

Candidate's Name:

Signature:

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

545/1
CHEMISTRY
Paper 1
Jul/Aug. 2024
2 hours



UGANDA TEACHERS' EDUCATION CONSULT (UTEC)

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.

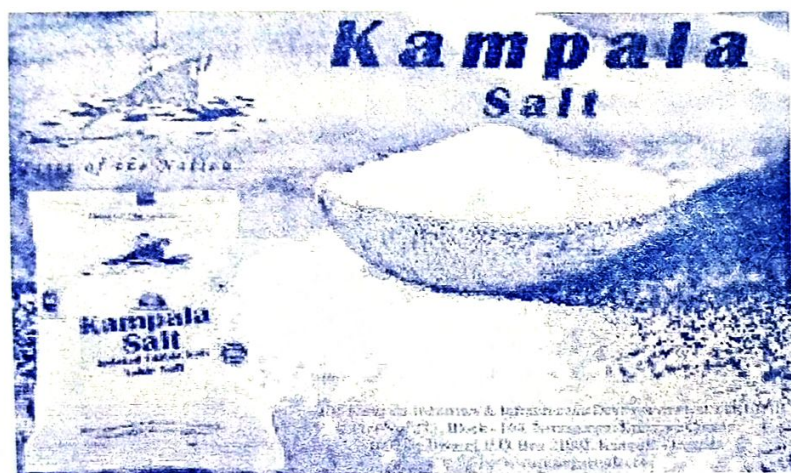
Any additional item(s) answered will not be scored.

SECTION A

Answer all the items from this section.

Item 1

One of the most important salts in human life is mined from Lake Katwe. This salt is a household chemical compound hence it is given a name common salt. Most of the people in the community have insufficient knowledge on the nature of this salt and its importance in their life. One of the community members has identified you as a knowledgeable person and he is seeking for guidance.



Task:

(a) Take him through on;

(i) the category of this chemical compound.

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(ii) the suitability of the chemical compound.

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(iii) how the compound is beneficial to the people in the community.

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(b) Does the compound have any effect on the environment? Guide him;

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Item 2

Due to increasing demand for power in Uganda, agencies predict that Uganda can adopt the use of nuclear power for the smooth running of increasing number of industries. Discussions in the ministry of energy are under way to build a nuclear power plant. However, there is little knowledge about the use of nuclear energy by most people in Uganda and others fear of its dangers.



Task:

You have been invited by the minister of energy and mineral development in Uganda, at the ministry headquarters as a student who has studied about nuclear processes; help the minister to acquire some knowledge on the following:

a) Category of the processes involved:

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b) How the processes will help to solve the problem?

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c) Impact of the processes on the environment.

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d) Make an evaluation on the processes.

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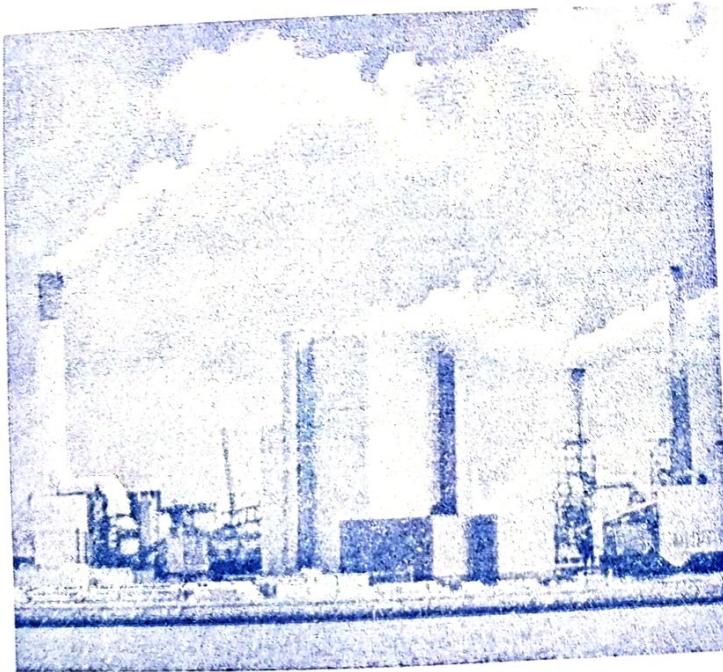
SECTION B

Part I

Answer only **one** item from this part.

Item 3

One of the large-scale uses of sulphuric acid is to manufacture fertilizers for high crop yields. To ensure that sulphuric acid is available at a cheaper cost, government has cleared a local investor to set up a sulphuric acid production plant in Kilembe mines in Kasere district. However, the community members are worried about its environmental effects and they would like to know how the production process will be carried out.



The chairperson of the village where the plant is proposed to be constructed has called for the village meeting and you have been invited to make a presentation.

Task

Make a write up of the message you will deliver during the village meeting.

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Item 4

An investor dealing in paper recycling is facing a challenge of high cost of sodium hydroxide which is so crucial to come up with high quality papers. He is planning to set up sodium hydroxide production plant to cut the costs. However the residents are protesting against the establishment of this plant and their concern is about its impact on the environment and how they will benefit from the plant. The investor has contacted you to guide him on what to tell the residents.

Task

As a chemistry learner, prepare a report that will guide him on his presentation.

Part II

Answer only **one** item from this part.

Item 5

People have encroached on wetlands in search for land for settlement and setting up industries. This has caused major problems to the country and prompted government to come up with a campaign to conserve the wetland. Your school has been selected to champion this campaign in the district.

**Task:**

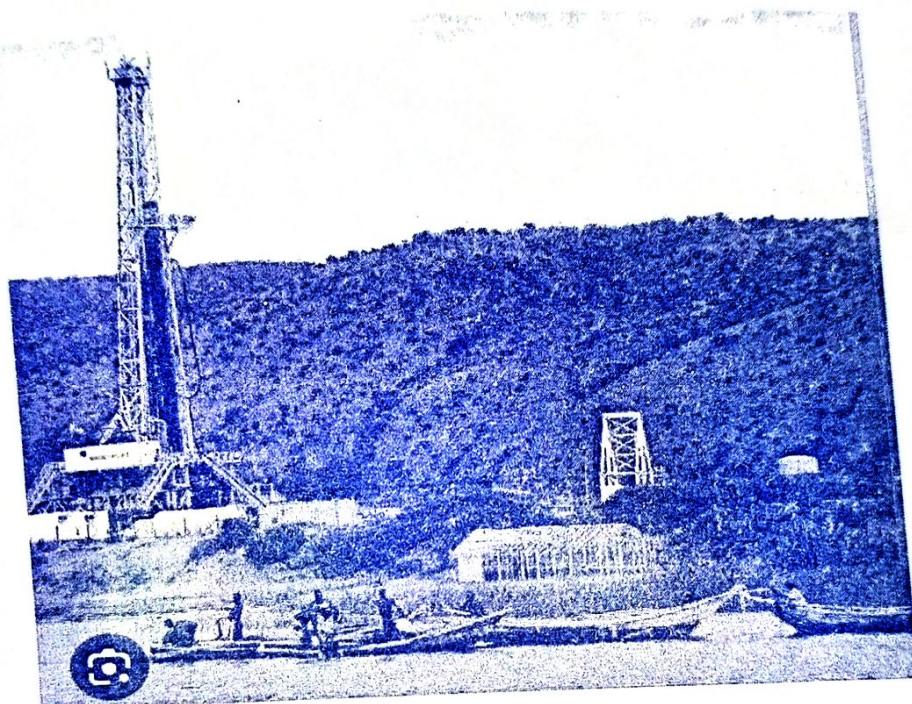
As a member of the campaign team in your school, make a write up of the message you will be presenting to people when you are called upon.

Item 6

In the village of Nkondo which is on lake shores in Kamuli District, people are found washing near the lake, practicing agriculture and setting up industries. They are now facing with a challenge of low water quality.

The chairperson of Nkondo village has organized an emergency meeting with a theme

"WATER CONSERVATION IS EVERYONE RESPONSIBILITY"



Task:

As a chemistry learner who is a member of the village make a write up about the theme that you will present in the village meeting upon invitation.

END