

CLEVERLAND HIGH SCHOOL MAYA

CHEMISTRY THEORY

Paper 1 545/1

SENIOR THREE 2024

TIME: 2 HOURS

SECTION A (*Answer **all** questions in this section*)

1. Derrick woke up one day and found that all the trees in his garden where cut due to the land wrangles. He reported to the police. When he came back home, he found that he had a heap of over 100 logs of wood and felt so sad of such a loss. He began thinking of what to do with these logs. He thought of transforming these logs into a fuel but was not sure of how to do it.
- a) If you found Derrick in such a puzzle, what helpful information would you give him? (10 marks)

b) Do you think Derrick has gotten a great idea? (10 marks)

2. Makuutu village in Uganda is one of the areas with a lot of the clay stone rock. But many people in that area are poor and have no jobs. Their conditions is worsening everyday yet clay is just everywhere in their area. The government is proposing to create an awareness workshop for these people on what they can make out of the mineral in their area to as to improve their wellbeing.



- a) Assuming you are chosen to head the team to Makuutu village for the awareness workshop, what main products would you not miss telling them about? (05 marks)

- b) What make the mineral in the area suitable for production of the products in a) above? (05 marks)

- c) Why do you think the Makuutu village products will add value to Ugandans? (06 marks)

d) What caution should the users of the Makuutu village products be aware of? (04 marks)

SECTION B

Part I (*choose any **one** questions from this section*)

3. Natural resources have been destroyed as a result of increasing population and human activities. This has attracted the attention of the officials from the National Environment Management Authority. (NEMA)

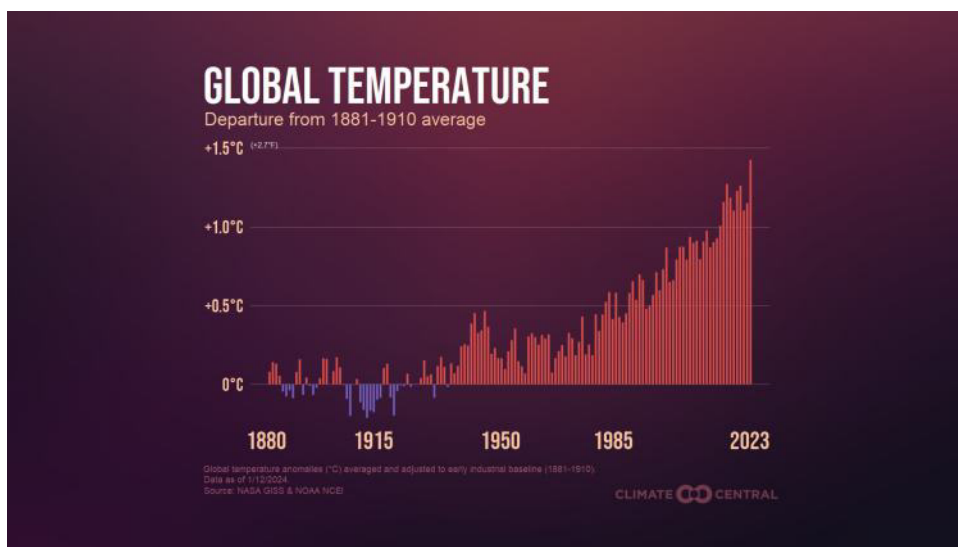
The officials are planning to create awareness to the people of the country through sensitization workshops organized in different district communities.

Task:

As a chemistry student, prepare a short presentation you deliver

during the workshop upon invitation. (20 marks)

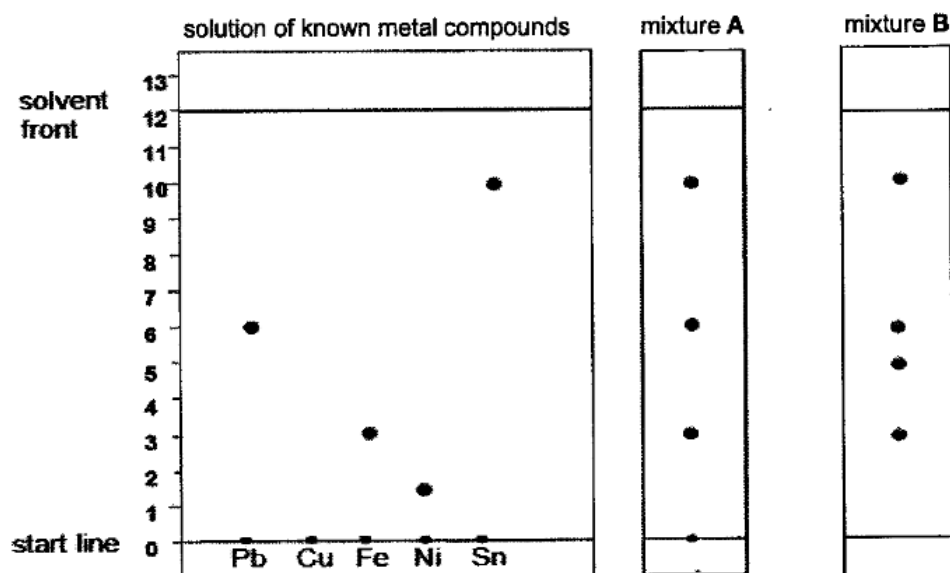
4. The BBC world service channel in Uganda reported of the annual global temperature of 1.4°C in only 2023. The **NOAA** (National Oceanic and atmospheric administration) and **NASA** (National aeronautics and space administration) data, shows that the global temperatures in 2023 are ranked highest since 1850. This is not good news to hear about but many Ugandans are not even aware of such information.



Task: If you are invited to a talk show at UBC television about the environment, what would you present? (20 marks)

Part II(choose any *one* questions from this section)

5. A trader in alloys was making a new deal with a new company to supply him with excellent alloys A and B. He traded mainly in alloys not containing lead since lead is considered poisonous. The new company claims to provide lead free alloys. But some people around the company have alerted him when he inquired from them about the issue that they always see lead containing truck entering the company area. The trader contacted a scientist around Kampala who provided him with the information below. The scientist used a dilute acid as the solvent.



Task: Use the information below to write a report to the trader explaining to him of what was done by the scientist to the samples of alloys he took there and your recommendation therefore. (20 marks)

- A group of learners got confusion about the fact that saucepans should be made from some metals not plastics. The confusion broke the group into three groups as shown below.

Group 1: they believe all metals can make saucepans

Group 2: they believe only some metals can make saucepans

Group 3: they believe metals and plastics can make saucepans



Task: In writing, judge which group is right. (20 marks)

END