to candidates

1. Write your name and admission number in the spaces provided above.
2. Sign and write the date of examination in the spaces provided above.
3. Answer **all** the questions in the spaces provided.
4. **This paper consists of 9 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.**

For Examiner's use only

Section	Candidate's Score
Comprehension	
Grammar/ Comm Skills	
Composition	
Total	

Passage I

Read the passage below and answer the questions that follow

Ma famille

Je m'appelle Marie. Ma famille se compose de quatre personnes. Mon mari et moi avons deux enfants, une fille de sept ans et un garçon de trois ans. Nous avons également des animaux : un chat, un chien, deux lapins et des poissons rouges. Nous vivons dans une jolie maison avec un grand jardin. Notre quartier est calme et paisible. Je suis secrétaire et je m'occupe de mes deux enfants quand ils rentrent de l'école. Mon mari est professeur d'anglais dans une école qui se trouve à 20 kilomètres de la maison. Le dimanche, nous aimons nous promener en famille dans la forêt proche de notre maison et faire des jeux. Nous jouons dans le jardin quand il fait beau ou dans la maison quand il pleut.

Les grands-parents de nos enfants aiment passer du temps avec nous lors des vacances. Les parents de mon mari habitent très loin de chez nous, mais mes parents ont une maison à quelques kilomètres de la nôtre. Les enfants aiment faire du vélo avec leur grand-père après l'école. Ma fille fait parfois des gâteaux avec sa grand-mère le samedi après-midi. Nous les mangeons ensemble le samedi soir.

Ma sœur habite également dans la même ville que nous. Elle a trois enfants, deux garçons et une fille. Ils aiment venir passer le week-end à la maison, ainsi mes enfants jouent avec leurs cousins dans le jardin.

Questions

Qui est l'auteur de ce texte ? (1pt)

Combien d'enfants ont Marie et son mari ? (1pt)

.....

Nommez les animaux dans la famille. (2pts)

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

Les enfants faire du vélo avec qui ? (1pt)

Est -ce - que les enfants ont des cousins ? Combien ? (1pt)

.....

Quelle est la profession de : (1pt)

(i) Marie

(ii) Son mari

Qu'est ce que la famille fait le dimanche ? (2pts)

.....
.....

Qui fait les gâteaux samedi ? (1pt)

Passage II

Read the poem below and answer the questions that follow

Mon papa s'appelle Henry
Il n'a pas de cheveux
Mais il est gentil

Ma maman s'appelle Julie
Elle a deux grands yeux bleus
Qui brillent quand elle rit

J'ai deux sœurs et un petit frère
Qui m'ennuient quelque fois
Mais je suis très patient
Je suis très patient

J'ai un grand-père, c'est Pépé
Une grand-mère, c'est Mémé
Mémé et Pépé

J'appelle ma tante Tata
Et mon oncle c'est tonton
Tata et tonton

J'ai deux sœurs et un petit frère
Qui m'ennuient quelque fois
Mais je suis très patient
Je suis très patient

Questions

1. Comment s'appelle son père et sa mère ? (2pt)
.....
2. Qui est Tata? (1pt)
3. Il a deux et un (1pt)
4. Mémé et Pépé sont ses (1pt)

Rewrite the sentences below using *les adjectifs possessifs* (10 marks)

J'ai un livre –c'est mon livre.

- a) J'ai une cravate c'est
- b) Elles ont des chaussettes ce sont
- c) J'ai une maison c'est
- d) Nous avons une voiture c'est
- e) J'ai une amie c'est
- f) Kamau a une sœur c'est
- g) J'ai dix stylos ce sont
- h) Il a trois crayons ce sont
- i) Tu as une voiture c'est
- j) Nous avons des cahiers ce sont

Complete the following passage by conjugating the verb correctly (15pts)

Note that "ne pas + verbe" means you negate.

Je (s'appeler) Louis, j'..... (avoir) 10 ans et je suis en troisième.

Je (aller) au collège Louis Pasteur à Lyon. Je (être) un bon élève et mes matières préférées sont l'anglais et la technologie.

Mon collègue (ne pas être) très grand mais c'est assez grand.

C'est un établissement moderne et il y a environ 600 et quatre-vingts. Il y a deux blocks .

Dans le premier nous (avoir) la cantine, la salle de gym et les vestiaires.

Le deuxième a deux étages. Il y a le secrétariat, le bureau du principal, la salle des profs et la bibliothèque. Au premier on (trouver) les salles de classes, les toilettes,

les labos et la salle d'informatique. Dans mon collège nous (jouer) au

tennis, et au foot. Les cours (commencer) à huit heures et ils se

..... (terminer) tous les jours à quatre heures de l'après-midi sauf le vendredi,

car on (ne pas avoir) cours l'après-midi. Les cours (durer) cinquante minutes et il y a deux pauses, la récréation à dix heures et la pause-déjeuner à midi et demie. Comme j' (habiter) près du collège, je (manger) toujours à la maison , mais je (ne pas aimer) ça !

Complete the sentences using either definite or indefinite articles : (8pts)

- a. Qu'est-ce que c'est ? C'est _____ trousse. C'est _____ trousse de ma copine Coralie.
- b. Avez- vous _____ crayons ? Oui, voilà _____ crayon rouge et _____ crayon noir.
- c. Voilà _____ bureau du professeur. Pour les élèves, il y a _____ tables.
- d. Je ferme _____ livre de maths.
- e. Regarde, ce sont _____ fenêtres de la classe d'espagnol.
- f. Dans mon sac il y a _____ livres, _____ cahiers, _____ trousse, _____ calculette et _____ agenda. _____ trousse est jaune et bleue et _____ calculette est rouge.

Negate the following sentences (6 pts)

- a. J'ai un cahier de français. _____
- b. Ce sont des copains. _____
- c. Tu manges à l'école. _____
- d. Les élèves regardent le tableau. _____
- e. C'est la trousse de ta sœur. _____
- f. Nous écoutons. _____

Choose the correct profession. (6 pts)

- 1. Un _____ doit être bilingue.

a. agriculteur b. interprète c. marchand d. journaliste

2. Je suis _____ de rugby.

a. chanteuse b. avocat c. serveuse d. joueur

3. Le _____ fait des gâteaux.

a. tuteur b. libraire c. teinturier d. pâtissier

4. Un _____ enseigne.

a. mécanicien b. plombier c. professeur d. fermier

5. Un _____ vole des avions.

a. vétérinaire b. pilote c. moniteur d. teinturier

6. Le _____ travaille à la banque.

a. comptable b. policier c. enseignante d. secrétaire

Write ONE composition 150 – 180 words in french titled:

Either

Mon Ami(e)

Or

Ma Famille



KENYA CERTIFICATE OF SECONDARY EDUCATION

GEOGRAPHY FORM ONE

MIDTERM 2 SET 2 2023 EXAM

NAME: _____ STREAM _____ DATE: _____

Instructions to candidates

- (a) Write your name, admission number and class in the spaces provided above.
- (b) Answer **all** the questions in the paper.
- (c) All the answers must be written in the spaces provided below each question.
- (d) This paper consists of **9** printed pages.

For Examiner's Use Only

Questions	Maximum Score	Candidate's Score
1	15	
2	30	
3	30	
4	25	
Total	100	

1. (a) Give the Greek words from which the term geography is derived. (2 marks)

.....
.....

(b) Identify **four** areas of concern in physical geography. (4 marks)

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

(c) Explain how geography relates to the following disciplines. (2 marks)

(i) History (2 marks)

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

(ii) Chemistry (2 marks)

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

(iii) Demography (2 marks)

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

(d) State **three** importance of practical geography. (3 marks)

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

2. (a) (i) What is solar system?

(2 marks)

(ii) The local time at Manual 60⁰W is 10.30 a.m. What is the time in Nairobi 37⁰E. (3 marks)

(b) State **five** characteristics of the mantle in the interior structure of the earth.

(5 marks)

(c) (i) What is rotation of the earth?

(2 marks)

(ii) State **three** effects of earth's rotation.

(3 marks)

.....
.....

(d) Explain **three** reasons for the shape of the earth.

(6 marks)

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

(e) (i) Give **four** sources of information on internal structure of the earth.

(4 marks)

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

(ii) With the aid of a well labeled diagram, describe the occurrence of lunar eclipse.

(5 marks)

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

3. (a) (i) What is precipitation?

(2 marks)

(ii) Give **three** types of fog.

(3 marks)

(b) (i) Using a well labelled diagram, describe how frontal rain is formed.

(6 marks)

(ii) State **two** characteristics of frontal rain.

(2 marks)

.....

.....

.....

(c) Explain how the following factors influence the humidity of an area.

(i) Temperature

(4 marks)

.....

.....

.....

.....

.....

.....

.....

.....

(ii) Air pressure

(2 marks)

.....

.....

.....

.....

(d) State **three** conditions necessary for the formation of dew.

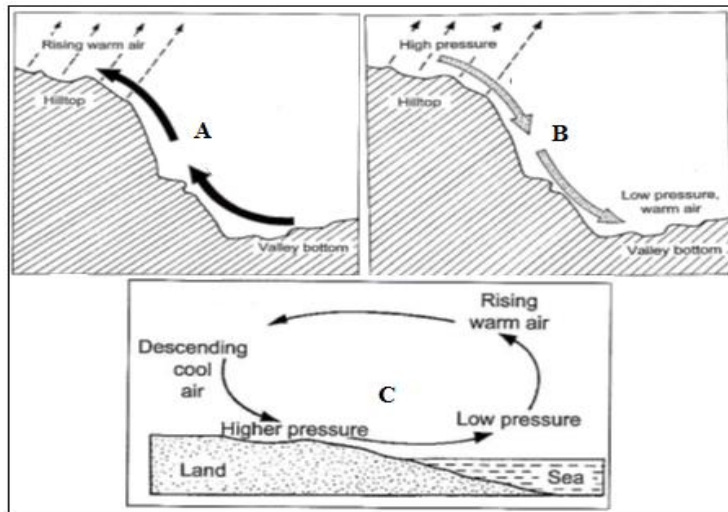
(3 marks)

.....

.....

.....

(e) The diagram below shows some of the local winds.



(i) Identify the winds marked **A**, **B** and **C**.

(3 marks)

(ii) At what time is the wind marked **C** experienced?

(1 mark)

(iii) Explain **two** effects of winds on the environment.

(4 marks)

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

4. (a) The table below shows temperature readings at a weather station for one week.

Temp/Day	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Max °C	28	27	28	26	29	29	26
Min °C	18	18	20	16	22	21	19

(i) Identify the method used to represent the above data. (1 mark)

.....

(ii) Calculate the following:

- The diurnal range of temperature for Tuesday (2 marks)
-
.....
.....

- The mean temperature for Saturday (2 marks)

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

(iii) Give **three** advantages of the method of data presentation identified in (a) (i) above.

(3 marks)

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

(b) (i) What is statistical data?

(2 marks)

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

(ii) Give **two** examples of continuous data

(2 marks)

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

(c) Explain **three** importance of statistics

(6 marks)

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

(d) (i) Apart from observation, give **three** other methods of collecting data.

(3 marks)

.....
.....
.....
(ii) State **four** reasons why you would limit the use of observation to collect data during a field study.
(4 marks)

.....
.....
.....
.....
.....
.....
.....
-END-



KENYA CERTIFICATE OF SECONDARY EDUCATION

HISTORY & GOVERNMENT FORM ONE

MIDTERM 2 SET 2 2023 EXAM

NAME: _____ STREAM _____ DATE: _____

INSTRUCTIONS TO THE CANDIDATES:

- *This paper consists of **three** sections A, B and C.*
- *Answer **all** questions in section A, B, and C*
- *Answers to **all** questions must be written in a separate booklet provided.*
- *This paper consists of 3 printed pages.*
- *Candidates should check to ascertain that all pages are indicated and that no questions are missing.*

FOR EXAMINERS USE ONLY

Sections	A	B				C			Total Score
Questions	1 – 17	18	19	20	21	22			
Marks									

SECTION A (25 MARKS)
Answer all the questions in this section

1. Identify One branch in the study of Kenyan history (1 mark)
2. Define the term government. (1mk)
3. Mention the first settlement of the highland Nilotes in Kenya during their migration. (1mk)
4. State two roles of the Oloibon among the Maasai. 2mks
5. Identify two species of early man whose remains were discovered in Kenya. (2 mks)
6. State two effects of migration of Southern Cushites have on other Kenyan communities (2 marks)
7. Name the original homeland of the plain nilotes of Kenya. (1mark)
8. Identify the main result of the encounter between the Coastal Bantu and the Oromo (1 mark)
9. What was the basic unit of political organization of the pre-colonial African communities in Kenya? (1mark)
10. State two physical characteristics of the Australopithecines. (2 marks)
11. Identify two factors that make Africa to be regarded as the cradle of mankind(2 marks)
12. Identify two reasons for the development of crop and livestock domestication.(2 marks)
13. State two political roles of the Orkoiyot among the Nandi. (2 marks)
14. Give one difference in the social practices of the Luyha and Ameru in the 19th century (1 mark)
15. Give the Main reason that made the Borana migrate to Kenya from Southern Ethiopia in 1897. (1 mark)
16. Give two ways archaeologists use to obtain historical information. (2 marks)
17. Name the period in history that is associated with microlithic tools. (1 mark)

SECTION B (45 marks)
Answer ALL the questions in this section

- 18 a) State three methods of hunting used by the early man. (3 Marks)
- b) Explain six benefits of the domestication of animals by early man. (12 marks)
- 19 a) List five economic activities of early man during the Stone Age period. (5 marks)
- b) Describe five ways in which the discovery of fire by early man improved his way of life. (10 marks)
- 20 a) Outline three importances of rock painting during the Stone Age period. (3mks)
- b) Explain six results of early Agriculture in Egypt (12mks)

SECTION C (30 marks)
Answer ALL the questions in this section

- 21 a) State three ways in which the study of History and government promotes a sense of patriotism in the learner. (3 mks)
- (b) Explain six sources of History and Government in Africa during the pre- colonial period. (12mks)
- 22 a) Identify three forms of Government (3 marks)
- (b) Explain six reasons why it is important to study government (12mks)



KENYA CERTIFICATE OF SECONDARY EDUCATION

HOME SCIENCE FORM ONE

MIDTERM 2 SET 2 2023 EXAM

NAME: _____ STREAM _____ DATE: _____

Instructions to candidates

1. This paper consists of three sections. A, B and C.
2. Answer all questions in section A. Section B is compulsory. Answer the two questions in section C.
3. Answers to questions must be written in the space provided.
4. All answers must be written in English.

For Examiner's Use Only

Section	Question	Maximum Score	Candidate's Score
A	1-18	40	
B	19	20	
C	20	20	
	21	20	
Total Score		100	

This paper consists of 11 printed pages. Students must check to confirm that all pages are printed and no question is missing.

SECTION A (40 marks)

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

1. List **two** separating tools found in the kitchen. (1 mark)

.....
.....

2. State how the following subjects are integrated in Home Science: (2marks)

- Biology.....
.....
- Chemistry.....
.....
- Geography.....
.....
- Mathematics.....
.....

3. Briefly explain **three** methods of removing dirt from surfaces. (3marks)

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

4. Give a reason why hot pans should not be put straight into cold water. (1mark)

.....
.....

5. List **two** methods of steaming food. (1mark)

.....
.....

6. State **three** ways of ensuring that the teeth remain healthy. (3marks)

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

7. Differentiate between food spoilage and food poisoning. (2marks)

.....
.....

8. Mention **three** points on care of the feet. (3marks)

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

9. Outline **three** ways of preventing fire outbreaks in a school. (3marks)

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

10. Give **two** items in a first Aid kit that can be used when handling a sprain. (1mark)

.....

.....
.....
11. Mention **three** differences between traditional houses and modern houses. (3marks)

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

12. Give **two** differences between a broom and a brush. (2marks)

.....
.....

13. Mention **four** methods used to finish wood. (2marks)

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

14. Outline **four** qualities of a well-groomed student. (4marks)

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

15. Give **two** common signs of food poisoning. (1mark)

.....
.....

16. Differentiate between: (2marks)

- Suffocation and choking

-
-
- Shock and fainting
-
-

17. Mention **three** ways of avoiding accidents in a flat/apartment. (3marks)

.....

.....

.....

18. List **two** methods of moist cooking. (1mark)

.....

.....

SECTION B (20 marks)

Answer **ALL** the sections of this question in the spaces provided

19. You are doing your weekly cleaning in school.

a) Outline the procedure you will follow to clean your white canvas shoes for P.E.

(8marks)

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

b) Give the procedure for cleaning your classroom floor made of plain cement.

(8marks)

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

c) Mention how you will clean your plastic comb.

(4marks)

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

SECTION C (40 marks)

Answer **ALL** the question in this section in the spaces provided

20.

- a) Explain **three** qualities of a good floor cloth. (6marks)

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

- b) Give **four** reasons why a student should take a bath daily. (4marks)

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

- c) Mention **four** personal items that should not be shared and why they should not be shared. (6marks)

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

d) Outline **four** reasons why renting is a common method of providing family shelter.

(4marks)

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

21.

a) Discuss **four** reasons why a school should be kept clean.

(8marks)

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

b) Giving clear examples state **four** reasons for cooking food. (6marks)

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

c) Mention **four** personal hygiene rules that should be observed when preparing food. (4marks)

.....

.....

.....

.....

.....

.....

.....

.....

d) Differentiate between misuse and abuse of drugs. (2marks)

.....

.....

.....

.....

This is the last printed page

HOME SCIENCE (441|1)
Paper 1
(THEORY)
FORM ONE (1)
Time: 2 Hours

MARKING SCHEME

Instructions to candidates

1. *This paper consists of three sections. A, B and C.*
2. *Answer all questions in section A. Section B is compulsory. Answer the two questions in section C.*
3. *Answers to questions must be written in the space provided.*
4. *All answers must be written in English.*
5. *This paper consists of 11 printed pages. Students must check to confirm that all pages are printed and no question is missing.*

For Examiner's Use Only

Section	Question	Maximum Score	Candidate's Score
A	1-18	40	
B	19	20	
C	20	20	
	21	20	
Total Score		100	

SECTION A (40 marks)

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

1. Separating tools found in the kitchen. (1 mark)

- Tea strainers
- Flour sieves
- Draining spoons
- Colanders

(Mark the first two responses. Each correct response $\frac{1}{2}$ mark each. $2 \times \frac{1}{2} = 1$ mark)

2. How the following subjects are integrated in Home Science: (2marks)

- Biology: - when learning about parts of the body,
 - Food spoilage
 - Nutrients and nutritional disorders
 - Prevention of disease
- Chemistry – Detergents
 - Stain removal
 - Food preservation
 - Soft and hard water
- Geography- Providing family shelter
 - Production of textile fibres
- Business Studies – Preparing a budget
 - Consumer awareness
 - Consumer protection

(Mark the first response in each. Each correct response $\frac{1}{2}$ mark each. $4 \times \frac{1}{2} = 2$ marks)

3. Methods of removing dirt from surfaces. (3marks)

- Sweeping. This is removal of loose dirt from the floor using a broom.
- Scrubbing. This is removal of fixed dirt from surfaces using a brush or an abrasive substance.
- Dusting. Removal of loose dirt from surfaces above the ground using a cloth.
- Suction. Removal of loose dirt using a vacuum cleaner.
- Wiping. Removal of dirt from a floor using water and a floor cloth.

(Mark the first three responses. Each correct response naming ½ mark, explanation ½ mark each. 3x 1 = 3 marks)

4. Reason why hot pans should not be put straight into cold water. (1mark)

To avoid warping of the metal/pan.

(Correct response 1 mark. 1x1= 1mark)

5. Methods of steaming food. (1mark)

- Plate method
- Bowl method
- Using a metal colander
- Using a steamer

(Mark the first two responses. Each correct response ½ mark each. 2x ½ = 1mark)

6. Ways of ensuring that the teeth remain healthy. (3marks)

- Brushing them at least twice a day to remove food particles that could lead to cavities.
- Flossing teeth to remove fine food particles between the teeth and on the gum line.
- Exercise the jaw by chewing on hard foods like raw carrots and sugarcane.
- Visit a dentist at least once yearly for a dental check-up.
- Eat a healthy diet that contains foods rich in; Calcium, Phosphorous, Fluorine, Vitamin A and C that keep the teeth and gum healthy.

(Mark the first three responses. Each correct response 1 mark each. 3x 1 = 3marks)

7. Difference between food spoilage and food poisoning. (2marks)

Food spoilage is deterioration of food making it unsuitable for human consumption while food poisoning is illness caused by eating food that is spoiled or contaminated.

(Well differentiated, 1 mark for each. If difference is not brought out, no mark. 2x1= 2marks)

8. Points on care of the feet. (3marks)

- Dry the feet well especially between the toes to avoid fungal infection.
- Wear well-fitting shoes to avoid corns, bunions and blisters.
- Wear cotton socks to absorb sweat and keep the feet dry.
- Wear shoes with moderate heels to avoid straining the leg and back muscles.
- Occasionally use a pumice stone or foot scrubber to remove dead skin from the soles.
- Air feet regularly to avoid smells and dampness.
- Avoid walking barefoot outdoors to ensure the feet do not get hurt by sharp objects.

(Mark the first three responses. Each correct response 1 mark each. 3x 1 = 3marks)

9. Ways of preventing fire outbreaks in a school. (3marks)

- Avoid use of candles in the dormitories or classrooms.
- Refuse should not be burned near buildings as the fire can spread.
- All electrical wires must be well insulated.
- Electrical repairs must be carried out by a qualified electrician.
- Matchboxes should not be used in the dormitory or classrooms.
- Students should not work unsupervised in the laboratories because some chemicals can explode and cause fire.

(Mark the first three responses. Each correct response 1 mark each. 3x 1 = 3marks)

10. Items in a first Aid kit that can be used when handling a sprain. (1mark)

- Crepe bandage
- Safety pin
- Painkillers
- Clean drinking water

(Mark the first two responses. Each correct response $\frac{1}{2}$ mark each. $2 \times \frac{1}{2} = 1$ mark)

11. Differences between traditional houses and modern houses. (3marks)

- Most traditional houses were not partitioned into rooms, modern houses are partitioned.
- Traditional houses were made from locally available material, modern houses do not necessarily rely on local materials.
- Traditional houses did not require experts when building. Modern houses require use of experts when building.
- Traditional houses took a short time to build. Modern houses take a long time to complete building.
- Traditional houses need to be repaired constantly. Modern houses are permanent and do not need constant repair.
- Most traditional houses were circular in shape. Modern houses are built in many different shapes.

(Mark the first three responses. Each correct response 1 mark each. $3 \times 1 = 3$ marks)

12. Differences between a broom and a brush. (2marks)

- Brooms have a long handle. Brushes can have a long handle but most have a short handle.
- Brooms have soft bristles. Brushes have hard bristles.
- A broom is used in cleaning a dry surface. A brush is used to clean wet surfaces.

(Well differentiated, 1 mark for each. If difference is not brought out, no mark. 2x1= 2marks)

13. Methods used to finish wood.

(2marks)

- Painting
- Varnishing
- Laminating
- Polishing
- Staining

(Mark the method not the type of finished wood, therefore do not mark as correct responses like varnished wood or polished wood. Mark the first four responses. Correct response $\frac{1}{2}$ mark each. $4 \times \frac{1}{2} = 2$ marks)

14. Qualities of a well-groomed student.

(4marks)

- Has well kempt hair.
- Wears clean uniform.
- Keeps uniform in good repair, no torn collars or hanging hems or missing buttons.
- Keeps nails short.
- Wears clean, polished shoes.
- Tucks in their shirt or blouse.
- Uses polite language
- Lives amiably with other students.

(Mark the first four responses. Each correct response 1 mark each. $4 \times 1 = 4$ marks)

15. Common signs of food poisoning.

(1mark)

- Vomiting
- Severe abdominal pains
- Diarrhoea

- Fever

(Mark the first two responses. Each correct response ½ mark each. 2x ½ = 1mark)

16. Difference between:

(4marks)

- Suffocation and choking

Suffocation is lack of air due to insufficient supply of fresh air for example due to leaking gas. Choking is blocking of the airway for example due to an object that is stuck in the throat.

(Well differentiated, 1 mark for each. If difference is not brought out, no mark. 2x1= 2marks)

- Shock and fainting

Shock is a condition that leads to weak rapid pulse, irregular breathing, heavy sweating and mental confusion or unconsciousness, fainting on the other hand is unconsciousness caused by temporary inadequate supply of blood to the brain.

(Well differentiated, 1 mark for each. If difference is not brought out, no mark. 2x1= 2marks)

17. Ways of avoiding accidents in a flat/apartment.

(3marks)

- Ensure stair cases are well lit.
- Stairs should not be slippery.
- Balconies should be well secured with no large gaps between bars that children can fall through.
- Toddlers should not be left to wander out of the house alone.
- If there is a swimming pool, children should not be allowed to go swimming unsupervised.

(Mark the first three responses. Each correct response 1 mark each. 3x 1 = 3marks)

18. List **two** methods of moist cooking.

(1mark)

- Stewing
- Steaming
- Boiling

(Mark the first two responses. Each correct response $\frac{1}{2}$ mark each. $2 \times \frac{1}{2} = 1$ mark)

SECTION B (20 marks)

Answer **ALL** the sections of this question in the spaces provided

19. You are doing your weekly cleaning in school.

a) Procedure to follow when cleaning white canvas shoes for P.E.

(10marks)

- Collect all equipment and materials required ($\frac{1}{2}$)
- Hit the shoes against each other to remove dust ($\frac{1}{2}$)
- Remove laces and wash them in warm ($\frac{1}{2}$) soapy ($\frac{1}{2}$) water using friction method. Rinse them in warm water and finally cold. Put them out to dry. ($\frac{1}{2}$)
- Clean the shoes in warm ($\frac{1}{2}$) soapy ($\frac{1}{2}$) water by scrubbing them with a brush or maize cob ($\frac{1}{2}$) Clean both inside and outside. ($\frac{1}{2}$)
- Rinse them thoroughly in warm ($\frac{1}{2}$) water to remove all soap and dirt.
- Give a final cold rinse ($\frac{1}{2}$) to freshen the fabric.
- Hold the toe end and flick ($\frac{1}{2}$) them to remove excess water.
- Put them to dry in an inclined ($\frac{1}{2}$) position with the heel on the ground ($\frac{1}{2}$) on a clean surface in a warm place. ($\frac{1}{2}$)
- When partly dry apply ($\frac{1}{2}$) whitener using a sponge or piece of cloth.

- Turn the shoes so that the toe end rests on the ground. ($\frac{1}{2}$)
- When completely dry ($\frac{1}{2}$) remove them from the drying area and store them in a clean place. ($\frac{1}{2}$)
- Clear the working area. ($\frac{1}{2}$)

(Points well written in a flowing manner. 20x $\frac{1}{2}$ mark= 10marks)

b) Procedure for cleaning a classroom floor made of plain cement.

(6marks)

- Move the desks to the one side. ($\frac{1}{2}$)
- Sweep ($\frac{1}{2}$) the floor, collect rubbish and dispose of correctly. ($\frac{1}{2}$)
- Scrub ($\frac{1}{2}$) the floor with soapy ($\frac{1}{2}$) water starting from the furthest corner working toward the door. Clean a small portion ($\frac{1}{2}$) at a time and overlap ($\frac{1}{2}$) the parts.
- Rinse each portion ($\frac{1}{2}$) by wiping with a floor cloth ($\frac{1}{2}$) wrung out of clean water. Change the water if it gets too dirty.
- Dry the floor with a well wrung cloth ($\frac{1}{2}$)
- Leave for a while for the floor to dry completely.
- Re-arrange the desks ($\frac{1}{2}$)
- Clean the equipment and clear up. ($\frac{1}{2}$)

(Points well written in a flowing manner. 12 x $\frac{1}{2}$ mark= 6 marks)

c) Cleaning a plastic comb.

(4marks)

- Protect the working surface. ($\frac{1}{2}$)

- Remove hair from the comb and dispose of correctly (½)
- Clean the comb in warm (½) soapy (½) water using a soft brush (½)
- Rinse thoroughly in clean warm water (½) to remove all dirt and soap
- Wipe dry with a clean cloth/leave to dry on a clean surface (½)
- Clear up (½)

(Points well written in a flowing manner. 8 x ½ mark= 4 marks)

SECTION C (40 marks)

*Answer **ALL** the question in this section in the spaces provided*

20.

a) Qualities of a good floor cloth.

(6marks)

- Absorbent. This will allow the cloth to dry water on the floor.
- Colour fast. So that it does not shed colour and leave the floor with marks.
- Non fluffy. This ensures that the floor is not left with threads or fluffs that make it look dirty.
- Strongly woven. So that it does not cut/break when wringing to dry the floor.
- Strong fabric. To be able to withstand frequent washing.
- Large enough. To make cleaning easy. If it is too small it becomes tiring to clean and if too big it is cumbersome.

(Mark the first three responses. Correct point 1 mark, explanation 1 mark. 3 x 2 = 6marks)

b) Reasons why a student should take a bath daily.

(4marks)

- To remove sweat so that the skin is not sticky.
- To avoid bad odour from dirt that has stayed on the body.

- To keep off parasites like lice that are attracted by dirt.
- To be pleasant company to others. A dirty smelly student is unpleasant company and will be avoided by other students.
- To avoid infections that can be brought about by dirt such as scabies.
- To boost one's self esteem. No student wants to be isolated and such isolation may lead to low self-esteem.

(Mark the first four responses. Statement $\frac{1}{2}$ a mark, explanation $\frac{1}{2}$ a mark $4 \times 1 = 4$ marks)

c) Personal items that should not be shared and why they should not be shared.

(6marks)

- Toothbrushes. Can lead to transmission of colds and HIV.
- Handkerchiefs. One can pass the flu and colds to others.
- Face masks. Can lead to transmission of colds, flu, tuberculosis and COVID 19.
- Bath towels. Can cause transmission of skin diseases such as ringworms and scabies.
- Inner wear such as panties. Can lead to transmission of skin problems and sexually transmitted infections.
- Nail cutters/clippers. Can lead to transmission of HIV and Hepatitis B.

(Mark the first four. Correct personal item $\frac{1}{2}$ a mark, correct reason 1 mark. $4 \times 1\frac{1}{2} = 6$ marks)

d) Reasons why renting is a common method of providing family shelter. (4marks)

- It is easy for a family to move in case of employed parents when transferred from their duty station.

- Many people are not able to afford their own homes through buying or building and thus rely on renting.
- Renting does not require a huge amount of money as one pays in small amounts monthly so it is quite affordable in the short term.
- It allows for flexibility. One can move to a more expensive area when they get a higher income or to a cheaper area when times are hard. One can also move from a small house to a bigger one or a big one to a smaller one as the situation demands.
- When renting one does not have to bear the cost of major repairs and thus is less stressed by issues of house maintenance.
- In case of insecurity one can easily move to a safer area.
-

21.

a) Reasons why a school should be kept clean. (8marks)

- Ensures a healthy environment. A dirty environment attracts disease causing insects such as flies and mosquitoes that could spread diseases like malaria and cholera.
- Psychological satisfaction. One has peace of mind when in a clean house, there is no fear of getting unexpected guests or inspections.
- Cut down costs. If places in a school are left to accumulate dirt over a long time, it will require expensive cleaning agents and take a lot of time and energy to clean.
- Preservation of appearance. A school that is kept clean has a welcoming appearance and buildings and rooms are maintained in their original state.
- Prolong life of a surface. If dirt is left to accumulate, it destroys the surface and may require replacement. For example, badly stained toilets may need to be replaced to make them appealing.

- To avoid accidents. Some areas in a school if left dirty may lead to accidents for example bathrooms if not cleaned will become slimy and easily lead to falls.
- To avoid pests. Pests such as rats and mice are attracted by dirt. These can be very destructive because they can destroy food in the kitchen store and also destroy students' clothes.

(Mark the first four responses. Correct statement 1 mark, explanation 1 mark 4 x 2 = 8marks)

b) Reasons for cooking food.

(6marks)

- To kill germs. Foods such as beef, chicken and fish easily attract micro-organisms and if not cooked may lead to food poisoning.
- To make food palatable. Some foods such as beans are not edible when raw. They have an unpleasant flavour and need to be cooked to make them get a good flavour.
- To make food soft. Some foods such as maize are hard and difficult to eat when raw but get soft when cooked.
- To give food flavour. During cooking some foods develop a good flavour for example meat develops a very nice aroma and flavour when cooked.
- To preserve food. Some foods will easily go bad if left raw due to enzymes and chemical changes in the food. Cooking destroys the enzymes that would make the food go bad. This allows the food to keep longer.
- To improve appearance. Some foods such as liver or raw egg have an unpleasant appearance but this is improved on cooking making them attractive.

(Mark the first four responses. Correct reason ½ a mark, example 1 mark. 4 x ½ = 6marks)

c) Personal hygiene rules that should be observed when preparing food.

(4marks)

- Keep hair covered to avoid having it fall into food.
- Trim nails short so that they do not hold dirt that could contaminate food.
- Wash hands before touching food and after visiting the toilet.
- Wear a clean apron when cooking to cover clothes that have been worn during the day and also to protect the clothes.
- Do not lick fingers or spoons used in cooking and return them back to the pot.
- Do not sneeze or cough over food when cooking.
- People suffering from infectious diseases or open wounds on their hands should not prepare food.

(Mark the first four responses. Correct point 1 mark each. $4 \times 1 = 4$ marks)

d) Difference between misuse and abuse of drugs. (2marks)

- Deviation from the basic instructions regarding use of a medicine is misuse of drugs. This misuse if prolonged can lead to dependency on the medicine which would then be abuse of drugs.
- Sharing medicine with another person in the belief that the medicine you have can cure their illness is misuse and the one receiving the medicine is abusing drugs.

(Mark the first response. Well differentiated 1 mark for each $2 \times 1 = 2$ marks)

**KENYA CERTIFICATE OF SECONDARY EDUCATION
KISWAHILI FORM ONE
MIDTERM 2 SET 2 2023 EXAM**

NAME: _____ STREAM _____ DATE: _____

Maagizo:

1. Jibu maswali yote.
2. Majibu yote yaandikwe katika nafasi ulizoachiwa katika karatasi hii ya maswali
3. Majibu yote **lazima** yaandikwe kwa lugha ya Kiswahili
4. Karatasi hii ina kurasa 9 zilizopigwa chapa
5. **Watahiniwa ni lazima wahakikishe kuwa kurasa zote za karatasi hii zimepigwa chapa sawasawa na kuwa maswali yote yamo.**

Kwa Matumizi ya Mtihani Pekee.

Swali	Upeo	Alama
1. UFAHAMU	15	
2. MATUMIZI YA LUGHA	40	
3. ISIMUJAMII	10	
4. FASIHI SIMULIZI	15	
Jumla	80	

1. UFAHAMU

Soma makala yafuatayo kisha ujibu maswali.

Nairobi, jiji kuu la Kenya ,ni jiji la maajabu na mastaajabu chungu nzima.Nadhari ya mtu anayewahi kuingia katika jiji hili kwa mara ya kwanza huvutiwa na huo msheheneko wa majumba ya fahari, marefu ajabu, kiasi cha minazi mitano-sita ,iliyounganishwa kuelekea juu. mbinguni.

Jumba linalowavutia watu wengi ni lile Ia makongamano ya kimataifa Iitwalo kwa Kiingereza *Kenyatta International Conference Centre* Jumba hili,hadi miaka michache iliyopita, ndilo lililokuwa refu zaidi mjini. Jumba lenyewe- lina ghorofa ishirini na tisa hivi ,usipohesabu hilo pambo kama kofia kileleni mwake,linalojulikana kama mwavuli. Hata hivyo ,miaka michache iliyopita jengo hili lilipitwa urefu na Mnara wa Nyakati (Times Tower).Mnara huo hasa ni jumba linaloafiki lakabu yake ya kikwaruza mawingu. Jumba hili lina ghorofa zisizopungua thelathini na mbili.

Mbali na majumba haya mawili ,kuna majumba mengine zaidi ya ishirini katikati ya jiji ambayo,japo mengine ni mafupi kiasi ,yana maumbo ya kustaajabisha kweli kweli.Hebu zingatia mwenyewe jumba Iitwalo “mdomo wa kengele” au “bell —bottom” ambalo ni vioo vitupu ,toka chini hadi juu.Fauka ya ,umbo lake ni Ia kipekee ulimwenguni kote. Jumba hili lina kama miguu, kisha kiuno mithili ya kinu hivi japo si mvingo.Linapaa juu, mbali sana, likichukua umbo pana kuliko lilivyo chini;umbo la kifua pana kama kengele. Halafu rudia barabara; hizi hazina hesabu katikati ya jiji na ni pana, tena safi sana.Magari yanayotumia barabara hizi ni kochokocho,ya kila aina na yanashindania nafasi.

Ajabu kubwa ya Nairobi hata hivyo ni idadi ya watu. Hakuna hasa anayejua idadi kamili ya watu wa Nairobi ,lakini sio kupiga chuku ninaposema kwamba ,hasa nyakati za kuelekea kazini asubuhi ,kwenda kula chakula cha mchana ,kuelekea nyumbani baada ya kazi na kuvuka barabara wakati wa msongamano, watu hukanyagana .Mtu anayesema kwamba watu wa Nairobi ni wengi kama chungu ,au kama mchanga wa ufuo wa bahari, hatii chumvi.

Watu wa Nairobi, kwa tabia na mavazi, si kama watu wa kwingineko nchini Kenya .Watu hawa huvalia nadhifu sana.Wanawake ni warembo ajabu na hutengeneza nywele zao mithili ya hurulaini peponi.Wengi huvaa suruali ndefu. Kucha zao na midomo yao hupaka rangi maridadi sana. Huzungumza Kiswahili na Kiingereza takriban wakati wote.Wanawake wengi ajabu huendesha magari yao wenyewe ,jambo ambalo litakushangaza mara tu uingiapo jijini ,hasa kama ulilelewa ukidhani maskani mwafaka ya wanawake ni jikoni peke yake;yaani kuzingatia ile falsafa kuwa “kuoa ni kupata jiko”.Wanaume nao huvaa suti safi ,maridadi na shingoni wamefunga tai stahiki yao.Wanaume hao huendesha magari na kuyaegesha karibu na afisi zao.Huingia afisini mwao kwa maringo na madaha, huku funguo za magari yao zikining’inia vidoleni. Hawa nao husema na Kiingereza kupitia puani, utadhani ni waingereza hasa.

Kwa upande mwingine ,watoto ni nadhifu kweli kweli hasa watoto wa shule.Hawa huvalia sare zilizofuliwa na kunyooshwa vizuri kwa pasi. Wake kwa waume ,shingoni huvalia tai. Watoto wa shule za Nairobi huongea Kiswahili, Kiingereza na *sheng*, ambayo ni msimu wao walioubuni.Msimu huu ni mchanganyiko wa Kiswahili,Kingereza na msamiati mchache wa lugha nyingine za Wakenya zisemwazo jijini Nairobi na vitongojini mwake.

Kwa jumla ,watu wote wa Nairobi hutembea kasi sana.Hawana hata wakati wa kutembea polepole na kuangazaangaza huku na huko.Iwapo wewe ni mgeni jijini,ukizubaa utapigwa kumbo na waendeleo na hamsini zao kama vile hapakutokea jambo.Hili linapojiri, usidhani limefanywa maksudi.La, hasha.Ni vile tu kwamba Wanairobi hawana muda wa kupoteza.

Maswali

(a) Toa kichwa mwafaka kwa makala haya (ala 1)

.....
.....

(b) (i) Tambua maajabu matatu yanayopatikana katika jiji la Nairobi. (ala 3)

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

(ii) Watu wa Nairobi wanajipenda kweli kweli, Fafanua (ala 3)

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

(c) (i) Kwa maoni yako, kwa nini majumba ya jiji la Nairobi yana majina au lakabu za Kiingereza? (ala 1)

.....
.....

(ii) Unafikiri ni kwa nini hasa wanawake wa Nairobi wanaonekana nadhifu? (ala 2)

.....

.....

.....

.....

(d) Watu wa Nairobi hukanyagana wakati upi ? (ala 2)

.....

.....

.....

(e) Eleza maana ya maneno na tamathali za usemi zifuatazo. (ala 3)

(i) Nadhari

.....

.....

(ii) Linaloafiki

.....

.....

(iii) Waendeleo na hamsini zao

.....

.....

MATUMIZI YA LUGHA (ALAMA 40)

a. Andika vitamkwa vyenye sifa zifuatazo: (alama 2)

i) Kikwamizo cha meno.....

ii) kiyeyusho cha midomo.....

b. Taja vigezo vitatu vya kuainisha irabu (alama 3)

.....

.....

.....

.....

c. Onyesha vipashio vya lugha kuanzia kidogo hadi kikubwa (alama 2)

.....

.....

d. i). Shadda ni nini? (alama 1)

ii) Tia shadda katika maneno yafuatayo: (alama 2)

Mbono (mti)

Barabara (sawasawa)

e. Taja ngeli za nomino zifuatazo (alama 2)

i) Ujinga

ii) Mashine

iii) Sukari

iv) Mti

f. Tunga sentensi ukitumia neno kisabuni kama: (alama 2)

i) Nomino

ii) kielezi

g. Bainisha virai katika sentensi ifuatayo (alama 3)

Mkulima stadi alilima vizuri kando ya mto.

h. a. Kiambishi ni nini? (alama 1)

.....
.....
b. Bainisha viambishi katika **Niliyemchorea**

(alama 3)

i. Andika ukubwa wa maneno yafuatayo:

(alama 2)

i) Mbuzi.....
.....

ii) Kisu.....
.....

j. Tunga sentensi moja moja kuonyesha matumizi ya alama za kuafikisha ulizopewa.

(alama 3)

a) Kistari kifupi

.....
.....
b) Ritifaa

.....
.....
c) Herufi kubwa

.....
.....
k. Andika upya sentensi zifuatazo katika hali ya kutendewa.

(alama 2)

i) Tuju alivua samaki wengi.

.....
.....
ii) Mwalimu amempa mwanafunzi kitabu.

.....
.....
l. Changanua kwa mistari

Askari jela atamsindikiza mshukiwa mahakamani

(alama 4)

m. Sahihisha sentensi zifuatazo.

i) Ile ni sungura ya nani? (alama

.....

ii) Mwanafunzi ambaye aliyechelewa ameadhibiwa. (alama

.....

n. Yakinisha sentensi ifuatayo kwa udogo. (alama 2)

i) Nyumba yenyewe haikujengwa karibu na mto.

.....

.....

o. Andika kwa umoja. (alama 1)

Nyaraka zilizoandikwa zimepokelewa

.....

.....

p. Andika kinyume cha sentensi hii. (alama 2)

Mama aliketi baba alipoondoka.

.....

3. ISIMU JAMII

a) Eleza sifa tano za lugha. (alama 5)

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

b) Lugha ina umuhimu gani katika jamii yako?

(alama 5)

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

5. FASIHI SIMULIZI

a) Fafanua maana ya sanaa.

(Alama 2)

.....

.....

b) Taja mifano mingine mitatu ya sanaa mbali na fasihi.

(Alama 3)

.....

.....

.....

d) Eleza tofauti sita kati ya fasihi simulizi na fasihi andishi.

(alama 6)

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

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

e) Fafanua vipera vifuatavyo vya fasihi simulizi (alama 4)

i. Hekaya.....

.....
.....

ii. Visasili.....

.....
.....

iii. Hurafa.....

.....
.....

iv. Mighani.....

.....
.....

KILA LA HERI



KENYA CERTIFICATE OF SECONDARY EDUCATION

MATHEMATICS FORM ONE

MIDTERM 2 SET 2 2023 EXAM

NAME: _____ STREAM _____ DATE: _____

Instructions

- (a) Write your name, admission number, school and class in the spaces provided above.
- (b) Sign and write the date of examination in the spaces provided above.
- (c) This paper consists of **two** sections; **Section I** and **Section II**.
- (d) Answer **all** the questions in **Section I** and **all** the questions from **Section II**
- (e) **Show all the steps in your calculations, giving your answers at each stage in the spaces provided below each question**
- (f) Marks may be given for correct working even if the answer is wrong.
- (g) Mathematical tables may be used, except where stated otherwise.
- (h) **This paper consists of 10 printed pages.**
- (i) **Candidates should check the question paper to ascertain that all the pages are printed as indicated and that no questions are missing**

For Official Use Only

Section I

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

Section II

17	18	19	20	21	Total

Grand Total

--

SECTION I (50 Marks)

Answer ALL the questions in this section

1. Evaluate:

(3 marks)

$$\frac{14 \div \left(\frac{1}{3} \text{ of } 5\frac{1}{4}\right) - \left(3\frac{1}{4} \times 1\frac{1}{3}\right)}{\left(\frac{3}{5} \times 6\frac{1}{4}\right) + 1\frac{1}{2}}$$

2. (a) Express 900 and 3136 as products of their prime factors

(1 mark)

(b) Hence evaluate leaving your answer in the form $\frac{p}{q}$ where p and q are natural numbers. (2 marks)

$$\sqrt{\frac{900}{3136}}$$

3. The GCD and LCM of three numbers are 24 and 5040 respectively. Given that the numbers are 48, 72 and P , use factorization to find the least possible value of P . (3 marks)

4. The sum of 3 133 792, 5 293 476, 7 672 598 and 4 257 348 is rounded off to the nearest 10,000. Calculate the difference between the actual sum and the rounded figure. (3 marks)

5. Without using a mathematical table or a calculator, evaluate: (3 marks)

$$\frac{(-8) \times 4 + 156 \div 2 \text{ of } (-43 + 30)}{(-3 - (-8) \times 2 + 6)}$$

6. Fifteen tractors, each working eight hours a day, take eight days to plough a piece of land. How many days will it take 24 tractors, each working 10 hours a day, to plough the same piece of land? (2 marks)

7. Using the number line work out $(+2) - (+7)$. (2 marks)

8. An 887.04 kg culvert is made of a hollow cylindrical material with outer radius of 77 cm and an inner radius of 63 cm. It crosses a road of width 6 m. Determine the density of the material used in its construction in kg/m^3 . Use $\pi = \frac{22}{7}$. (4 marks)

9. Show that the number 87 534 216 is divisible by both 4 and 11 (3 marks)

10. Simplify the following expression (3 marks)

$$\frac{2mx + 3px - 2mk - 3pk}{x - k}$$

11. Mary arranged all prime numbers less than ten in descending order to get a number. Mary also arranged all perfect square less than ten in ascending order to get a number. Find the total value of the second digit in the difference between the numbers (3 marks)
12. The number of cattle, goats and sheep in farm are in the ratio 6: 2: 3 respectively. The total number of animals in the farm is 1 452. The animals are to be reduced by 25%, 50% and 33 $\frac{1}{3}$ % respectively. How many animals will remain in the farm? (3 marks)
13. In a bank customers may withdraw cash through one of the three tellers at the counter. On average, one teller takes 3 minutes, the others take 5 minutes and 6 minutes respectively to serve a customer. If the three tellers start to serve the customers at the same time, find the shortest time it takes to serve 210 customers. (4 marks)

14. In 2009 the population of India was three hundred and forty five million, six hundred and seventy eight thousand, nine hundred and three while that of China was seven hundred and sixty nine million, three hundred and one thousand, eight hundred and fifty six. A new census carried out seven years later revealed that India's population had increased by a third and that of China by a quarter. Calculate the sum of the population of the two countries in 2016. (4 marks)

15. Express the recurring decimal $5.7\dot{2}$ as a fraction in the form $\frac{a}{b}$ where a and b are whole numbers hence evaluate $(b - a)$. (3 marks)

16. Use square and square roots tables only to evaluate. (4 marks)

$$(0.04478)^2 + \sqrt{0.0009256}$$

SECTION II (50 Marks)

Answer ALL the questions in this section

17. UK Sacco operates an express minibus between Bondo and Kisumu with a passenger capacity of 32 exclusive of the driver and conductor. The fare between Bondo and Kisumu is Kshs. 250 one way. The minibus makes 2 round trips between the two towns daily. The driver and conductor are paid daily allowances of Kshs. 1 500 and 1 000 respectively. Fuel consumption of the minibus per day is Kshs. 5 000 and a further Kshs. 16 000 is set aside for monthly for insurance and maintenance. The rest is the profit.
- (a) Find the amount of money the minibus raises in one day when full 65% in every trip. (2 marks)

- (b) In a given month, the minibus operated for only 20 days and was averagely 80% full in every trip.
Calculate:
- (i) The amount raised that month (2 marks)
- (ii) The profit realized in that month (3 marks)
- (c) In a given day, the minibus was hired by an organization at a rate of Kshs. 3 500 per hour and it worked for 6 hours. The fuel consumption during the hire was Kshs. 6 800. The driver and conductor were paid the usual daily rates. Calculate the profit realized by the bus on this day. (3 marks)

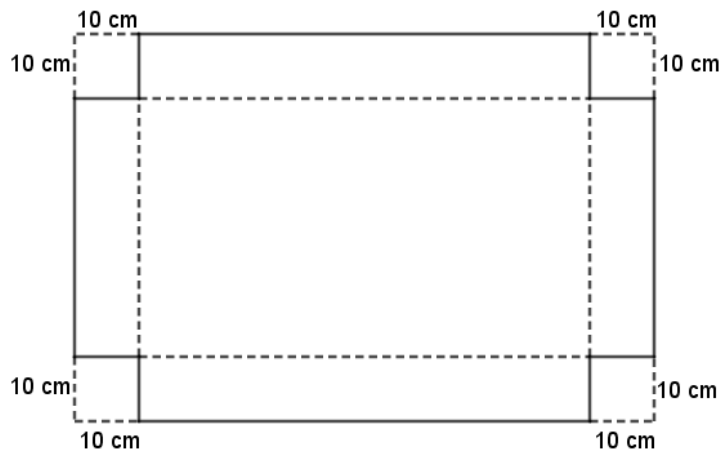
18. Terry and Maggy entered into a business partnership in which they contributed Kshs. 120 000 and Kshs. 150 000 every year respectively. After one year, Jabali joined the business and contributed Kshs. 90 000.

(a) Calculate the ratio of their investment after 3 years of business. (3 marks)

(b) It was agreed that 30% of the profits after 3 years be used to cater for the cost of running the business, while the remaining would be shared proportionally. Calculate each person's share, if the profit made after three years was Kshs. 1 870 000 (4 marks)

(c) If each of them invested their shares back in the business, find their new individual investments at the beginning of the fourth year (3 marks)

19. The figure below shows a metallic sheet of dimensions 51.5 cm by 36.8 cm. Equal squares of side 10 cm are cut from each of the four corners. The remaining sheet is then folded to form a tank



(a) Calculate:

(i) the dimensions of the tank formed

(1 marks)

(ii) the capacity of the tank in litres correct to 1 decimal place.

(4 marks)

(b) Find the cost of painting the tank on the outer surfaces at a rate of Kshs. 75 per square centimetres. Give the answer to the nearest Kshs. 1 000.

(5 marks)

20. In the year 2010, the price of a sofa set was Kshs. 18 500.

(a) Calculate the amount of money received from the sale of 230 such sofa sets. (2 marks)

(b) In 2012, the price of each sofa sets sold increased by 15% while the number of sets sold decreased by 20%.

(i) Calculate the percentage change in the amount received from the sales. (6 marks)

(ii) If at the end of the year 2012, the price of each sofa set changed in the ratio 5: 4, calculate the price of each sofa set in the year 2013. (2 marks)

21. (a) A watch which loses 20 seconds every hour was set to read the correct time at 0945 hours on Monday. Find the time, in 12 hour clock system that the watch will show on Thursday at 2145 hours
(4 marks)

(b) Departure times of a commuter train from various termini are shown in the table below

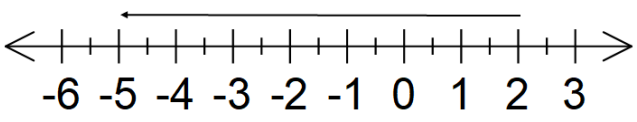
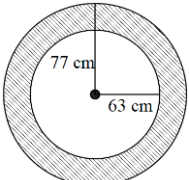
Terminus	Arrival Time	Departure Time
A	--	11.23 a.m.
B	11.28 a.m.	11.35 a.m.
C	11.52 a.m.	12.04 p.m.
D	12.12 p.m.	12.27 p.m.
E		--

- (i) If the train took 47 minutes from D to arrive at E, calculate the overall time that it took to travel from A to E. (3 marks)

- (ii) Calculate the total time that the train took in the breaks within the termini. (3 marks)

MATHEMATICS (Alternative A)
FORM 1 (ONE)
MARKING SCHEME

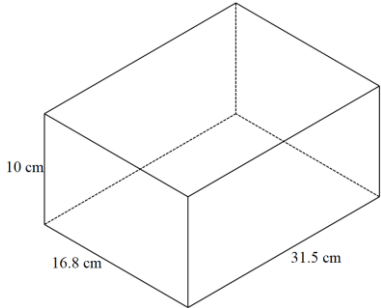
NO.	WORKING	MARKS	COMMENTS
1.	$14 \div \left(\frac{1}{3} \times \frac{21}{4} \right) - \left(\frac{13}{4} \times \frac{4}{3} \right)$ $14 \div \frac{7}{4} - \frac{13}{3} = 14 \times \frac{4}{7} - \frac{13}{3} = 8 - \frac{13}{3} = \frac{11}{3}$	M1	Numerator evaluated i.e., $\frac{11}{3}$ seen
	$\frac{3}{5} \times \frac{25}{4} + \frac{3}{2} \rightarrow \frac{15}{4} + \frac{3}{2} = \frac{21}{4}$	M1	Numerator evaluated i.e., $\frac{11}{3}$ seen
	<p>Hence $\frac{11}{3} \div \frac{21}{4} = \frac{11}{3} \times \frac{4}{21} = \frac{44}{63}$</p>	A1	
2.	<p>(a) $900 = 2^2 \times 3^2 \times 5^2$ $3136 = 2^6 \times 7^2$</p>	M1	900 and 3136 as products of prime factors
	<p>(b) Value</p> $\sqrt{\frac{2^2 \times 3^2 \times 5^2}{2^6 \times 7^2}} = \sqrt{\frac{2^{2 \div 2} \times 3^{2 \div 2} \times 5^{2 \div 2}}{2^{6 \div 2} \times 7^{2 \div 2}}}$ $\frac{2 \times 3 \times 5}{2^3 \times 7} = \frac{3 \times 5}{2^2 \times 7} = \frac{15}{28}$	M1	
3.	<p>GCD $\rightarrow 24 = 2^3 \times 3$ LCM $\rightarrow 5040 = 2^4 \times 3^2 \times 5 \times 7$</p>	M1	GCD and LCM in prime factors
	<p>$48 = 2^4 \times 3$ $72 = 2^3 \times 3^2$</p>	M1	Prime factors of 48 and 72
	<p>$P = 5 \times 7 = 35$</p>	A1	35 seen
		3	

NO.	WORKING	MARKS	COMMENTS
4.	$\begin{array}{r} 3\ 133\ 792 \\ 5\ 293\ 476 \\ 7\ 672\ 598 \\ \underline{4\ 257\ 348+} \\ 20\ 357\ 214 \end{array}$ <p>Round off figure = 20 360 000</p> $20\ 360\ 000 - 20\ 357\ 214$ $2\ 786$	M1 M1 A1 3	
5.	$\begin{array}{l} -32 + 156 \div (2 \times -13) \\ -32 + 156 \div -26 \\ -32 + (-6) = -38 \\ \\ -3 - (-16) + 6 \\ -3 + 16 + 6 = 19 \\ \\ \frac{-38}{19} = -2 \end{array}$	M1 M1 A1 3	Numerator evaluated, -38 seen Denominator evaluated, 19 seen
6.	$\frac{15}{24} \times \frac{8}{10} \times 8$ $= 4 \text{ days}$	M1 A1 2	
7.	$(+2) - 7$  $(+2) - 7 = -5$	B1 B1 2	Number line Solution
8.	 $V = \left(\frac{22}{7} \times 77 \times 77 - \frac{22}{7} \times 63 \times 63 \right) \times 600$ $V = \frac{3,696,000}{1,000,000} = 3.696 \text{ m}^3$ $\text{Density} = \frac{887.04}{3.696} = 240 \text{ kg/m}^3$	M1 A1 M1, A1	

NO.	WORKING	MARKS	COMMENTS
		4	
9.	87 534 216 is divisible by 4 because the last 2 digits (16) are divisible by 4 $(8 + 5 + 4 + 1) - (7 + 3 + 2 + 6)$ $18 - 18 = 0 \rightarrow 87\ 534\ 216$ is divisible by 11	B1 B1 B1	
		3	
10.	$\frac{x(2m + 3p) - k(2m + 3p)}{x - k}$ $\frac{(x - k)(2m + 3p)}{x - k}$ $2m + 3p$	M1 M1 A1	
		3	
11.	7532 and 149 $7532 - 149$ 7383 $8 \times 10 = 80$	B1 M1 A1	
		3	
12.	Total ratio $\rightarrow 6 + 2 + 3 = 11$ Remaining cattle $\rightarrow \frac{6}{11} \times 1452 \times \frac{75}{100} = 594$ Remaining goats $\rightarrow \frac{2}{11} \times 1452 \times \frac{50}{100} = 132$ Remaining sheep $\rightarrow \frac{2}{11} \times 1452 \times \frac{66\frac{2}{3}}{100} = 264$ $594 + 132 + 264 = 990$	M1 M1, A1	Expressions for all the remaining animals
		3	
13.	LCM of 3, 5 and 6 = 30 $\frac{30}{3} + \frac{30}{5} + \frac{30}{6}$ $10 + 6 + 5 = 21$ $21 \rightarrow 30$ minutes 210 customers $\rightarrow \frac{210 \times 30}{21} = 300$ minutes	M1 M1 M1, A1	LCM of 3, 5 and 6 Customers served for 30 minutes
		4	
14.	$1\frac{1}{3} \times 345\ 678\ 903 = 460\ 905\ 204$ $1\frac{1}{4} \times 769\ 301\ 856 = 961\ 627\ 320$	M1 M1	

NO.	WORKING	MARKS	COMMENTS
	460 905 204 + 961 627 320 1 422 532 524	M1 A1 4	
15.	Let $a = 5.72222 \dots$ $100a = 572.2222 \dots$ <u>$10a = 57.2222 \dots$</u> $90a = 515$ $a = \frac{515}{90}$ $b - a = 515 - 90 = 425$	M1 A1 M1, A1 4	
16.	$(0.04478)^2 = 4.478^2 \times 10^{-4}$ $(0.04478)^2 = 20.052 \times \frac{1}{10000} = 0.00020052$ $\sqrt{0.0009256} = \sqrt{92.56} \times \sqrt{10^{-6}}$ $\sqrt{0.0009256} = 9.6208 \times \frac{1}{1000} = 0.0096208$ $0.00020052 + 0.00962208 = 0.00982132$	M1 M1 M1, A1 4	
17.	(a) Daily amount at 65% per trip $32 \times \frac{65}{100} \times 250 \times 2 = 10\,400$ (b) 20 days at 80% full per trip (i) Amount $32 \times \frac{80}{100} \times 250 \times 2 \times 20 = 256\,000$ (ii) Profit realized $(1500 + 1000 + 5000) \times 20 + 16000$ 148 000 $256\,000 - 148\,000 = 108\,000$ (c) Bus on hire $3\,500 \times 6 = 21\,000$ $6\,800 + 1\,500 + 1\,000 = 9\,300$ $21\,000 - 9\,300 = 11\,700$	M1, A1 M1, A1 M1 M1, A1 M1 M1 A1 10	Total monthly expenses incurred

NO.	WORKING	MARKS	COMMENTS
18.	<p>(a) Ratio of investment after 3 years Terry $\rightarrow 3 \times 120\,000 = 360\,000$ Maggy $\rightarrow 3 \times 150\,000 = 450\,000$ Jabali $\rightarrow 2 \times 90\,000 = 180\,000$</p> $\frac{360\,000}{90\,000} : \frac{450\,000}{90\,000} : \frac{180\,000}{90\,000}$ <p>4: 5: 2</p> <p>(b) Shares $\frac{70}{100} \times 1\,870\,000 = 1\,309\,000$</p> <p>Terry $\rightarrow \frac{4}{11} \times 1\,309\,000 = 476\,000$ Maggy $\rightarrow \frac{5}{11} \times 1\,309\,000 = 595\,000$ Jabali $\rightarrow \frac{2}{11} \times 1\,309\,000 = 238\,000$</p> <p>(c) Investment by fourth year Terry $\rightarrow 360\,000 + 476\,000 = 836\,000$ Maggy $\rightarrow 450\,000 + 595\,000 = 1\,045\,000$ Jabali $\rightarrow 180\,000 + 238\,000 = 418\,000$</p>	<p>M1</p> <p>M1</p> <p>A1</p> <p>B1</p> <p>B1</p> <p>B1</p> <p>B1</p> <p>B1</p> <p>B1</p> <p>B1</p> <p>10</p>	

NO.	WORKING	MARKS	COMMENTS
19.	<p>(a) (i) Dimensions of the tank Length $\rightarrow 51.5 - 2 \times 10 = 31.5$ cm Width $\rightarrow 36.8 - 2 \times 10 = 16.8$ cm Height $\rightarrow 10$ cm</p> <p>(ii) Capacity Volume = $31.5 \times 16.8 \times 10 = 5\,292$ Capacity = $\frac{5\,292}{1\,000} = 5.292 \cong 5.3$ litres</p> <p>(b) Painting</p>  <p>S.A = $(2 \times 31.5 \times 10) + (2 \times 16.8 \times 10) + (31.5 \times 16.8)$ S.A = $630 + 336 + 529.5 = 1\,495.2$ cm²</p> <p>$1\,495.2 \times 75 = 112\,140$ = 113 000</p>	<p>B1</p> <p>M1, A1</p> <p>M1, A1</p> <p>M1</p> <p>A1</p> <p>M1, A1</p> <p>B1</p> <p>10</p>	

NO.	WORKING	MARKS	COMMENTS
20.	<p>(a) $18\,500 \times 230 = 4\,255\,000$</p> <p>(b) Percentage change Price $\rightarrow \frac{115}{100} \times 18\,500$ $= 21\,275$</p> <p>Sofa sets $\rightarrow \frac{80}{100} \times 23$ $= 184$</p> <p>$21\,275 \times 184 = 3\,914\,600$</p> <p>$\frac{3\,914\,600 - 4\,255\,000}{4\,255\,000} \times 100\%$ $= -8\%$ Hence a reduction/fall of 8%</p> <p>$\frac{4}{5} \times 21\,275 = 17\,020$</p>	<p>M1, A1</p> <p>M1</p> <p>M1</p> <p>M1</p> <p>M1</p> <p>A1</p> <p>B1</p> <p>M1, A1</p> <p>10</p>	
21.	<p>(a) New Time Monday – Thursday 0945hrs = $24 \times 3 = 72$hrs 2145 hrs. – 0945 hrs. = 12 hrs. Total time = $72+12=84$ hrs.</p> <p>$84 \times \frac{20}{60} = 28$ minutes</p> <p>2145 hrs – 28 minutes 2117 hrs. 2117 hrs. – 1200 hrs = 9.17 p. m.</p> <p>(b) Travel Timetable (i) Overall time 12.27 p.m. +47 = 1314 hrs</p> <p>1314 hrs – 11.23 a. m.</p> <p>1 hour 51 minutes</p> <p>(ii) Break times 11.35 a.m. – 11.23 a.m. =12 minutes 12.04 p.m. – 11.52 p.m. = 12 minutes 12.27 p.m. – 12.12 p.m. = 15 minutes</p> <p>12+12+15=39 minutes</p>	<p>M1</p> <p>M1</p> <p>M1</p> <p>A1</p> <p>M1</p> <p>M1</p> <p>A1</p> <p>M1</p> <p>M1, A1</p> <p>10</p>	

KENYA CERTIFICATE OF SECONDARY EDUCATION

PHYSICS FORM ONE

MIDTERM 2 SET 2 2023 EXAM

NAME: _____ STREAM _____ DATE: _____

INSTRUCTIONS TO CANDIDATES

- I. Answer all questions.
- II. All answers should be written in the space provided in this booklet.
- III. Show all your working

Maximum score	Students score
80	

Attempt ALL questions.

1. State any **TWO** laboratory safety rules (2mk)

.....

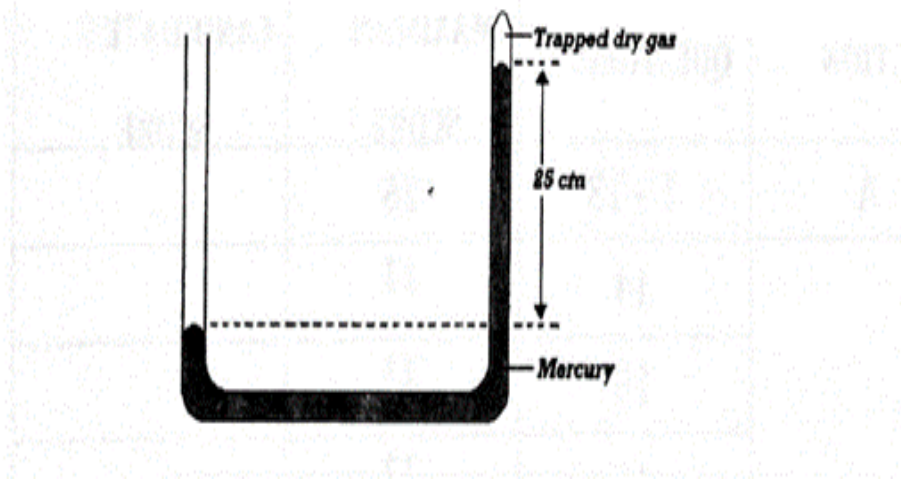
.....

.....

2. The diagram below shows a mercury manometer . Some dry gas is present in the closed space.

If the atmospheric pressure is 105,000 pascals and density of mercury is 13600Kg m^{-3} ,

determine pressure of the gas (take $g= 10\text{ N/kg}$) (4 mks)



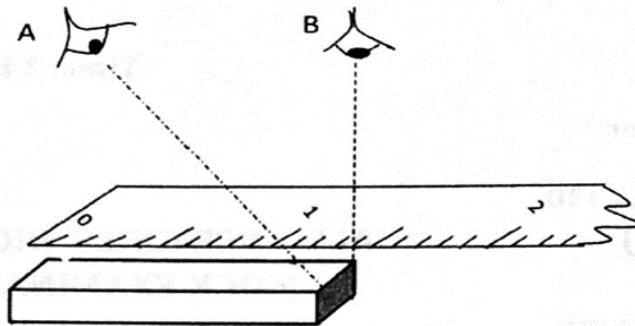
.....

.....

.....

.....

3. Two students A and B measured the length of a block of wood by placing their eyes at different positions as shown below. Use the diagram to answer questions (i) and (ii)

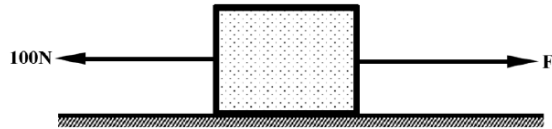


- (i) State the reading as measured by student with eye position at A (1 mk)
-
- (ii) State the reading as measured by the student with eye position at B (1 mk)
-

4. A rubber balloon filled with gas is released from a high-flying aeroplane. State and explain what happens to its volume as it falls. (2 mk)

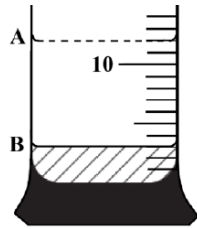
.....
.....
.....

5. Two horizontal strings are attached to a block, resting on a frictionless surface, as shown below. A force of 100N pulls on one string. The block does not move. Find the value of force, F on the other string. (1 mk)



.....
.....

6. A stone of mass 18.0g was immersed into a liquid and then removed. The figure below shows initial liquid level ,A, when the stone was fully immersed and the final level, B, after the stone has been removed. Determine the density of the stone. (3 mk)



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

7. Explain what is observed when the temperature of water, which has pollen grains suspended in it, is raised. (2 marks)

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

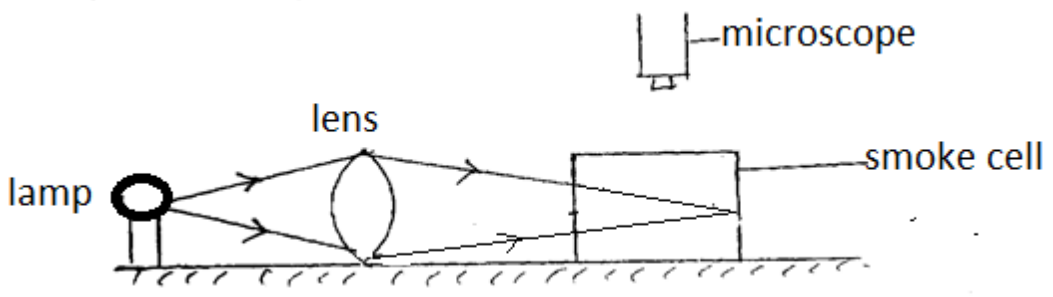
8. A form one student observed that when mercury is put into a glass it does not wet the glass. Explain the observations made by the girl. (2 marks)

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

9. In using the lift pump to raise water from a bore hole. It is observed that practically the height the water raised cannot be 10m and more. Give two reasons for this observation. (2 marks)

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

10. Brownian motion of smoke particles can be studied by using the apparatus shown in the figure below .To observe the motion, some smoke is closed in the smoke cell and then observed through the Microscope



Explain the role of the lens and microscope in the experiment.

(i) Lens (1 mark)

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

i) Microscope (1 mark)

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

(b) State and explain the nature of the observed motion of the smoke particles. (3 marks)

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

11. Determine the minimum pressure exerted by a block measuring 0.2m by 0.06m by 0. 1m.

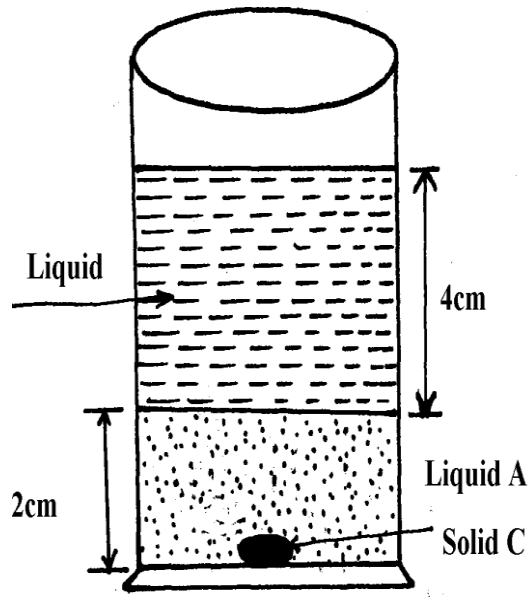
If the mass of the block is 6kg.(Take $g=10\text{N/kg}$) (3mks)

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

12. Two immiscible liquids are poured in a container to the levels shown in the diagram

below. If the densities of the liquids **A** and **B** are 1g/cm^3 and 0.8g/cm^3 respectively, find

the pressure acting upon solid **C** at the bottom of the container due to the liquids (4 mk)



.....

13. Briefly explain how physics is related to biology (1mk)

.....

14) State any **THREE** effects of a force (3 mk)

.....

15) Describe the method you would use to measure the circumference of a cylinder using a thread and a meter rule (4mk)

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

16) A sphere of diameter 3.0 cm is moulded into a thin uniform wire of diameter 0.2mm
calculate the length of the wire in meters (4mk)

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

17) State any three differences between mass and weight (3mk)

Mass	Weight
I.	
II.	
III.	

18) 300 cm³ of fresh water of density 1000kg/m³ is mixed with 100cm³ of sea water density
1030kg/m³.calculate the density of mixture (4 marks)

.....
.....

.....
.....
19) Define force and state its SI unit (2 marks)

.....
.....
20) State any 2 types of force (2 marks)

.....
.....
21) Distinguish between a scalar and vector quantity giving an example of each (3 marks)

.....
.....
22) State any two factors affecting the surface tension (2 marks)

23) A man has a mass of 70kg. Calculate
a) His weight on earth where the gravitational strength is 10 N/kg (2 marks)

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

b) His weight on moon where the gravitational strength is 1.7 N/kg (2 marks)

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

24) A body weighs 400N in water. If the up thrust force is 20N.calculate its weight in air (2mk)

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

25) Explain briefly why a razor blade floats in water and when soap solution is carefully added to the water it sinks (2 mk)

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

26) Explain the following behavior of molecules.

a) When it is raining it is advisable not to touch a canvas tent from inside (2mk)

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

b) Water rises up in narrow tubes but Mercury which is also a liquid falls in a narrow tubes to level below the outside surface? (2mk)

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

27) a) (i) state two precautions to be taken when using a density bottle. (2 mks)

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

(iii) The mass of a density bottle of volume 50cm^3 is 10g when empty. Spherical balls are poured into the bottle and the total mass is 60g . Water is then added into the balls till the bottle is full. If the total mass of the bottle and its contents is 90g , calculate density of the spherical balls. (4 mks)

.....

.....

.....

.....

-LAST PAGE -