Candidates' Name:	•••••	• • • • • • •	•••••	•••••	•••••	•••••	•••••	
Signature:	Random No.				Personal No.			
~								

(Do not write your school / Center name or Number anywhere on this booklet)

545/3

CHEMISTRY
Paper 3
July / Aug 2024
2 ½ HOURS



KAMTEC EXAMINATIONS BOARD

Uganda Certificate Of Education CHEMISTRY

Paper 3

TIME: 2 hours 30 minutes

INSTRUCTIONS TO CANDIDATES

This paper consists of one compulsory item.

Answers to this item are to be written in the spaces provided in this booklet.

Use blue or black ink All working must be clearly shown. A Graph paper will be provided

Mathematical tables and silent non-programmable scientific calculators may be used. You are not allowed to use reference books.

Candidates are advised to carefully read the item, make sure they have all the apparatus and chemicals they may need and then plan appropriately before starting.

FOR EXAMINER'S USE ONLY

ITEM	SCORE(S)	EXAMINER'S SIGNATURE
1		

Item 1

In a local village around Sukuru subcounty, in Tororo district, the water discharged into the valley dams from small industries contains traces of sulphuric acid which is unfavourable to the fresh water fish. The industry managers have been advised to use solution KA_1 to neutralize the acid in the water without affecting the life of fish. This is because the reaction between KA_1 and sulphuric acid may produce amounts of heat which is unfavourable, yet fresh water fish thrives well only if the heat change of 2.47 - 2.52kJ occurs in water.

You are provided with the following; Solution KA_1 Solution KA_2 is a sample of the acidic fresh water. Some apparatus

Task

(a) Design an experiment you can this reaction.	use to determine the amount of heat evolved i

	•	•		the amount of	
Analyse yo	our results and	d hence draw	possible conc	lusion.	
, ,					

END