**Assignment**

**1- In Mohr method, if the pH is higher than 10 ……….. Precipitates.**

 **a- titrant b- indicator c- silver hydroxide d- silver complex e- silver nitrate.**

**2- A solution contains 0.03 gm of Lithium Chloride in 50mL of solvent. The**

 **concentration of this solution in ppt (part per thousand) equals to…**

 **a- 0.6 gm/L b- 600 mg/mL c- 60 ng/cm3 d- 0.6 ppb e -60pg/mL**

**3- The solubility of AgI salt in water equals to: (Ksp(AgI) = 8×10-17 ).**

1. **8.944**×**10-7 M**
2. **8.944**×**10-8 M**
3. **8.944**×**10-9 M**
4. **8.944**×**10-10 M**
5. **8.944**×**10-11 M.**

**4- The solubility of AgBr salt in ammonia solution equals to:**

**(Ksp(AgBr) = 4×10-13 ) β0 for this solution = 1.5×10-3.**

1. **1.633**×**10-5 M**
2. **1.633**×**10-6 M**
3. **1.633**×**10-7 M**
4. **1.633**×**10-8 M**
5. **1.633**×**10-9 M**

**5- In Mohr method, is used to keep the pH of the solution about 8.**

 **a-NH3 b- CaCO3 c- NaOH d- KOH e- LiOH.**

**6- The Solubility of AgCl salt in water equals to: (Ksp(AgCl) = 1.82×10-10 ).**

1. **1.349**×**10-2 M**
2. **1.349**×**10-3 M**
3. **1.349**×**10-4 M**
4. **1.349**×**10-5 M**
5. **1.349**×**10-6 M.**

**7- Argenometric Titration:**

1. **Neutralization Titration.**
2. **Precipitation Titration.**
3. **Complexation Titration.**
4. **Red-Ox Titration.**

**8- The solubility of PbS salt in acidic solution equals to:**

**(Ksp(PbS) = 3**×**10-28 ) α2 for H2S in this solution = 1.25**×**10-17.**

1. **4.8989**×**10-2 M.**
2. **4.8989**×**10-3M.**
3. **4.8989**×**10-4M.**
4. **4.8989**×**10-5M.**
5. **4.8989**×**10-6M.**

**9- A solution contains 0.005 gm of sodium sulphate in 50 mL of solvent. The**

 **concentration of this solution in ppm equals to ………**

 **a- 50 µg/m3 b- 150 mg/mL c- 100 mg/L d- 75 gm/m3 e -25 ng/cm3**

**10- Fajanﹸs Method:**

1. **Adsorption Indicator.**
2. **Back Titration.**
3. **Direct Titration.**
4. **Indicators Reacting with the Titrant.**
5. **None of the above.**

**11- The conditional solubility product value holds:**

1. **The concentration of acid.**
2. **The concentration of base.**
3. **Specified pH.**
4. **None of the above.**

**Q\ Calculate PI for the titration of 50 mL of 0.1 M CaI2 with 0.1 M AgNO3 after addition of (0, 60, 100 and 110) mL. Ksp(AgI)=8.3 x 10-17 .**

**Q\ How many grams Sodium Chloride should be weighed out to prepare 1L of a 100 (mg/m3, µg/m3 and gm/L) solution??**

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