

**PRESIDENT'S OFFICE  
REGIONAL ADMINISTRATION AND LOCAL GOVERNMENT  
BUNDA DISTRICT COUNCIL  
FORM TWO DISTRICT EXAMINATION – APRIL 2022**

**032**

**TIME 2:30HRS**

**CHEMISTRY**

**Monday 11<sup>th</sup> April 2022 | AM**

**INSTRUCTION**

1. This paper consist of three sections A, B and C
2. Answer all questions in section A and B and only one question from section C
3. Show your work clearly

**SECTION A (15%)**

1. Choose the most correct answer from the items provided and write its letter on the box provided

(i) A metal that is usually in liquid form is

- A. Mercury
- B. Bromine
- C. Sulphur
- D. Iron

(ii) One of the characteristics of a good fuel is

- A. Low harmful into environment
- B. Expansivity
- C. Affordability
- D. Scarcity

(iii) Which one of the following is not an element?

- A. Mercury
- B. Water
- C. Zinc
- D. Hydrogen

(iv) Water is a universal solvent because:

- A. It is available everywhere
- B. It boils at 100°
- C. It dissolves most of the solvent
- D. It dissolves all crystals compound

(v) If K and Y are Isotopes of the same element then K and Y have the same

- A. Number of neutron
- B. Atomic weight
- C. Mass number
- D. Atomic number

(vi) Which of the following is not a property of hydrogen gas?

- A. It supports combustion
- B. It is slightly soluble in water
- C. It is less denser than air
- D. It is colourless and odourless

(vii) The process used to separate a mixture of salt and water is

- A. Filtration
- B. Fractional distillation
- C. Evaporation
- D. Sublimation

(viii) Mortar and pestle in a chemistry laboratory is used for:

- Filtration dirty liquids
- Decantation of dirty liquid
- Pounding, grinding and crushing
- Distillation

(ix) Aluminium is the thirtieth element in the periodic table. Its valence is

- 4
- 2
- 3
- 1

(X) Ungalvanized iron sheets undergo rusting when exposed to;

- Air and fire
- Air and oil
- Air and moisture
- Water and oil

2. The following are matching items. Match the correct item from list B with the corresponding with list A. write the letter against the corresponding item on the box provided

**LIST A**

- Number of electrons shared or transferred when atoms form a chemical bond
- Destructive distillation of woods
- Gives a pop sound when burnt
- Relights a glowing splint
- The study of matter and its properties

**LIST B**

- Chemical reaction
- Chemistry
- Electron transfer
- Electron sharing
- Hydrogen
- Mercury
- Oxygen
- Valency

**SECTION B (70%)**

Answer all questions in this section

3. (a) define the term laboratory

(b) draw the following apparatus in a tabular form and state one uses of each

Apparatus	Diagram	uses
Measuring cylinder		
Round bottomed flask		
Spatula		
Test tube		

4. (a) state the burning material in each of the following classes of fire

- Class A fire.....
- Class B fire.....
- Class C fire.....

(b) give a briefly explanation on how you would stop fire caused by electronic equipment.

5. in the figure below identify the processes labelled A to D

6. When  $20\text{cm}^3$  of ethanol was added to  $20\text{cm}^3$  of water and mixed thoroughly, the resultant solution was less than  $40\text{cm}^3$  in volume. Say why?

7. (a) what is fuel  
 (b) Give one example of each of the following categories of fuel  
 (i) Solid fuel example.....  
 (ii) Liquid fuel example.....  
 (iii) Gaseous fuel example.....

8. (a) differentiate a mixture from a compound  
 (b) Is air a mixture or a compound? Give three reasons to support your answer

9. (a) define the following  
 (i) Physical change  
 (ii) Chemical change  
 (b) Write three differences between physical and chemical change

**SECTION C (15%)**  
*Answer only one question*

10. (i) Gondo is a form two student at Wenye secondary he always prepare a breakfast before going to school, but he realized that much of his time is used in the kitchen preparing tea, which advice would you give to him upon the fuel he used.  
 (ii) For him to have a good fuel what are other consideration he should make before buying another fuel. Give four  
 (iii) If the fuel used by Gondo is not environmental friend, what comment will you make to him so that to conserve environment and their natural heritages. Give two

11. If water is a component of hydrogen and oxygen molecules, and rainfall gives water so is it possible to make rainwater in the laboratory by preparing hydrogen gas and oxygen gas then combine them?  
 (a) if the answer is YES give reasons  
 (b) if the answer is NO describe how rainwater can be formed.