THE PRESIDENT'S OFFICE
REGIONAL ADMINISTRATION AND LOCAL GOVERNMENT
BUNDA DC WESTERN CLUSTER
FORM TWO PRE-MOCK EXAMINATIONS
CHEMISTRY

TIME: 2:30 HOURS **DATE: JUNE, 2022**

INSTRUCTIONS:

1. This paper consists of **THREE** sections **A**, **B** and **C**.
2. Answer all questions in all sections.
3. All answers must be written in the spaces provided
4. All writings must be in blue or black pen except diagrams which must be drawn in sharp pencil
5. Write your examination number on every page of this paper
6. Show your work clearly.

SECTION A: (15Marks)

1) For each items (i) – (x) choose the correct answer from the given alternatives and write its letter in the space provided.

i. A chemist should acquire the following skills except
   a. Problem identification b. Surgery c. Data analysis d. Observation

ii. . Glucose dissolves in water to form a uniform mixture.
   a. water is solution, glucose is solvent and the product is solute
   b. water is solute, glucose is solvent and the product is solution
   c. water is solvent, glucose is solute and the product is solution
   d. water and glucose forms immiscible mixture

iii. An important property of oxygen which distinguishes it from other gases is that;
   a. Burns and support combustion
   b. Support combustion but does not burn
   c. Burns but does not support combustion
   d. Neither burns nor supports combustion

iv. which of the following is an agricultural chemical products made by the application of chemistry?
   a. Drugs b. Cement c. Pesticides d. Clothes

v. Which one of the following sets of laboratory apparatus are used for measuring volume of liquids
   a. flask, measuring cylinder and test tube
   b. Burette, pipette and measuring cylinder
   c. Volumetric flask, water though and burette
   d. Gas jar, measuring cylinder and pipette

vi. Which state is involved when drying wet clothes?
   a. Liquid to solid b. Gas to liquid c. Liquid to gas d. Solid to gas

vii. The components of fire triangle are;
   a. Oxygen, fuel and heat b. Oxygen, heat and hydrogen

c.. Oxygen, nitrogen and heat d. Oxygen, carbon dioxide and fuel

viii. The process of coating iron or steel with zinc is known as:

a. Zinc painting b. Allowing c. Tin plating d. Galvanization

ix. The appropriate extinguisher used to put off fire caused by electricity is:

a. Carbon dioxide extinguisher b. Water extinguisher

c.. Wet chemical extinguisher d. Dry air extinguisher

x) Technicians prefer to use Non-luminous flame in welding because:

a. It is bright and non-sooty b. It is light and non-sooty

c.. It is very hot and large d. It is very hot and non-sooty

i	ii	iii	iv	v	vi	vii	viii	ix	x

2. Match the descriptions in **List A** with the corresponding in **List B** by writing the letter of the correct response beside the item number in the answer booklet provided

LIST A	**LIST B**
ii. Series of investigations iii. A tentative explanation iv. A statement that identifies an event, fact or situation v. A statement of how the results relates to hypothesis vi. A step in which the researcher explains the results	A. Conclusion B. Data analysis C. Data collection D. Hypothesis E.Observation F. Experimentations G. Problem identification

List A	i	ii	iii	iv	v
List B					

SECTION B (70 Marks)

Answer all questions in this section

3. a) In which other areas do we find the warning signs out of laboratory (give four point)

i. …… ii. …… iii. …… iv. ……

b) Name the chemical warning sign that is mostly likely to appear on a bottle of

i. Concentrated nitric acid…….

ii. Body spray……..

c) List down the difference between the named warning sign in b (i) and (ii)

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……
4. a) Explain how measurements of volume differ when using measuring cylinder and burette.……
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……
……
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……
b) It is recommend that laboratory apparatus should be properly washed or wiped after use, explain the significance for this when
i. Measuring volume of liquids
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……
……
…..……

ii. Measuring mass of substance
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… ……
……
……
……
5. Sometime you need to separate solvent from solution. For example drinking water can be obtained from sea water.
a) Name the method employed……..
b) Draw a well labeled set of laboratory apparatus showing the method you have named above
c) State process of change in the two different apparatus used showing where the change comes from and the destination.
……
……
……
…..……..……..….
6. (a) By giving one reason, explain the following facts
i. During laboratory preparation of oxygen gas, little manganese dioxide is added to hydrogen peroxide.
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……
……
…..…….....….
ii. Fish can obtain oxygen for respiration although spend their life in water
……
iii. Oxygen gas can be used for welding activities although it does not burn.
……
b) Give two domestic uses of oxygen gas

i. ……
ii. ……

7. Chemistry is not useless subject. Give five points
   i. . ……
   ii. ……
   iii. ……
   iv. ……
   v. ……

8 a) Draw a Bunsen burner flame which is obtained when the air hole is open and label H as the "hottest part", C as the "cold part"

b) List down **four** properties of the named flame above

i. …… ii. …… iii. …… iv. ……

9. In an experiment, two iron nails **A** and **B** were used whereby painting was applied on nail **A**. The two nails were placed in moist environment and after one month the weight of each nail was determined.

a) i. Which of the two nail would be heavier?.....

ii. Write a reason for your choice above…… b) i. why nail **A** was painted

…… ……

…… ……

ii. Define a chemical process occurred on nail **B** after one month.

…… … …… …… …… …

SECTION C (15 Marks)

10. a) i. The set up below represent laboratory preparation of Hydrogen gas.

Suggest any **two** possible mistakes done for setting up the diagram.

i. ……
ii. ……

b) i. Draw the correct diagram for preparation of the gas

ii. Name the acid used…… iii. Why does the gas is collected by downward displacement of water

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……..….

(c) Which property enables the use of hydrogen gas in

i. Fueling

……... …

…… ii. Manufacturing of margarine

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……,……..……..….