

Candidate's Name:

Signature:

Random No.						Personal No.		

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

545/1
CHEMISTRY
Paper 1
2024
2 hours



UGANDA NATIONAL 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** 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.

Onyera, living in an area where they use bore hole water, slid, fell and his white shirt became dirty. He decided to use a detergent to clean his shirt. The shirt remained with some brown spots yet he had rinsed it several times.

Task:

As a chemistry learner;

- (a) point out the problem Onyera made when choosing a product.

- (b) help Onyera understand how the product works.

- (c) advice Onyera on the challenges associated with the long term use of the product.

Item 2.

Peter is in the process of constructing his house without affecting the environment. He wants to build a good strong house; there are various building materials of different quality and properties on the market. However, he does not know the quality of materials to use.



Peter knows that choosing quality materials depends on the nature of the material and has come to you for advice.

Task:

Use your chemistry knowledge to;

- (a) Explain
(i) Categories of materials.

(ii) The suitability of the materials.

(b) Advise peter on the choice of materials.

SAMPLE PAPER

SECTION B

Part I

Answer one item from this part.

Item 3.

One of the large scale uses of chlorine is treating water, to ensure that chlorine is readily available and at a cheaper cost. Government has cleared a local investor to set up a chlorine production plant near Lake Katwe in Kasese district. However, the community is concerned about its environmental effects and how the environmental process will occur.



The class teacher has appointed you to sensitize the other learners.

Task:

Prepare a presentation you will make during the meeting.

Item 4.

Air which is a mixture of different components contains 21% oxygen. Due to a wide spread of respiratory illnesses caused by COVID-19, there was an increased demand for oxygen by patients in hospitals. The government supply of oxygen is not enough and is planning to set up an oxygen production plant with minimal environmental impact.



However, the science club members in your school would like to know how the process of production will be carried out.

Task:

As chemistry student, make a write up you will use during the presentation.

Part II

Answer one item from this part.

Item 5.

Natural resources have been destroyed as a result of increasing population and human activities. This has attracted the attention of the officials from the National Environment Management Authority (NEMA).



The officials are planning to create awareness to the people of the country through sensitization workshops organized in different district communities.

Task:

As a chemistry student, prepare a short presentation you will deliver during the workshop upon invitation.

Item 6.

Osukuru village in Tororo district is at the foot of Tororo rock. People of this village for a long time have practiced charcoal burning, animal husbandry, crop husbandry and stone quarrying, recently the animals have started dying and wells are drying up yet the little water available is not fresh. The locals are now wondering why all these are happening.



A sensitization workshop is to be organized to explain the existing situation in the village. The theme of the work shop is **MY ENVIRONMENT MY RESPONSIBILITY**.

Task:

As chemistry student, write a message you will deliver upon invitation.