Candidate's Name.....

545/1 CHEMISTRY Paper 1 2024 2 hours



SHAPTA JOINT ASSESSMENT BOARD 2024

Uganda Certificate of Education

CHEMISTRY Paper 1

Theory

2 HOURS

INSTRUCTIONS TO CANDIDATES:

- The paper consists of **six** examination items. It has two section **A** and section **B**
- > 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.

SECTION A

Answer all items from this section.

Item 1

Charcoal burning is one of the sources of income and the main source of fuel in Uganda but recently charcoal burning has attracted a national concern where the majority of people are against it.

TASK	
As a chemistry learner;	0.0
a) Explain the effects o <mark>f this economic acti</mark> vity	32
<mark>.</mark>	
b) How it can be prevented in the community?	
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Item 2

In the last 40 years, plastics have taken over as replacement materials for metals,
glass, paper and wood as well as for natural fibres such as cotton and wool.
However, plastics such as polyethene bags have contributed significantly to
household waste problem, up to 10% in some countries, and it is getting worse.

TA	ASK
a)	Outline any three advantages of using polyethene packaging
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	<mark>.</mark>
b)	Explain any three ways how polyethene bags are dangerous to our environmen
env	Explain any three ways of how to prevent the effects of polyethene bags on the vironment
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SECTION B

Part I

Answer **one** item from this part

Item 3

The world suffer from global warming and greenhouse effects due to mismanagement of carbon cycle by human being. This has become a global issue that calls for every one's contribution if the world is to be a better place for human being since global warming has resulted into climatic changes with effects on the operation of human being. As a chemistry learner, you are required to sensitize your community about this global challenge

TASK

Sensitize the community about the global warming and greenhouse effect, in your sensitization message clearly reflect on the meaning of global warming and greenhouse effect, how human being mismanaged carbon cycle resulting into global warming and greenhouse effect and solution to global warming and greenhouse effect.

Item 4

Salts are very important in our everyday lives as some of them are used in medicines, add taste to our food. Many of these salts can be prepared in the laboratory.

TASK

- a) Suggest three ways in which salts can be prepared.
- b) Ammonium chloride is an example of the salts prepared from the laboratory. When it was dissolved in water and the solution tested, it was found to be acidic. Explain why the solution was acidic.
- c) State three other applications of salts in your community.

Part II

Answer one item from this part

Item 5

Lira city is known for its good climate, good security entertainment and businesses. However, hard water continues to be a challenge in the city. The residents in the city use a lot of soap when washing and bathing. This has greatly affected their economy on a daily basis. As a chemistry learner, you have been invited by the area MP on a radio station in lira to help and teach the residents on how to make hard water soft using any physical method that can remove both permanent and temporary hardness

TASK.

Write a paper that you will use over the radio during your presentation. The presentation should clearly reflect the materials needed, procedures followed and results or conclusion

Item 6

Human beings respond to the cut from razorblade in different ways, some respond by crying and do not go to the hospital, some by crying and going to the hospital while some don't cry and neither do they go to the hospital. This too happens with elements on the periodic table. As a chemistry learner, you are required to demonstrate that elements also respond differently when subjected to similar conditions.

TASK

Demonstrate with the help of word equations how potassium, sodium and magnesium respond differently when in contact with water.

SHALIA