**CHEMISTRY FORM THREE MARKING SCHEME 2021**



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3.a) Under similar conditions of temperature and pressure, the rate of diffusion of a gas is inversely proportional to the square root of its density.

b) i) Yellow solid deposited.

ii) X close to Cl2 end



**4. a)** Charles law states that, the volume of a given mass of a gas is directly proportional to its absolute temperature at constant pressure.



ii)

iii) Extrapolation ***½***

Value = -271 ± 2 ***½***

iv) Read from the graph

Volume at -225°C = 5cm³ ± 0.1 



|  |  |  |
| --- | --- | --- |
| a)fractionating column.To enhance successive condensation and evaporationb) Leibig condenser.  | c) Point X  | d) ethanol |