

MT EDUCARE LTD.

ICSE X

SUBJECT : **CHEMISTRY**

ANALYTICAL CHEMISTRY

Assignment Sheet

STEP UP ANSWERSHEET

22.

(i)	Test	Sodium Chloride Solution	Sodium Nitrate Solution
	On adding ammonium hydroxide Solution.	White ppt of AgCl is formed which dissolves in NH_4OH	No reaction takes place.
(ii)	Test	Hydrogen Chloride Gas	Hydrogen Sulphide Gas
	A rod dipped in ammonium hydroxide is brought near the gas.	Dense white fumes of Ammonium Chloride are formed.	No reaction takes place.
(iii)	Test	Calcium Nitrate Solution	Zinc Nitrate Solution
	Ammonium Hydroxide is added first dropwise and then in excess.	No precipitation	Gelatinous white ppt of $\text{Zn}(\text{OH})_2$ is formed which is soluble in excess of NH_4OH .
(iv)	Test	Carbon dioxide Gas	Sulphur dioxide Gas
	The gas is passed through acidified solution of orange coloured $\text{K}_2\text{Cr}_2\text{O}_7$ solution.	No. change is observed.	Orange solution of $\text{K}_2\text{Cr}_2\text{O}_7$ turns green.

[2013]

23. (i) Initially a pale blue ppt is formed which on addition of excess of ammonium hydroxide dissolves and a deep inky blue solution is obtained.
(ii) Initially gelatinous white ppt is formed which dissolves in excess of ammonium hydroxide.

[2013]

24. A colourless gas with characteristic smell of ammonia is evolved. [2014]

25. (i) $X \hat{=} \text{Zn}^{2+}$
(ii) $Y \hat{=} \text{Cu}^{2+}$
(iii) $W \hat{=} \text{Ca}^{2+}$ or Mg^{2+}
(ii) $Z \hat{=} \text{NH}_4^+$

[2015]

26. (D) Copper chloride **[2017]**
27. Ca^{2+} **[2017]**
28. A dirty green precipitate is formed. **[2017]**

