

Name.....

Signature.....Candidates Personal Number.....

545/1

CHEMISTRY.

Paper 1.

Aug /2025.

2 hours

CHEMISTRY DEPARTMENT

New Lower Secondary Chemistry Examination

Uganda Certificate of Education

Internal mock set 4

Paper 1

2 hours

INSTRUCTIONS:

*This paper consists of **two** sections **A** and **B**. It has **six** examination items.*

*Section **A** has **one** 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 provided answer sheets.*

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

SECTION A

Answer all items in this section in the spaces provided.

Item 1

Arafat, a local entrepreneur in the business of packaging fatty foods is facing a pressing issue. Customers are reporting that while the food's initial visual appearance is not good, what begins as a delightfully flavourful and tasty food product soon gives way to a sharp, foul odour and a completely unpleasant taste long before the food should be considered spoiled. The deterioration in quality is tarnishing the brand's reputation and leading to a wave of dissatisfied customers.

Task. As a chemistry student,

- (a) guide him to understand the category of substances he should use to improve the quality of his food product and ensure customers satisfaction

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- (b) advise him on the challenges associated with use of the substances

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- (c) evaluate the substances he should use to improve the quality of the food product

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Item 2.

In our lives, the contrast between two materials, diamond and graphite serves as a perfect example of how structure dictates function despite both being made of same element. An investor intends to set up a production facility that will exploit the structural composition of any of the substances but needs comprehensive knowledge about them and their environmental impact you have been consulted for guidance.

Task: As a Chemistry student,

- (a) explain the **type** of the structure possessed by the two materials.

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- (b) Suggest the suitability of any material in every day life.
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(c) explain the environmental impact associated with use of any material .

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SECTION B

Part I (Attempt one item from this part)

Item 3. In response to a limited supply of highly demanded sodium hydroxide, a raw material for making detergents, the government has contracted an investor to build the facility along Jinja road. While this project address critical market needs, the community is strongly worried about its impact and is seeking assurance on how they will benefit from it's operations. The Uganda Investments Authority, UIA has organized a workshop to educate the public. You have been invited to attend.



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

Item 4.

The government has contacted an investor to establish a copper extraction plant in kilembe, Kasese . This move is intended to address the limited supply of highly demanded metal , which is essential for electrical wiring, plumbing and electronics. However, the project has met strong worry from the local residents who are concerned about the potential for environmental damage from extraction process and is questioning how they will directly benefit from the plant's operations. The district official have organized workshops to address the locals . You have been invited to address the locals .

Task. Write a write up presentation you will use during the presentation.

Part II. (Attempt one item from this part.)

Item 5. The heavy reliance on wood charcoal in many homes and the dominant use of petrol by many manufacturing industries and 78% of mobile vehicles are causing signifant environmental problems. This has prompted environmental bodies to take action and call for significant changes by investing in awareness campaign to promote and develop energy sustainability . They have organized radio talk shows to create awareness to the public. You have been invited to address the public.



Task. As a chemistry prepare a short presentation you will deliver in the radio talk show.

Item 6 The recently released National Census report has highlighted a concerning trend. Some of families in rural depend on charcoal burning and mostly stone quarrying for those in rocky regions as their source of income. This reliance has raised significant alarm among environmental officials who are worried about the potential consequences of these actions. The government has organized rural workshops to raise awareness amongst the public about these actions. . You have been invited to attend address the public.



Task. As a chemistry student, prepare a short message you will use to deliver in the workshop.

End.