

Candidate's Name:

Signature:

545/1

CHEMISTRY

Paper 1

2025

2 hours



CHEMISTRY DEPARTMENT EXAMINATIONS BOARD

Uganda Certificate of Education

CHEMISTRY

Paper 1

2 hours

INSTRUCTIONS TO CANDIDATES:

*This paper consists of **two** sections; **A** and **B**.*

*It has **six** examinations items.*

*Section **A** has **two compulsory** items.*

*Section **B** has **two parts; I and II**. Answer **one** item from **each** part.*

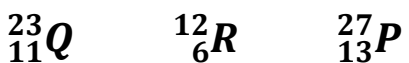
*Answer **four** items in all.*

*Answers to section **A** **must** be written in the spaces provided while those of section **B** **must** be written on the answer sheet(s) provided.*

*Any additional items(s) answered will **not** be scored.*

Item 2.

Klova is a company which uses three different elements to make various products basing on their qualities and properties. The elements are represented by atom notations as shown below.



However, the nearby residents have cautioned the company about the use of such elements as they fear that they can pose some impacts to their environment.

Task:

As a chemistry learner;

(a) Explain the categories of the elements being used by the company.

(b) Give properties of the elements that make them to be used to make other products.

(c) Point out the impact of such elements on the environment plus its mitigation.

SECTION B

Part I

Answer **one** item from this part in the answer sheet(s) provided.

Item 3.

Sulphuric acid is used as an electrolyte in car batteries to facilitate chemical reactions that generate electricity. In order to enhance the automotive industry, the government has decided to set-up a sulphuric acid manufacturing plant in a certain area.



However, the residents seek to be sensitized about the production process, social benefits and they are also concerned about whether sulphuric acid can pose any danger to workers or their environment.

You have been selected to sensitize the residents.

Task:

Use your chemistry knowledge to make a write-up you will use to sensitize the residents.

Item 4.

In the steel industry, oxygen is blown into high carbon steel to remove impurities. In order to manufacture more pure steel, the government has set up a large oxygen manufacturing plant in kirasi town to manufacture more oxygen.

You were part of the group of students who visited the plant and production process, its associated side effects and social benefits were explained by one of the workers. On your return back to school, many senior 2 students have approached you so that you explain to them what you learnt while at the plant.

Task:

Make a write-up you can use to respond to concerns of senior 2 students.

Part II

Answer one item from this part in the answer sheet(s) provided.

Item 5.

Residents of Kajumiro village often cut down trees from nearby forest to be used for roofing their constructed houses and this has attracted the attention of environment management officials who would like to end this practice. They decided to organize an emergency meeting about environment conservation.

However, you have found out that you won't be able to attend the meeting but you would like to contribute something about environment conservation and one of your friends will be among the presenters.

Task:

Prepare a write-up about environment conservation you will give your friend so that he includes it among what he/she will present.

Item 6.

Due to increased human population in Kyotera district, many swamps have been reclaimed for settlement and rice farming. These activities have left the district officials in worry about the current state of district's environment.

They have decided to organize a sensitization workshop to create environment awareness to people of kyotera district and you have been invited to be one of the presenter.

Task:

Prepare a short presentation you will deliver during the workshop.



**CHEMISTRY DEPARTMENT EXAMINATIONS BOARD
UGANDA CERTIFICATE OF EDUCATION
NOVEMBER, 2025**

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Subject: Paper Code/

FOR SCORERS' USE ONLY

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