

Candidate's Name.

Signature.....

Random No.

Personal no.

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545/1
CHEMISTRY
Paper 1
Oct/Nov 2024
2 hours

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)** will not be scored.

Where necessary, use Na=23, C=12, H=1, O=16

Section A

Answer **both** items from this section in the spaces provided

Item 1.

Kawuka, runs a laundromat, where he gets paid to wash people's clothes. Recently, his customers have been complaining that their clothes are always stained. He thinks this is due to the bar soap he has been using to wash the clothes. He wants to change and use a new Powderly detergent called Omo. However, he has some concerns about its use.



Task.

As a learner of chemistry.

a. Identify the category of product he chose to use.

b. Guide him on how this product works.

c. Advise him on any dangers associated with the use of this product and how can they be mitigated.

Item 2

During DIT lessons, senior 3 students at Africana high school used sodium hydrogen carbonate (baking powder) to make their cakes rise. One learner raised a concern that too much baking powder can spoil the cake due to formation of sodium carbonate that can result into poor taste.



she said that according to the size of their cake, they should not exceed 10g of sodium carbonate in order to keep the cake sweet. She also noted that the gaseous product is useful in the environment

Task.

As a chemistry learner,

a. identify the category of baking soda with a reason.

b. Find out how much baking soda they have to use in order to keep the cake sweet.

c. Suggest the properties of the gaseous product that make it useful in daily life.

d. Explain the impacts of the gaseous product to the environment and how they can be mitigated.

Section B

Part 1

Answer one item from this part in the booklet provided

Item 3.

The government of Uganda is looking at cutting the budget of money used to import materials from abroad. One of the affected sectors is the health sector. They have also resorted to manufacturing some of these materials locally. One of such materials is oxygen used in hospitals. However, they need some guidance on how oxygen can be produced, the benefits of the process and any dangers associated with the process. You have been invited to guide them.



Task.

Make a writeup which you can use to guide them.

Item 4

Nankya, a, single mother wants to find a way to support her family. She thinks manufacturing ethanol can be a good source of income to her and her family. She has a plantation of bananas in her backyard and she thinks it can help her during her endeavor. She needs some guidance on the process of production, how the process can benefit her and her community and any dangers associated with this.

Task

Prepare a writeup you can use to guide Nankya.

Part II

Answer one item from this part in the answer booklet

Item 5

Amos runs a sugar manufacturing company in Buwambo village. His factory emits black fumes when manufacturing their product. This has kept citizens of Buwambo village concerned about their health and the environment at large.



The chairperson has arranged a meeting to address this concern.

Task.

A learner of chemistry, make a writeup to help the chairperson address this concern.

Item 6

An investor wants to build a school in Kawempe village. However, the available piece of land has a swamp with trees and some water. In order to create space for the school, the swamp has to be cleared and some land deposited in the craters. This has raised concerns of the citizens that despite the benefits of the school, the activity may not be good for the environment. The local government wants you to hold a talk that can clear the concerns of the citizens.

Task.

Make a writeup you will use to achieve this.