

Student's name..... Signature

Stream

545/1
CHEMISTRY
(Theory)
Paper 1
OCT 2023
2 ½ hours



KABALEGA SEN.SECONDARY SCHOOL
UGANDA CERTIFICATE OF LOWER SECONDARY EDUCATION
MID-END OF YEAR COMPETENCE BASED ASSESSMENT
CHEMISTRY (THEORY)
PAPER 1
SENIOR 3
2Hours: 30 minutes

INSTRUCTIONS:

- *This paper consists of ONLY one section.*
- *Answer all Tasks in this paper.*
- *Illustrations in form of drawings or equations should be made where necessary and earns scores.*

For official use only

Question	Marks/scores	Teacher's comment
1		
2		
3		
4		
5		
Total score		

1. Large deposits of crude oil were discovered in lake Albert near Hoima City. Crude oil contains a variety of different compounds but with similar structure. Total Uganda is organizing an awareness campaign in the surrounding communities on formation, constituent and benefits of crude oil. You have been selected from your school to design a message that will be used during the campaign.



2. A new borehole has been dug in your village. However, the water from this borehole leaves a lot of dirty marks on clothes upon washing with ordinary soap. All cooking utensils are left with a lot of dirty marks. Upon making this observation, the villagers are putting allegations that technicians were reckless to the point of leaving chemicals within the borehole that could be more hazardous to their lives. The villagers have resorted to using rain water.



You are among the Technicians, write a speech that you will use in the village meeting to avoid the false allegations.

3. A carpenter was contracted to fix a door lock for a new house. He went to a hardware shop but found different metal types of locks with handles made from iron, brass, zinc and copper. However, the carpenter opted to use locks made of brass out of the different types. The

carpenter's neighbour on the same day bought a new bicycle whose iron chainwheel in just weeks was covered in a brown coating.



Analyze the situations and advice.

4. In an investigation to ascertain metals to use in making water pipes and roofing materials, a group of students found out that different metals react differently. They observed when some metals were made to react with cold water and steam. The changes they observed are summarized in the table below.

Metal	Reaction with water	Reaction with steam
Sodium	Reacts rapidly	Reacts violently
Calcium	Slow reaction	Fast reaction
Copper	No reaction	No reaction
Magnesium	Very slow	Relatively fast
Iron	Too slow	Slow

You were part of the group, explain your findings to the class members. In your explanation include choice of the metal.

5. Health experts recommend 6 teaspoons or 24g of sugar or sucrose for adults per day. Martin a 46 year old takes 24g of sugar in passion fruit juice twice a day with each time taking 500mls. On the other hand Akena takes 50g of sugar in 500mls in cup of fruit juice. Both Martin and Akena prepare their fruit juice from passion fruits and have always faced a problem of separating effectively the fruit seeds from the juice and do not understand the recommendations of experts on sugar concentrations of sugar to consume per day. How can you best advice the two individuals. (C=12, H=1, O=16)

"Always believe in yourself "

END