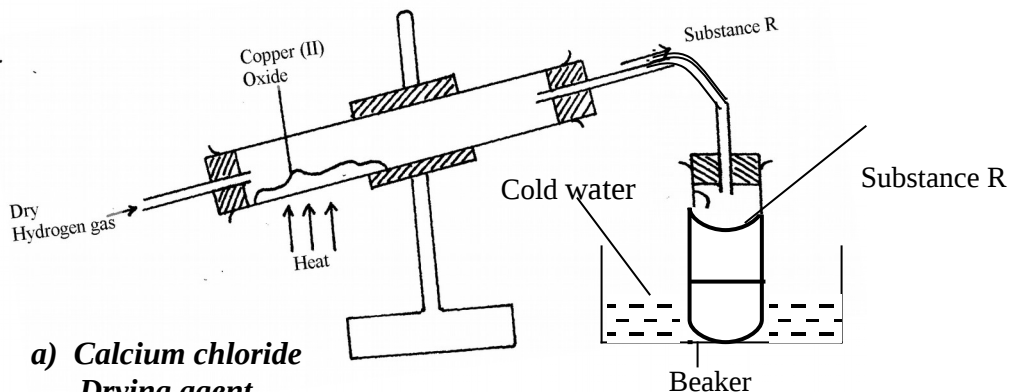


Water and hydrogen

- Aluminium is above hydrogen in the reactivity series of elements
 - The reaction is too exothermic that alot of heat is produced causing ignition of hydrogen in presence of oxygen
 - $$K_{(s)} + H_2O_{(g)} \rightarrow KOH_{(aq)} + H_{2(g)}$$

$$H_{2(g)} + O_{2(g)} \rightarrow H_2O_{(g)}$$

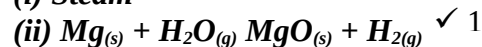
2.



- Calcium chloride
Drying agent



- Steam

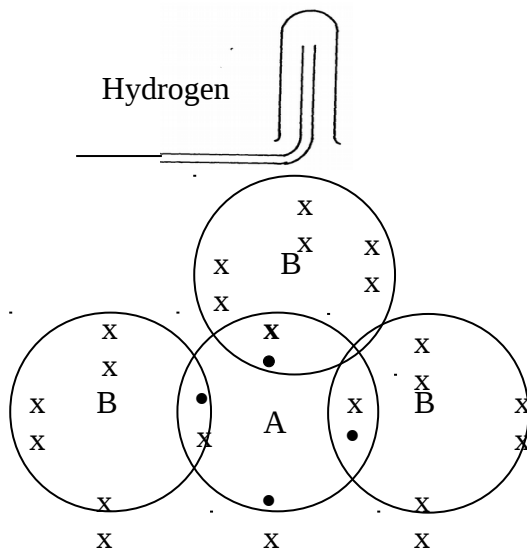


(iii) Gas P is passed through the combustion tube before heating is commenced

- $2H_{2(g)} + O_{2(g)} \rightarrow 2H_2O_{(l)}$ ✓1

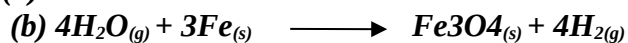
b) – Turns anhydrous white paper $\checkmark\frac{1}{2}$ copper (II) sulphate into blue. $\checkmark\frac{1}{2}$ Or
– Turns anhydrous blue $\checkmark\frac{1}{2}$ cobalt (II) chloride into pink. $\checkmark\frac{1}{2}$

-



- reverse steam ✓1

- N



(Not balanced 0mk)