

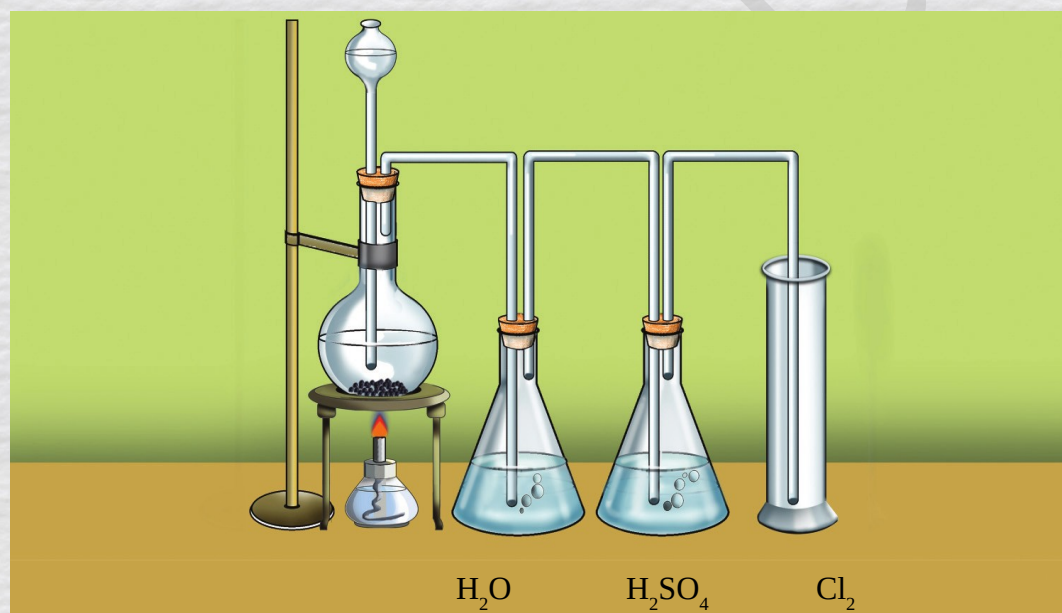
**THIRUVANANTHAPURAM EDUCATIONAL DISTRICT**

STANDARD IX

CHEMISTRY

CW IX 18

1. Observe the figure carefully which shows the preparation of chlorine in laboratory and answer the following



- What are the reactants required for the preparation of chlorine?
- What are the products?
- Write the balance chemical equation of this reaction?
- Why chlorine gas is passed through water?
- How can we remove the water vapour formed along with chlorine?

2. Take two glass jar filled with dry chlorine gas. Put a litmus paper, bits of coloured cloth and pieces of coloured paper in one jar in wet condition and similar dry objects in another jar.

a) Materials in which jar are decolourised?(wet /dry condition)

b) The equation for bleaching action of chlorine is given below. Which compound is responsible for bleaching?



c) Complete the equation.



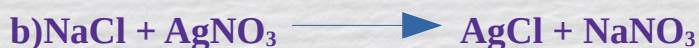
(Nascent oxygen)

d) Bleaching activity of chlorine is an oxidation reaction. Why?

3. Given below is a page from chemistry record of Sonu . Help him to complete the table and answer the following questions

a)

EXPERIMENT	OBSERVATION	INFERENCE
Take a little sodium chloride solution in a test tube. Add a few drops of silver nitrate solution in it.	.....(i).....	.....(ii).....



Identify the type of chemical equation given above? (Decomposition / Double decomposition)

4. Nitrogen is essential for the growth of plants. Complete the following stages which represents atmospheric nitrogen reaching soil in the form of nitrogenous compound as a result of thunder and lightning.

a) The ... (i) ..... bond in nitrogen is broken when there is thunder and lightning.

b) Nitrogen combines with oxygen to form ..... (ii) .....

c) Nitric oxide formed like this combines with more .... (iii) .... to form nitrogen dioxide ( $\text{NO}_2$ ).

d) Nitrogen dioxide dissolves in rainwater and reaches the soil as ..... (iv) ....

e) Nitric acid reacts with minerals in soil and forms ..... (v) .....