**Name………………………………………………………………**

**545/1**

**CHEMISTRY (Theory)**

**April/2024**

**2 HRS**

**Uganda Certificate of Education**

**End of term 1 2024 S3**

**CHEMISTRY**

**Paper 1**

**2 hours**

**INSTRUCTIONS TO CANDIDATES:**

This paper consists of two sections; A and B. It has six examination items.

Section A has two compulsory items.

Section B has two Parts; I and II. Answer one item from each part.

Answer four items in all.

Answers to Section A must be written in the spaces provided while those of Section B must be written on the answer booklet(s) provided.

Any additional item(s) answered will not be scored.

**SECTION A**

Item 1

Mr obo is a plastic collector, he also collects charcoal dust , animal droppings, egg shells and plant materials he uses to make charcoal briquettes that he shells for income. He also sells the collected plastic bottle and bags to the recycling industries from which he also attain income for his survival.

a) help Mr obo know how important he is to the environment. ( 5 scores)

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b) As an official from NEMA write brief notes to be presented to the public in village meetings including other ways of protecting the environment from harmful effects of polymers. ( 5 scores)

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Item 2.

Your school has run of short of commercial indicators during the practical lessons and the students where required to Identify solutions as neutral, acidic and alkaline.

a) Assume you're a laboratory attendant help students carry out a practical by making an indicator from locally available materials (5 scores)

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b) Describe how the solutions can be identified (5 scores)

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**SECTION B**

Part 1

Item 3

Carbon dioxide on large scale is being used as a freezer in fish preservation and as a preservative in carbonated drinks like sodas and hence highly needed in large quantities for it's use. Hence it's highly demanded on the world market therefore the government plans to set up a carbon dioxide plant with minimal environmental impact. However, the science club members in your school would like to know how the process of production will be carried out.

Task:

As chemistry student, make a write up you will use during the presentation. (20 scores)

Item 4.

A resident of Kyakasengejjo village fetches water daily from two sources of water: borehole and nearby spring. When she uses this water from these two sources, she realized that she uses a lot of soap while washing her clothes. One day she boiled the water from the borehole for bathing but remembered that she had not washed one of her shirts and washed it with the boiled water instead and used little soap than it used to be. This has forced her to try boiling the spring water as well and used it for washing her clothes but still used a lot of soap as it used to be.

Task.

This has confused her more. Prepare an article to clear away her dilemma. *(score 15)*

Part 2

Item 5.

Recently there is a general increase in the temperature in the whole world which has impacted much on the climate. One of the effects is the elevated temperature particularly at night. In one of the summits organized for the climatic changes in Africa under the United Nations climate change conference, the members strongly agreed that man has to be blamed for this rise in temperature and that it is man who can also reduce it.

Task.

Evaluate the meeting’s resolution. (*score 15)*

Item 6.

There is increasing prices for fuels used at homes for cooking especially fire wood and charcoal yet they are needed every day. This calls for the sustainable use of the firewood and charcoal.

Task.

Guide the locals on how the make sustainable use of these fuels. *(score 15)*

**END**