**Name………………………………………...…Stream………...Sign…………….**

***(Write your name and stream in the spaces provided)***

**CHEMISTRY**

(Theory)

**Paper 1**

**NOV/DEC.2023**

*21/2hours*



**MVARA SECONDARY SCHOOL**

***Uganda certificate of Lower secondary education***

**S.2 END OF YEAR ASSESMENTS 2023**

CHEMISTRY

(Theory)

**Paper 1**

21/2hours

**INSTRUCTIONS**

* *This paper consists of* **two** *sections* **A** *and* **B.**
* *Section A consists of* **ten** *structured questions. Attempt* **all** *the questions in this section by writing the answers in the spaces provided.*
* *Section B consists of* **six** *extended questions. Attempt* **any four***questions in this section. Answers to this question must be written in a separate sheet of paper provided. All the questions in this section carry equal marks.*
* *Drawings should be made clearly using sharp pencils.*

**For official use only**

|  |  |  |
| --- | --- | --- |
| **SECTION** | **SCORE** | **INITIALS** |
| **A** |  |  |
| **B** |  |  |
| **TOTAL** |  |  |

***Turn over***

**SECTION A (SCORE:40)**

*Attempt* **all** *the items in this section*

1. Jane a S.2 student, lives with her parents in Kampala city but comes for holidays in Arua.In her routine house works she realized that whenever she is boiling water it takes a longer time to boil when in Kampala compared to when she is in Arua.This has made her confused. Make a write-up explaining her observations*. (score 04)*

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1. Manyibaku trading Centre in the outskirts of Arua city is a very dirty trading Centre heavily flooded with polyethene bags, plastic bottles from beverages and other items which makes it one of the dirtiest places in the city. As such the trading Centre committees have called for a meeting to have this issue addressed. As a concerned member, write a brief advice for the committee on what can be done. *(score 04)*

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1. A family organized for outing during Christmas day and everyone ordered for his or her choice of drinks. Shamim ordered for a cold drink(soda) and placed it on the table for some times. After a few minutes, droplets of water were seen on the bottle, something she failed to understand and kept on wondering what could be the problem with her drink. Briefly explain to her what is happening. *(score 04)*

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1. You have been awarded a contract to construct a modern school gate for your school. Prepare a brief document that will guide you and the engineers on the choice of materials that you will use to build this modern gate for the school. In each case relate the choice of the material to its physical property. *(score 04)*

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1. Below is part of conversation between four students of Mvara s.s day section on their way to home

**Atama**:(recording the groups notes about practical), what happened

**Kitongo**:it went fizzy(foamy)

**Atama**: Did you see any new substance formed?

**Kitongo:** No

**Wadri**: What shall I write that was formed

**Hassan**: A blue colour

Make a conclusion about the types of changes these students were conversing about. *(score 04)*

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1. Peptic ulcers commonly known as heart burns is caused by too much hydrochloric acid produced during the digestion of foods in the stomach and normally treated by taking magnesium tablets. Explain how Magnesium tablets makes one relieved from heart burns. *(score 04)*

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1. Sam a resident of Soroti city always wonder as where the waste water from his bathrooms, toilets and kitchen goes after use and has come to inquire from you as you went for the holidays. Guide him as to where this water goes and what happens to it. *(score 04)*

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1. Carbon exhibits allotropes inform graphite and diamond used for different purposes. Relate the properties of these allotropes to their uses in everyday life. *(score 04)*

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1. Sarah was attacked by bees when collecting firewood in a nearby forest. As a friend to Sarah with whom you associate, describe how you can help her using locally available materials. *(score 04)*

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1. Aluminium is one of the most reactive elements in the reactivity series. However, it is mostly used in satellite discs without protecting it. Explain why aluminium is not protected. *(score 04)*

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**SECTION B (SCORE 60)**

*Attempt* **four** *questions from this section*

1. A resident of Mvara Congo zone 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. This has confused her more. Prepare an article to clear away her dilemma. *(score 15)*
2. In one of the parliamentary sessions of the 11th parliament of the republic of Uganda, one of the honorable members raised a concern that the enhanced salary for the science teachers should be scrapped off which created a heated debate in that sitting with many saying that the subjects including chemistry have done nothing for this country. As a young chemist justify the statement of these members of parliament. *(score 15)*
3. The school management committee(SMC) of Yawe secondary school has organized a budget meeting for the academic year 2024 to purchase learning materials for the school and a member has proposed that the modern periodic table should be one of the materials to be purchased which many members did not agree. Insist on the need to include the modern periodic table among the items to be purchased.  *(score 15)*
4. 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. Evaluate the meeting’s resolution. (*score 15)*
5. 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. Guide the locals on how the make sustainable use of these fuels. *(score 15)*
6. Lake Katwe in western Uganda is known to be the source of salts that is used in homes for cooking and other uses. The president of the republic of Uganda has therefore asked the scientists for whom he had increased their salaries to do everything possible to get the common salt from this lake. As a young scientist, guide the fellows on how salt can be obtained from this lake.  *(score 15)*

**END**

**MERRY CHRISTMAS AND PROSPEROUS NEW YEAR 2024**

**EJK AND SAM……………..CHEM DEPT**