

Candidate's Name:.....

Signature:.....Index number.....

545/1

**CHEMISTRY**

**PAPER 1**

**2024**

**2 Hours**



**JINJA JOINT EXAMINATIONS BOARD**

*Uganda Certificate of Lower Secondary Education*

**MOCK EXAMINATIONS – JULY / AUGUST 2024**

**CHEMISTRY**

**2Hours**

**INTRUSTIONS 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 items answered will **not** be scored.*

## SECTION A

*Answer all items from this section.*

### Item 1

Ms. Balanda has a restaurant in Iganga Town. The customers have these days abandoned her restaurant because of poor taste of food, unpleasant scent and food gets spoilt after a very short time. The appearance of cooked food is also not attractive and the soup is always too dilute. She wishes to acquire different substances which would be added to her food to produce meals attractive to her customers. She has contracted you as a chemistry student well knowing that you can advise her on the right products /substance to buy.

(Support material)



Task.

Write a piece of advice to her on: -

- a) Category of the substance/product

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- b) Uses of the different substance/product

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- c) Side effects of using the different products/substances on customers and mitigation.

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- d) Evaluation of the substance/product.

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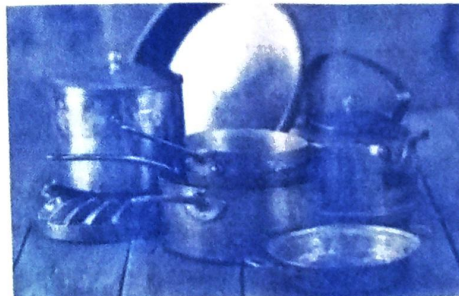
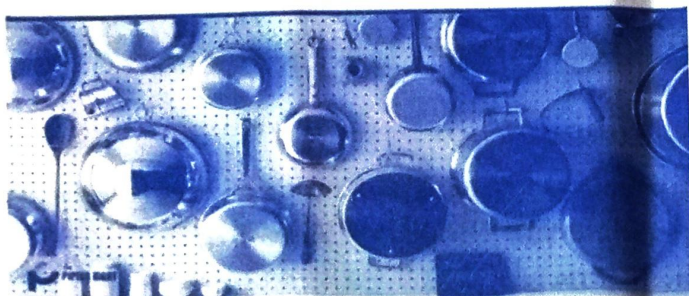
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## Item 2

Mayuge District local Government has planned to create Jobs for Jobless youth by setting up an industry that makes Kitchen Utensils. However, they do not know the various materials and their properties that can be used to make the items. The district has contacted the chemistry department of your school to advise them on what elements /substances to be used as raw materials.

Support materials



Task:

As a chemistry student who has learnt about periodic table, write a presentation you would give upon invitation being selected by the head of department.

a) On the category of elements /substances

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b) Suitability of the element/substances.

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c) Choice of the element/substance

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d) Impact of the elements/substance on the environment and mitigation.

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**SECTION B****Part I**

Answer **one** item from this part.

**Item 3**

In some districts of Uganda like Tororo district, farmers get very low crop yields due to poor soils that has led to persistent famine in the area.

Ammonium nitrate is one of the effective fertilizers used to improve crop yields. The ministry of agriculture and animal husbandry has entrusted an investor to put up an ammonium nitrate production plant in Tororo district such that the fertilizer is got at cheap cost. However, the community near the site is worried about its effects on the environment and how the environmental process will occur.

(Support Material).



The head of department has appointed you to sensitize the community.

Task:

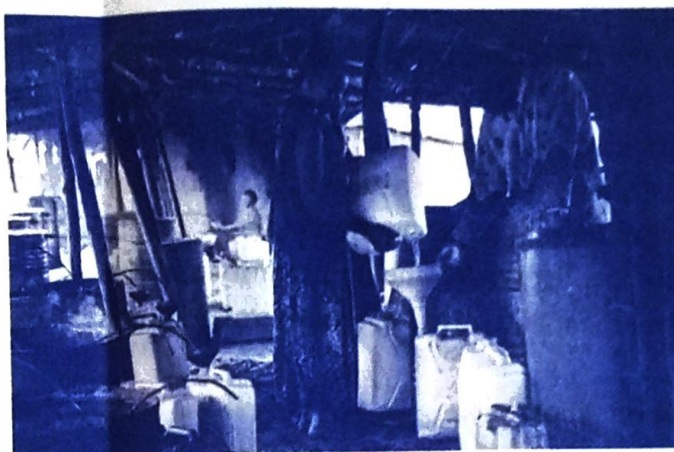
Prepare a presentation you will make during the meeting.

**Item 4**

Bugiri sugar factory which has just been setup is disposing off molasses which would be used to make ethanol. Ethanol is at a high demand and it's used to make essential substances like sanitizer. The locals around are making ethanol on small scale and it can not meet the demands. However, the government is planning to set up an industry to produce ethanol with minimum environmental impact.



(Support material)



However, the community would like to know the process of production and how it would be carried out.

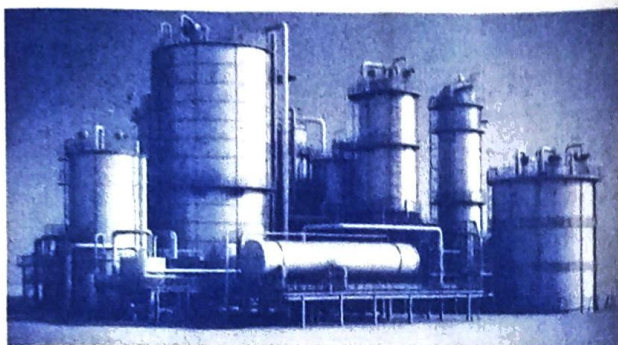
**Task:**

As a chemistry student, make a write up you will present to the community members.

**Part II****(Attempt one question)****Item 5**

The setup of crude oil mine in Hoima district resulted in displacing of residents to other places but the displaced people are still not contented. This has made the government to intervene.

(Support material)



The government is planning to sensitize the residents through workshops in the district.

**Task:**

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

**Item 6**

In Masese Division Jinja city some residents near the lake are involved in certain activities like rearing animals, growing crops, distillation of ethanol and washing clothes from lake banks. Recently it has been discovered that the fish has started dying and people who use the water for bathing develop rashes. This has attracted the attention of officials of the ministry of health and have been invited for discussion to try and discover the causes of what is happening.

(Support material)



A sensitization workshop is to be conducted to explain the existing situation in the area.  
The theme of the workshop is MY ENVIRONMENT MY RESPONSIBILITY.

Task:

As a chemistry student, write a presentation.