

UGANDA CERTIFICATE OF LOWER SECONDARY EDUCATION

S.2 END OF TERM TWO - 2023

CHEMISTRY

PAPER ONE

TIME: 2 HOURS

SECTION A: (Attempt all questions from this section)

1. Match the following items of column 1 with column 2 and choose the correct answer.

S/N	COLUMN 1	COLUMN 2
a)	Acetic acid	Stomach
b)	Formic acid	Curd
c)	Lactic acid	Bee sting
d)	Hydrochloric acid	vinegar

2. Laboratory accidents are often witnessed amongst senior one student's in our school.

a) Identify any two possible causes of laboratory accidents

.....
.....

b) Chelabat accidentally got burnt with a liquid while heating a liquid in the lab.

i. Name the type of burn sustained with the liquid

.....
.....

ii. What two effects is possibly caused by this burn

.....
.....
.....

iii. Outline three procedures to follow in giving first Aid

.....
.....
.....
.....

c) Mention four items found in a first Aid Kit and their uses

.....
.....
.....
.....

3. State any two (a) Write the name given to bases that are highly soluble in water? Give an example

.....
.....

(h) How is tooth decay related to pH? How can it be prevented?

.....
.....
.....
(c) Why does bee sting cause pain and irritation? Rubbing of baking soda on the sting area relieves. How?
.....
.....

(d) Explain the following

i. Tap water conducts electricity whereas distilled water does not
.....
.....

ii. During summer season, a milkman usually adds a very small amount of baking soda to fresh milk
.....
.....

. In chemistry laboratory we often encounter many chemicals such as acids, bases and different salts which are used when during both qualitative analysis and volumetric analysis. Give a brief meaning of the following terms
(03 marks)

(a) Acid

(b) Base

(a) Salt

(b) Lynette mixed an acid and a base and formed a new solution (02 marks)

(i) What was the composition of the new solution

(ii) Write a word equation between an acid and a base to show the formation of new solution
.....
.....

(c) Name 3 examples of indicators found in the laboratory (03 mark)
.....
.....
.....

(d) Namayanja was given two beakers A and B. Beaker A was containing dilute sulphuric acid and beaker B was containing sodium hydroxide solution. Explain how she can identify the beaker containing an acid and a base (02 marks)
.....
.....
.....
.....

5.(a) The table below shows the components of air and its percentage composition by volume, you are required to fill in the blank spaces. (05 marks)

Component	Percentage composition by volume
-----------	----------------------------------



Edit with WPS Office

Nitrogen
Carbon dioxide
.....	0.03%
.....	0.9%
Water vapour

(b) Identify the component of air which can be detected by (03 marks)

- Glowing splint
- Anhydrous copper (II) sulphate
- Calcium hydroxide solution

SECTION B: (Attempt any 2 (two) in section B)

6. Natakwa is a student in Kapchorwa Standard Academy. When in the chemistry class, their teacher taught that melting of candle wax when a candle is burning is a physical change. The teacher told them to go and research more from a particular book in the library about chemical and physical changes. On reading the book, she found that a burning candle has both physical and chemical changes. Natakwa wondered which chemical change is in the burning candle since their teacher had only said that a burning candle has only physical change. When she went back home, she saw her uncle splitting firewood into small pieces. At the same time, her mother was using the splitted pieces of wood to cook food.

Burning Candles



Her mother using split firewood



- Differentiate between physical and chemical changes
- What type of change is
 - Melting of candle wax
 - Splitting firewood
 - Burning of firewood
- Make a list of other common changes in our homes

S/N	PHYSICAL CHANGES	CHEMICAL CHANGES
(i)		
(ii)		
(iii)		

10. Weathering results in soil formation

- a) What is weathering?
- b) What type of weathering is shown above?



- c) Rocks are extremely significant today, with people saying "Rocks are a wealth." And those inheriting it are sometimes lucky though they try to regret, of where to build and bury their dead
 - i. Explain the six ways in which rocks are beneficial to man?
 - ii. Suggest four problems faced by people living around rocky places

END

"Education is a powerful weapon that changes the world."