

Candidate's Name:

Signature:

(Do not write your School/ Centre Name or
Number anywhere on this Booklet.)

545/1
CHEMISTRY
Paper 1
2024
2 hours

Random No.						Personal No.		



MATIGO EXAMINATIONS BOARD

Uganda Certificate of Education

CHEMISTRY

Paper 1

2 hours

INSTRUCTIONS TO CANDIDATES:

*This paper consists of two sections; A and B. It has six examination items.
Section A has two compulsory items.*

*Section B has two Parts; I and II. Answer one item from each part.
Answer four items in all.*

*Answers to Section A must be written in the spaces provided while those of
Section B must be written on the answer booklet(s) provided.*

Any additional item(s) answered will not be scored.

Turn Over

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Item 1

Amina and Jolly were playing netball in their backyard, near a garden full of flowers. The ball rolled into the garden, and when Jolly picked it up, a bee stung her. Jolly was very hurt and uncomfortable, but Amina told her to use a special kind of medicine (an alkaline product) at home to help her feel better. This was a good first aid tip!

Task:

- (a) As a chemistry learner point out the alkaline product Amina can choose.

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- (b) Help Amina understand how the alkaline product works.

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- (c) Advise Amina on the dangers of excessively using the product.

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Item 2

There are several elements that have been discovered in the entire world and they have been fit in the periodic table depending on their physical and chemical properties. Knowing these properties for different elements has been important to our health and to many industries in our economy at large. The table below shows some elements labelled A-F (Note: These letters are not the exact symbols of the elements but used to represent the actual symbols of the elements). Use them to answer the questions that follow.

Element	Melting point (°C)	Boiling point (°C)	Electrical and heat conductivity
A	1,280	2,450	GOOD
B	98	890	POOR
C	-7	59	POOR
D	768	1,380	GOOD
E	-238	-188	POOR
F	-101	-35	POOR

Hint: Room temperature is 25°C

Task:

Use your knowledge of chemistry to:

a) Explain

i) Categories of elements at room temperature.

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ii) Giving a reason, state the possible uses of element A

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b) Suggest ways in which knowing the properties of different elements has been important to

i) Our health

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ii) Economy

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SECTION B

Part I

Answer one item from this part.

Item 3

Malebu village has been hit hard by a red eye outbreak. The village is known for its yellow bananas, which are used to make a local drink called "Tonto". But because the outbreak is getting worse, the Ministry of Health has locked down the village. Now, a businessman from a nearby town wants to invest in processing the yellow bananas into a longer-lasting product. The villagers are curious and wondering how this will work and how it will affect their community.



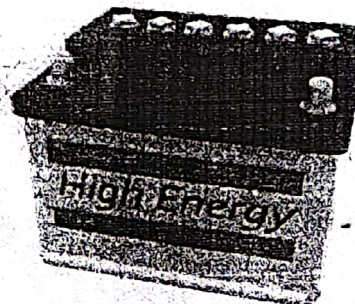
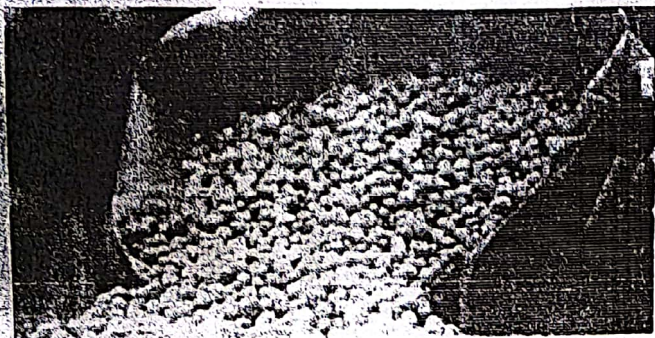
You have been invited by the local leaders to sensitize the locals

Task

Prepare a presentation you will make during the meeting

Item 4.

Sulphuric acid is very useful in car batteries and fertilizer production. Scientists have found a way to make it cheaper and more available by using a raw material found in Mt. Elgon. They plan to build a factory in the next two months. However, local businesses are concerned about the potential harm this factory could cause to the environment.



You have been invited by the science club at your school to help them understand how the process of production will take place.

Task.

As a chemistry student come up with a write up you will use during your presentation.

Part II

Answer one item from this part.

Item 5



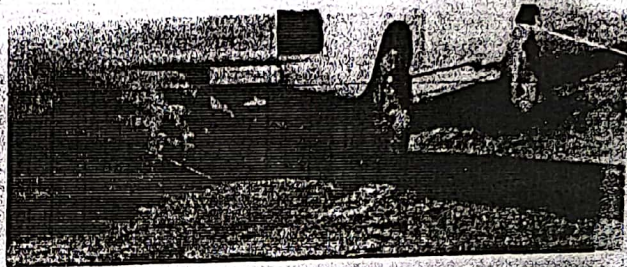
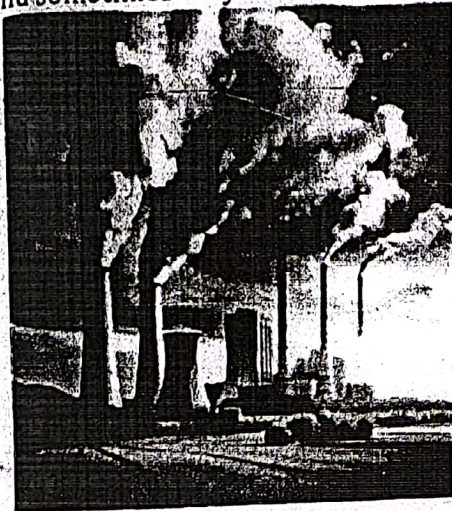
Metallic ores from Earth's crust provide us with metals and alloys needed to make products such as computers, mobile phones, cars, wires and nails. The demand for minerals continues to increase, both from developed and developing countries. However recently in Uganda it has become a concern from environment authority to sensitize companies dealing in extraction of metals about environmental conservation.

Task

As a chemistry student prepare a speech you would use upon invitation by the environment authorities.

Item 6

Air is one of the most available natural resource every living thing benefits from however its greatly affected by some activities of man and this makes it less suitable for use. Especially in the current generation where industrialization and auto mobiles have become key for life. This is why we experience Extreme hot days and sometimes very extreme cold days.



An inter school debate competition has been organized with the theme "**AIR PRESERVATION IS EVERYONES RESPONSIBILITY**" and you are to represent your school.

Task.

Make a write-up that will help you support the motion

END

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