

CHEMISTRY

SENIOR THREE

TIME: 2HOURS

END OF TERM THREE

INSTRUCTIONS

Attempt all item in section A and two items in section B choose one item in section B from each part

ITEM 1

In Kawempe town, residents are facing an unexpected challenge of water wasting detergents. The local are frustrated with the increasing soap bills and do not know what to do. They have been advised to try using other alternatives on market to overcome the challenge and they need more clarification



TASK

As a learner of chemistry who is concerned, help the residents

- a) Understand the category of the detergent to use to prevent the problem

- b) Under the mode of action of the detergents

- c) Effects of long term use of the detergent

ITEM 2

Sodium carbonate can be used to neutralize the excess acid of the water treatment tank. At Gaba water treatment plant; "Mugume" accidentally poured the carbonate in a very hot treatment plant tank that led to decomposition of the carbonate. The carbonate decomposes as below



TASK

As a learner of Chemistry;

- a) Assess the category of the products formed

- b) Describe the properties of each of the products formed.

- c) The composition of the elements in the Carbonates are 16.08% Sodium, 4.2% Carbon, 16.78% oxygen and 62.94% water (Na=23,H=1,O=16,C=12). Calculate the simplest formula of the carbonate.

SECTION B

PART 1

Attempt one item in this part

ITEM 3

At Mulago referral hospital, there is high demand of Oxygen. An investor was contracted by government to set up an oxygen manufacturing plant at Mulago. However, the residents seem not to understand how the process will occur plus its consequences and are resisting the government plan for the project. A student of form three with the knowledge of Chemistry was contacted to create awareness to the members and provide the necessary information.



TASK

Write a brief message that a student will deliver to the group members.

ITEM 4

Students at Satellite secondary school in Matugga have access to only borehole water situated in the middle of the school. The borehole water is not effective in cleaning the uniform when soap is used. A local investor has been cleared by government to set up an industry that makes soapless detergents in the area. However he is facing resistance from the community members about the issue of starting up the factory and he is equally lacking knowledge about the manufacturing process. The Headmaster has appointed a student senior three to go and represent the school in the meeting organized by the chairperson of the area to settle the wrangles between the investor and the citizens of the area.



TASK

Write a brief message the student would deliver during the meeting

PART 2

Attempt one item from this part

ITEM 5

A non-governmental organization dealing with the impact of refugees on the hosting communities in West Nile region observed number of challenges that impacted negatively on the natural resources. The refugees carried out activities such as grazing, cultivation, cutting down trees for firewood and charcoal, brick making, molding soil for houses, cutting grass for mud and wattle houses, brewing alcohol and many others. The environment was noisy, dusty with generally poor sanitation, Malaria was quite common and poor harvests as the soils are left bare and eroded.



TASK

Write a brief message that could be delivered.

ITEM 6

John was surviving on Church land. He built a temporary grass thatched house in which he slept together with his goat and poultry. John received a visitor who spent a night in his house

The visitor advised his host to quickly save himself from dying early and build another house for the animals and another house for the animals and cooking.

John felt insulted and wondered whether people who live in two houses do not die at tender age



TASK

Present a write up that you would use to convince John that it is right to live in separate houses with animals as well as cooking.

END

SOME TIMES THE HARD WAY IS THE ONLY WAY