NAME:SIGNATURE:





NAKWAYA SECONDARY SCHOOL MITYANA UGANDA CERTIFICATE OF EDUCATION

End of Term 3 Examination 2024
S.2 CHEMISTRY
2 hours

INSTRUCTIONS:

This paper consists of Section A and Section B Answer ALL items in section A and ONE items in Section B Answers to Section A and B MUST be written in the space provided.

Item 1.

A group of Learners were faced with a unique **solid** substance, X, which they suspected to be an **element**. The element could burn in **air** to form the **solid product**. One of them picked interest in what could be the **chemical formula** of the **oxide** of the element. However, he did not know how to determine the formula. When they contacted the laboratory technician he gave them the atomic number and mass number of X as 12 and 24 respectively, and the symbolic representation of oxygen $^{16}{_8}$ O

Task:

As a student of chemistry help the learners to; a) Understand the category of substance X
••••••
b. determine the formula of the oxide of X
c. know the environmental consequences of the element
•••••••••••••••••••••••••••••••••••••••
•••••••••••••••••••••••••••••••••••••••

Item 2

In NAKWAYA village, MITYANA district, a modern building has been completed but several huge cracks have developed and is about to collapse .Residents are planning to arrest and beat the construction workers .accusing them of using sub-standard materials .the chairperson LC1 together with the community development officer have organized a meeting to talk to the residents and discuss the other possible alternatives to rebuild the society's house



Task;
Use your chemistry knowledge to; Explain;
a) The categories of materials
b) The suitability of the materials.

c) Advise the residents and authorities on the choice of the materials.

SECTION B (attempt one item)
Item 3
Air which is a mixture of different components contains 21% oxygen. Due to a wide spread of respiratory illnesses caused by COVID-19, there has been an increased demand for oxygen by patients in hospitals. The government wants to set up an oxygen production plant in order to supply oxygen to be used in hospitals.
However, the community members want to know how the process of production will be carried out. Task
As a chemistry learner, write a message to your community members to address their concerns. (11scores)
ITEM 4
There has been a nationwide destruction of natural resources due to increasing population and human activities resulting into adverse climate changes. This has attracted the attention of officials from the national environment management authority (NEMA). The officials are planning to create awareness to the people of the country through sensitization workshops organised in different communities.
Task:
As a chemistry student, write a message you will deliver upon invitation in the

workshop organised in your district.