

Candidates name :

Signature :

541/1

CHEMISTRY.

JULY

2 hours

CHEMISTRY DEPARTMENT
UGANDA CERTIFICATE OF EDUCATION
CHEMISTRY
PAPER 1

INSTRUCTIONS .

- This paper consists of two sections ; A and B
- Section A has two compulsory items .
- Section B has two parts ; I and II . Answer one item from each part .
- Answer to section A must be written in spaces provided .

Item 1

Jimmy has been diagnosed with severe bacterial infection- cellulitis in his leg. The doctor prescribes a course of antibiotics cephalexin to target the infection. However, Jimmy resistant having heard about the risks of antibiotic resistance and their high cost and wants to go for a natural remedy, pawpaw leaves . He has come to you for advice.

Task:

As a chemistry learner:

- a. Help Jimmy know the categories of products.

- b. Guide Jimmy on which product he should choose.

[illegible]

c. Inform him on the effects of long-term use of the product.

[illegible]

d. Guide him to make evaluation of the products.

[illegible]

Mr. Bisaso is a livestock farmer in Lyantonde district. He has been accused of carelessly letting his animals into his neighbors' crops which he doesn't agree up on. On investigation he was found to be using ropes made of sisal which the animals managed to break and escape. The chair person has advised him to use better ropes made of nylon but he insists that they are expensive.



Task.

As a chemistry learner:

a. Explain

i. The categories of materials.

ii. suitability of the materials.

b. Advise on the choice of material.

SECTION B

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

PART ONE

Item 3

In the village of Bukonde in Mbale district, Uganda, coffee farming is a primary source of livelihood for many residents. However, in recent years, farmers have been grappling with significantly reduced coffee yields. One of the main reasons identified for this decline is the insufficient supply of Urea, a critical nitrogen-based fertilizer essential for healthy coffee plant growth. The Ugandan government, recognizing the importance, has cleared a local investor to construct a urea production unit to address the issue. However, the government's decision has been met with resistance from the local community.



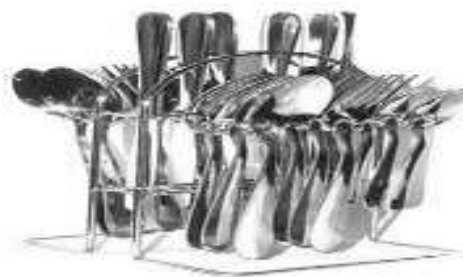
The proposed site for the urea production unit is a piece of fertile land that many villagers use for subsistence farming.

Task:

Prepare a message that the government should use to address the people of Bukonde. **(11 scores)**

Item 4

In Uganda, the need for durable and reliable cutlery has become apparent. The local population has experienced frustration with cutlery made from copper and aluminum due to their relatively weak and less durable nature. Recognizing this issue, the Ugandan government decided to take action. They contracted a private investor to construct an iron extraction unit in Manafwa district after iron deposits being discovered. This unit is expected to provide a steady supply of high-quality iron, which can be used to manufacture stronger and more durable cutlery. However, the community members of Manafwa district have expressed concerns about the direct benefits of this project to their livelihoods.



To address these concerns, the government and the private investor have organized community meetings to address the apprehensions.

Task:

As a chemistry learner, prepare a write-up that will be used during the community. **(11 scores)**

PART TWO

Item 5

Kisoro, a picturesque village nestled among rocky hills in southwestern Uganda, has long depended on stone quarrying as a primary source of livelihood. The rugged terrain, rich in stone deposits, provided ample opportunities for the villagers to earn a living by extracting and selling stone. However, the extensive quarrying activities have led to seasonal changes and water Shortage, air quality and health issues, water Contamination. Recognizing the severity of these issues, the government of Uganda has stepped in to provide assistance and create Community Awareness Programs About the issues.

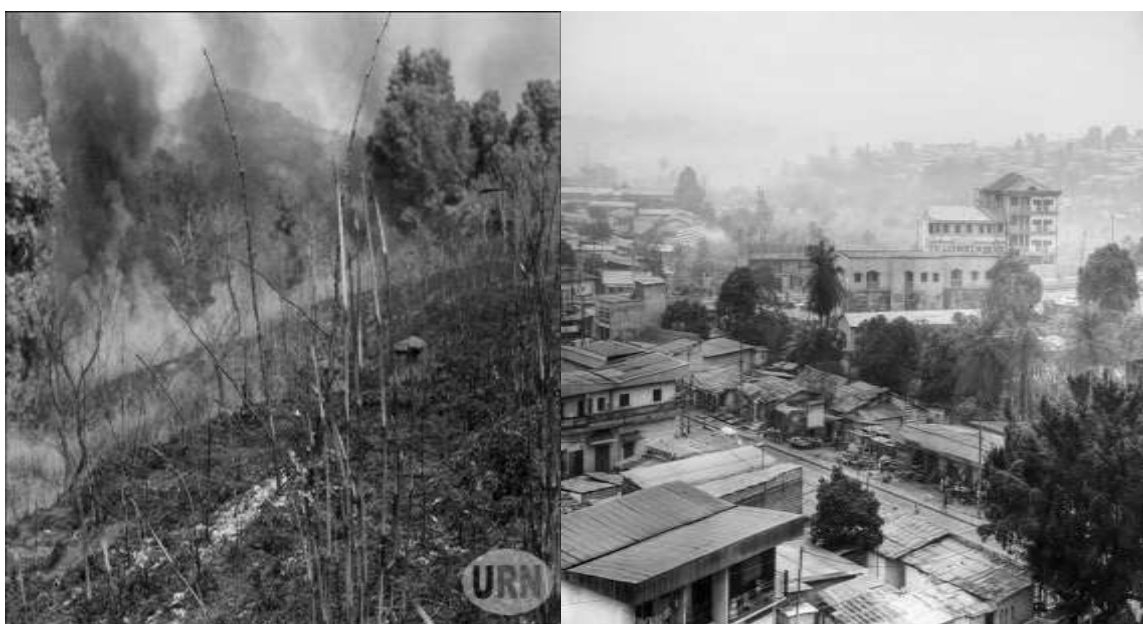


Task:

As a chemistry learner, prepare a simple write-up that the government should base on when addressing to the residents. **(11 scores)**

Item 6

In the rural community of Kiryandongo Uganda, agriculture is the primary source of livelihood. The local farmers, striving to expand their agricultural productivity, have been clearing land and practicing bush burning extensively. This has led to reduced rainfall, prolonged droughts, air contamination, and an unpleasant odor permeating the village, wild animals are invading peoples' homesteads. In response to the escalating crisis, community members have appealed to the government for assistance. Recognizing the severity of the situation, the government organized a village meeting to raise awareness and address the environmental issues caused by current agricultural practices.



To the meeting, government officials, environmental experts, and agricultural extension officers and environmental clubs of some schools have been invited.

Task:

As a chemistry learner, prepare a simple presentation you will use to educate the villagers. **(11 scores)**