

SARASWATI DEVI INTERNATIONAL SCHOOL

WEEKLY TEST

CLASS XII

CHEMISTRY

FM-20

1. Derive Ostwald dilution law. **(3)**
2. The dissociation constant of acetic acid is 1.8×10^{-5} . Calculate (H^+) . Calculate the same in its 0.05 M solution **(3)**
3. The value of K_w at a certain temperature is 9.55×10^{-14} . Calculate the pH of water at this temperature **(3)**
4. 15 ml of 0.05 M $AgNO_3$ is mixed with 45 ml of 0.03 M K_2CrO_4 . Predict whether precipitation will take place or not. K_{sp} of Ag_2CrO_4 is 1.9×10^{-12} . **(3)**
5. Group 4 cations precipitate in alkaline medium as sulphides but group 2 cations precipitate in acid medium. Why? **(3)**
6. Pb^{2+} ions are detected in group 1 and group 2 both. Why? **(3)**
7. Give two uses of buffer solution. **(2)**