

Candidate's Name:

Signature:

545/1
Chemistry Theory
Paper 1
July / August 2024
2 ½ Hours



KAYUNGA SECONDARY SCHOOLS EXAMINATIONS COMMITTEE (KASSEK)
JOINT MOCK EXAMINATION 2024
Uganda Certificate of Education

CHEMISTRY

Paper 1

2 Hour 30 Minutes

INSTRUCTIONS TO CANDIDATES:

- This paper consists of two Sections A and B
- **Section A** consists of **TWO** items with broken tasks. Attempt all questions in this section.
- Answers to these questions must be written in the spaces provided **only**. **Section B** consists of **4** items with unbroken tasks. Attempt **only two Items** from this section.
- Answers to the questions must be written in the answer booklets provided
- In both sections, all work must be shown clearly

For assessment use only					
1	2	3	4	5	6

Turn Over

SECTION A

1. A senior one learner found a piece of paper having some information as shown below, which he did not understand.

Element	Observations
P	Reacted violently while floating on the surface of cold water forming an alkaline solution with evolution of hydrogen gas.
R	Reacted slowly with cold water forming an alkaline solution and hydrogen gas but when heated with steam formed a white solid and hydrogen gas

He was told that **P** and **R** are elements in Period 3 of the Periodic Table but there was no full discussion on what the elements do and how they affect the environment.

Task:

As a chemistry learner;

- (a) Give the category of elements **P** and **R**.

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- (b) Predict the behaviors of **P** and **R**

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- (c) Advise the student on the possible danger of **P** and **R** to the environment.

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2. A restaurant operator in a trading Centre used to register a large turn-up of customers as compared to other restaurants. After suspending one of the cooks, she realized that customers had reduced and she was making losses. She was told by one of her customers that the food was no longer delicious.



She lacks knowledge of how to go about this issue.

Task

As a chemistry student, help her

- (a) Identify the product(s).

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[illegible][illegible]

SECTION B

Attempt **one** item from each part

Part I

3. Many farmers are registering a great decrease in the amount of harvest they are making because of reduced soil fertility. The government has cleared a local investor to start a fertilizer production plant. However, the citizens are very much worried about their land being taken, how the entire process will be carried out, and the effects of the industry on the environment.



The chairperson LCV of the district has appointed you to sensitize the citizens of the area.

Task

Prepare a presentation you will make during the meeting.

4. The cost of all items and many other services depends on the cost of fuel which is imported through Malaba. Of recent, there have been country-wide complaints of the high fuel prices.
As a result, the government has agreed with some foreign investors to set up another oil refinery plant in Kadam – Moroto Basin in the North to tap the oil deposits in the area but residents are, however, protesting the establishment of the plant.
They are claiming that the government is going to steal their land, they also do not know how the process will be done and the refinery plant is of no importance to them.



A radio talk show has been organized on one of the local radio stations by the District Development Officer and the Local council representative to sensitize the locals on the issues at hand and you have been invited.

TASK

As a learner of Chemistry, prepare a written presentation you would make.

Part II

5. Due to increased population, urbanization, and other activities in many parts of the country, many people have started encroaching on forest land to create space for settlement and charcoal burning. This has attracted the attention of NEMA officials because community members seem not to understand the effects and the need to preserve the gazetted areas.



The officials want to sensitize people about environment conservation through a workshop and your school is involved.

Task:

As a chemistry learner, prepare a written message you will deliver upon invitation to the workshop.

6. People in Palisa, Bugiri, and Bugwere have for a long time cleared the swamps in many places for settlement, rice farming, and dumping of human wastes.



This has attracted the attention of the officials who are seeking to create awareness about the conservation of the environment through village meetings.

Task:

As a chemistry student, prepare a message you would like to be delivered by one of the officials.

END