#### 545/1

**CHEMISTRY** 

Nov/Dec 2023

2 Hours: 30 Mins



# **MEBU EXAMINATIONS BOARD**

Uganda Certificate of Lower Secondary Education

### **S.1 END OF YEAR ASSESSMENT 2023**

**CHEMISTRY** 

**TIME: 2:30 MIN** 

## **INSTRUCTIONS**

- Answer all questions
- Answers **MUST** be written in the spaces provided.

## **SECTION A**

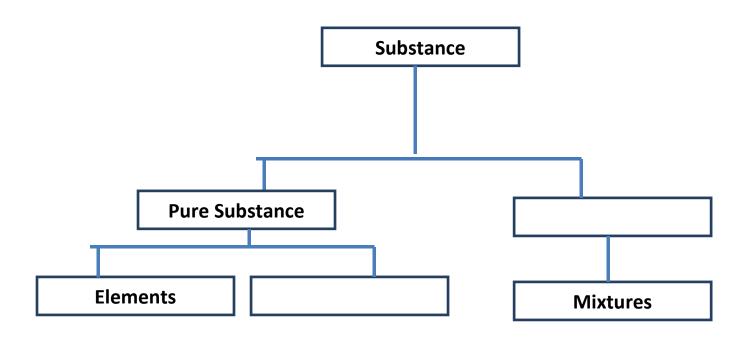
1. Explain the following observations. (05 marks)

Fishing nets

Tea pot

a. If			water becomes sweet even without stirring.
	Vet Clothes dry	faster on a sunny day	than a cloudy day
c. Ic			
	/hen a tightly ir	aflated balloon is left	in a room for over 3 days, its size reduces.
	et clothes dry v	when hanged even in	cold weather.
 2. (a	a) By stating a n		(property) why each of the following items are made from the
	ITEM	MATERIAL	PROPERTY FOR THE CHOICE OF MATERIAL
	Water pipes		
	Desk		

(b) Explain how plastics are dangerous to the environment. (02 marks)			
3. (a) A list of statements below shows examples of changes that take place in the environment. State			
whether they are physical or chemical. (05 marks)			
. A piece of paper is folded in halfway.			
i. Droplets of water form on the outer surface of cold glass of water.			
ii. Glucose is fermented into ethanol.			
v. A piece of sodium is sliced into smaller pieces.			
v. Dry ice (solid carbon dioxide) sublimes directly to gaseous carbon dioxide.			
4. (a) Complete (by filling in the blank spaces) the flow diagram below that shows the classification of			
substances present in nature. (02 marks)			



(b) Packed mineral water contains naturally occurring elements which are important in the body. Below is a label of "*Ice water*" study it and answer the questions that follow.



(i)	Write symbol of each element present in water. (Use a table; Name of element and Symbol (08 marks)					

(ii)	Outline a suitable method in the laboratory the packed mineral water of <i>ice brand</i>	(02 marks)
5. Jai	ames your elder brother who is a carpenter unkno	wingly left his iron nails outside overnight. The
follo	owing morning he realized that the iron nails were	e coated by a layer of a brown solid unlike the few he
had 1	left in the store, but could not explain why. As a	chemistry student who understands air, answer the
follo	owing questions to help James understand why.	
a) Na	Name the brown solid that coated the iron nails. (0	1 mark)
	state the process by which the brown substance fo	
c) Na	Jame the components of air involved in the forma	tion of this brown solid. (02 marks)
d) Aı	Apart from the components of air you named in (c	) above, list down two other components
•	ir (stating their approximate percentage compos	·
	ist down three ways of preventing the formation	of the brown solid on the iron nails
	scribe how each of the ways you have stated pre	
	id) (06 marks)	rents the formation of the oroni
• • • • • •		

\*\*\*\*END\*\*\*\*