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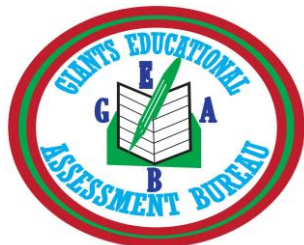
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CHEMISTRY

Paper 1 (Theory)

Nov/Dec. 2024

2-Hours



GIANTS EDUCATIONAL ASSESSMENT BUREAU

Uganda Certificate Of Education

END OF YEAR ASSESSMENT 2024

S.3

CHEMISTRY

Paper 1

2 Hours

INSTRUCTIONS TO LEARNERS:

- *This paper consists of two sections A and B.*
- *Section A has **two examination items** both of which are compulsory. Responses to these items **must** be written in the spaces provided.*
- *Section B has two parts I and II. Choose **one item from each part** and write your responses on the answer sheets provided.*
- *All items in each of the parts I and II of section B carry equal scores.*
- *Any additional items attempted in section B shall not be scored.*
- *You are required to respond **concisely** and **precisely** to each examination item using a **neat hand writing**.*

TURN OVER

SECTION A

Answer all items in this section

ITEM 1:

Ms. Nakanwagi is school Matron at Top care Junior school in Bujuuko who washes learners' uniforms using ordinary white star soap. Recently there was a complaint by the senior woman that the learners' white shirts were turning cream, making her think that the matron was not washing the shirts thoroughly. However, the matron could not explain well but recommended that she should be provided with other detergents such as NOMI to whiten the shirts again.

Task:

(a) As a chemistry learner, help Ms. Nakanwagi to categorize the two cleansing products mentioned above.

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(b) Briefly explain how one of the products categorized above works to make the uniforms clean.

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(c) Help Ms. Nakanwagi to know some of the side effects associated with use of the above products and state any possible mitigations.

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TURN OVER

(d) Evaluate the two categories of the products stated in (a) above.

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ITEM 2:

Rojo is a senior one learner at Silicon Valley who at one time while revising with Evelyn, her elder sister in senior four, saw a chemical symbol of an element written as ${}_{11}^{23}\text{Na}$ in her sister's chemistry book and she was wondering which element it was and if it was of any applications in daily life.

Task:

As a senior three learner, help Rojo to;

(a) understand the category of element.

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(b) predict the properties of the element.

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(c) know the applications of the element in daily life.

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(d) Learn about the impact of the element on the environment.

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TURN OVER

SECTION B

PART I

(Choose **one** item from this part)

ITEM 3:

Due to COVID – 19, there has been an increase in number of patients with cases of asthma and pneumonia who each time they get an attack need life support on Oxygen. This has increased demand for oxygen in health facilities across the country. The government therefore intends to start an oxygen production plant around Kawoko village, Nansana municipality but the locals are resistant to the establishment of the plant for fear of the likely impact it would impose on their environment. You have been invited by the local chairperson as a specialist with the knowledge of oxygen production with minimal environmental impact to speak to the locals and convince them to accept establishment of the plant in their area



Task:

Prepare a message you would deliver to the locals in your speech. Your message should include;

- Raw material(s) required to produce oxygen.
- Stages of the production process
- likely impact of the production process on the environment, suggesting mitigations to the impact.
- Social benefits of the plant to the locals.

TURN OVER

ITEM 4:

Soap is a chief material commonly used to facilitate washing. Of recent, there has been a country wide outcry to the government about the high costs of soap for domestic use. This is partly because of few soap manufacturing industries in the country. To ensure sufficient supply of soap, the government has secured a piece of land in Tororo district. However, the locals are concerned about its environmental impact as well as their valuable land that is about to be given to the investor. They are wondering how the production will be, the likely impact of the production process on the environment, mitigations to such impacts as well as how this industry will benefit their society. As a result, the district chairperson has called for a meeting with the investor and the locals.



Task:

As a chemistry learner, make a write up you will use during the presentation upon your invitation.

TURN OVER

PART II

(Choose *one* item from this part)

ITEM 5:

There has been massive swamp reclamation around the valleys of Kabulengwa village due to the fast-growing fish farming projects and basketry around the village. The district environment management authorities are concerned about the likely impact of these activities on the environment and have gazetted a sensitization meeting where you will be a main speaker.



Task:

Design a sensitization message you will deliver to address the above stated challenge.

ITEM 6:

There is a river around Nsujjuwe, in Mpigi District. The people around it survive on sand mining, crop husbandry, animal husbandry and brick making. Recently the water levels have gone so low, fish is dying, and sadly the little water is seriously polluted and the town mayor is concerned. He has organized a local meeting to address this challenge and has invited to have your take on this existing challenge.



Task: As a chemistry learner, write a sensitization message you will deliver in this meeting.

END