

S.1 Chemistry  
**Paper 1**  
Theory

**INSTRUCTIONS**

- ✧ *This paper consists of three examination items in two sections A and B.*
- ✧ *Write your responses in the gaps left for section A and use the space left for responses in section B.*
- ✧ *Respond to all the items in both the sections.*
- ✧ *Untidy work and unreadable handwriting will not be scored.*

## SECTION A

### Item 1

When Dorothy was collecting utensils for washing at home, she unintentionally mixed paraffin and water in a cup. Before she recognised her accidental incidence, she also added water to her father's waragi in a glass. After recognition of the incidence, Dorothy became worried because she is going to be beaten by her mother for having spoilt her paraffin and by her father for having diluted his waragi. The two parents went to a wedding ceremony and therefore, Dorothy has only a half a day to sort herself however, she has no any knowledge to use and escape this challenging situation.

### Task

Help Dorothy on,

a) i) The category of the mixtures she accidentally made.

.....

.....

.....

.....

..... 06scores

ii) The category of the liquids in the mixtures she made.

.....

.....

.....

.....

..... 06scores

b) The properties of the components that led to their behaviour in the mixtures Dorothy made.

.....

.....

.....

..... 04scores

c) The suitable method she would use to obtain pure components before the parents come back.

.....

.....

.....

.....

..... 04scores

d) The side effect associated with over use of the pure component from the father's glass.

.....

.....

.....

..... 03scores

## Item 2

S.2 learners of Nelson Mandela S.S started up a project of construction of a gabbage incinerator at their school but they neede fired bricks which they didn't have. They decided to make their own bricks but since it was a wet season, they were disturbed by rain which destroyed some of their row bricks. The learners decided to looke for a material to be used for covering their bricces from rain drops but the materials in the most abundance are polythen sacs. Since they are looking forward to protecting the environment, some learners suggest to use dry grasses. Arguments are in compromise.

### Task

a) Help the learners to categorise the materials.

.....

.....

.....

.....

..... 06scores

b) Explain to them how the abundantly available material would be used.

.....

.....

..... 03scores

c) Explain to them the suitability of the most abundant material.

.....

.....

..... 03scores

d) Evaluate the materials

.....

.....

.....

..... 03scores

e) Help them to understand the environmental impacts of the most available material.

.....

.....

.....

..... 03scores

## SECTION B

### Item 3

On your village, there is rapid development of industries which have accumulated toxic gases into the atmosphere. The village leaders felt concerned because people are suffering from chronic respiratory and heart diseases, Waters have changed colour, smell and taste. The village L.C chairman has hosted an environment officer from the district to sensitise people and factory owners about the this environmental case but before he addresses the congregation, you have been asked to present a speech addressing this issue.

### Task

Make a write up of your speech.

11scores

-----