

MKALAMA DISTRICT COUNCIL

**FORM TWO DISTRICT MOCK ASSESSMENT
CHEMISTRY**

TIME: 2:30 Hours

YEAR: 2025

INSTRUCTIONS

1. This paper consist of section A, B and C with total of ten (10) questions
2. Answer all questions in section A, B and one (1) question from section C
3. Write your examination number on every page of your answer booklet(s)

QN NO	SCORE	EXERMINER'S INITIAL
1.		
2.		
3.		
4.		
5.		
6.		
7.		
8.		
9.		
10.		
TOTAL		
CHECKER'S INITIALS		

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Candidate Examination Number

SECTION A (15 Marks)

Answer all questions from this section

1. For each of the items (i) – (x), choose the most correct answers from among the given alternatives and write its letter in the box provided.

(i) Nawanda went to the laboratory to perform a certain experiment. During experiment she used a spatula for scooping substances. What is the possible type of substance making that apparatus scoop?

- A. Powdery and gases
- B. Crystalline chemicals and powdery
- C. Crystalline chemicals and liquids
- D. Powdery and liquids

(ii) A girl dissolved a small amount of sodium chloride in the evaporating dish containing water to form a solution then heated. What name is given to a sodium chloride in the solution?

- A. Solute
- B. Solvent
- C. Solution
- D. Suspension

(iii) What is the smallest particle of an element that retains its chemical properties?

- A. Molecule
- B. Ion
- C. Atom
- D. Compound

(iv)

Which of the following is a physical change?

- A. Burning of paper
- B. Melting of ice
- C. Rusting of iron
- D. Digestion of food

(v) Among the following which one is the physical properties of oxygen?

- A. Its colourless, odorless and tasteless
- B. It turns blue litmus paper to red
- C. It has pungent smell
- D. It burns with blue flame

(vi) Mr. Majanga experiences difficulty in breathing when using elevator of his house.

What was exactly happening to his lungs?

- A. Do not exhale enough oxygen
- B. Do not inhale enough carbondioxide
- C. Do not inhale enough oxygen
- D. Do not exhale enough carbondioxide

(vii) Trashes collected from all dustbins in a school were put into a special furnace where they produce energy in the form of light and noticeable heat when lit. What is the process taking

place inside the furnace?

- A. Decomposition
- B. Combustion

- C. Disposing
- D. Rotting

(i) P nting	A. A mo reactive
(ii) C vanizatio	metal tha iron is a
(iii) S rificial a d	ached to e protect
ode	mate
(iv) P ting	al an will
(v) S ca gel	cons med favc of it

B. A substance in form of granules and it absorbs moisture

C. The process of coating iron material or steel with zinc

D. The coating of substances such as metals with a special pigment

E. Involves coating iron with oil.

F. The process of spraying iron with carbon dioxide gas

G. The c

	ting of n								
	erial wit								
	in.								
(i)	(ii)	(iii)	(iv)	(v)	(vi)	(vii)	(viii)	(ix)	(x)
LIST	(i)	(ii)	(iii)	(iv)	(v)				
LIST									

Candidate Examination Number

- (viii) Mabala was prescribed to use a medicine whose container had a label written “**shake well before use**” as the best for him. In which kind of mixture is the medicine categorized to?
- A. Solution
 B. Emulsion
 C. Suspension
 D. Filtrate

ANSWERS:

- (ix) Kibanji was ironing her uniforms, suddenly her mother called and she went to listen without switching off the socket. Upon coming back she found out that iron had exploded and the fire started to spread. Classify the type of fire caused by Kibanji.
- A. Class C
 B. Class D
 C. Class E
 D. Class F
- (x) Lulela is facing a problem of fetching water at his village because all available water sources are full of mud. His friend advised him to assemble a simple water filter. Which of the components outlined below should not be included by Lulela in assembling the device?
- A. Cloth
 B. Alum
 C. Charcoal
 D. Gravel

2. Match the methods of preventing rusting in LIST A with the corresponding descriptions in LIST B

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SECTION B (70 Marks)

Answer **all** questions in this section

3. (a) You have been appointed in a village meeting as an expert of Chemistry to explain to villagers four (4) applications of Chemistry in our daily life on the following fields.
by writing the letter of the correct response below the item number in the table provided.

(i) Agriculture

(ii) Transportation

(iii) Medicine and pharmacy

(iv) Construction materials industry

ANSWERS:

(b) A student was asked to mention four professional careers he/she may attain through studying Chemistry subject. What correct answers can we get from her/him?

(i) _____

(ii) _____

(iii) _____

(iv) _____

4. (a) A teacher planned with his students to perform an experiment at 8:00 pm. Students reminded

the teacher that the laboratory has no source of electricity so how can the experiment be conducted without light? The teacher told them we shall use the Bunsen burner to get light.

(i) What type of flame will be suitable during their experiment?

(ii) Why is the flame named in (i) above suitable for that purpose? Give two reasons.

(iii) Draw a well labelled diagram of the flame named in (i) above.

(b) Scientists believe that the use of chemical symbols is more significant than using common names of elements. Give two reasons to support this statement

(i) _____

(ii) _____

5. (a) Madam Aisha took 1kg of maize to a mortar and pestle for grinding it, after few hours she succeeded to get 1kg of maize flour from those grains.

(i) Comment on the change occurred on the maize grains, as it was a physical change or chemical change.

(ii) Give four reasons to support your answer in (i) above

(i) _____

(ii) _____

(iii) _____

(iv) _____

(b) Four beakers/bottles were found in the laboratory containing the following components: Bottle

A contains a mixture of spirit and water, Bottle B contains a mixture of Iodine and sand,

Bottle C contains a mixture of dyes and Bottle D contains muddy water. Which methods can you use to help a laboratory technician to separate these components accordingly?

In bottle A _____

In bottle B _____

In bottle C _____

In bottle D _____

6. (a) Form four (4) students confused the uses of the gas that supports combustion (ignites) with the one which burns with a Pop sound.

As a form two (2) student give the name of the gas that burns with a pop sound, then correct this confusion by giving them four uses of the gas which burns with a pop sound;

Name of the gas

Renewable	Non-renewable

Uses of the gas:

(i) _____

(ii) _____

(iii) _____

(iv) _____

(b) Mr. Majula went to the laboratory and found a substance T kept in a beaker, he also observed that the substance T boils at 100°C and freezes at 0°C at standard pressure.

(i) Outline three (3) chemical properties of substance T.

a)

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b)

c)

(ii) How is the substance T used in manufacturing industries? Give two (2) uses;

a)

b)

c)

7. (a) Give the meaning of the following terms:

(i) Fuel

(ii) Efficiency of a fuel

(b) You have been given the following; Biogas, petroleum, solar energy, wind energy, charcoal, natural gas. Help your young brother to classify them as renewable or non-renewable energy sources.

(c) Suppose your mother told you to buy a good/proper fuel for normal domestic uses. Which four (4) factors you may consider to implement your mother's order?

(i) _____

(ii) _____

(iii) _____

(iv) _____

8. (a) What are the qualities of a good chemistry laboratory (give four points)

i) _____

ii) _____

iii) _____

(b) State any four rules that must be considered during practical activities in the chemistry laboratory
