**ANALYTICAL CHEMISTRY**

***Assignment***

**Chose the correct answers:-**

1. **Molality is :-**
2. **The number of moles solute per litre.**
3. **The solute (mole) in solvent (kg).**
4. **The ratio between number of mole for solute or solvent to solution.**
5. **The number of equivalent solute per litre.**
6. **The M.wt of Hydrazine N2H4 is:-**
7. **25 gm\mol. b- 30 gm\mol. c- 32 gm\mol. d- 28 gm\mol.**
8. **The percentage% of Potassium ion in Potassium bicarbonate is:-**
9. **45% b- 43% c- 38% d- None of these.**
10. **The (wt/v %) unites are:**

 **a- (gm/mL), b- (mmol/L), c- (mg/mL), d- (g/mL×100).**

1. **Saturated solution are:-**
2. **The amount of solute are larger than the capacity of solvent.**
3. **The amount of solute are less than the capacity of solvent.**
4. **The amount of solute are equal than the capacity of solvent.**
5. **None of the above.**
6. **The mass substance of (5 mole) Calcium carbonate is:-**
7. **450 gm b- 500 gm c- 640 gm d-None of these.**
8. **The millimoles of (40 gm) CO2 is:-**
9. **740 mmol.**
10. **0.91 mmol.**
11. **850 mmol.**
12. **910 mmol.**
13. **The Normality unites are:**

 **a- (eq/mL), b- (meq/L), c- (meq/ cm3), d- (eq/cm3).**

1. **The Eq.wt of Sodium phosphate is:-**
2. **65.8 gm\eq. b- 59.0 gm\eq. c- 54.7 gm\eq d- 67.4 gm\eq.**
3. **A solution contains 0.025 gm of Calcium bromide in 500 mL of solution, The concentration of this solution in ppm equal:-**
4. **50 ppm b- 150 ppm c- 100 ppm d- 75ppm.**
5. **The pH of (0.2M, 25mL) (strong base) NaOH titrated with 10 mL of 0.2M (strong acid) Hydrochloric acid is equal:-**
6. **13.90 b- 12.88 c- 13.88 d- 13.50**
7. **The Mole fraction of water in the solution containing (20 gm) of Barium Chloride. The Density of water 1000 gm\cm3 is:-**
8. **0.998 b- 0.950 c- 0.899 d- 0.960**
9. **Lewis Theory is:-**

 **a- Acid:-a substance that can accept an electron pair and the base:-a substance that can donate an electron pair.**

 **b- Acid:-any substance that ionizes in water to give hydrogen ion and the base:-any substance that ionizes in water to give hydroxyl ions.**

 **c- Acid any substance that can donate a proton and the base any substance that can accept a proton**

1. **None of the above.**

**14- The equivalence point is:-**

1. **The number of moles of titrant equal number of moles of analyte.**
2. **The number of moles of titrant less number of moles of analyte.**
3. **The number of moles of titrant larger number of moles of analyte.**
4. **None of the above.**
5. **The relationship between molarity and part per million:-**
6. $ppm=\frac{M}{M.wt ×1000} $
7. $M=\frac{ppm}{M.wt ×1000} $
8. $M=\frac{ppm}{M.wt ×VmL} $
9. **None of the above.**

**(Atomic weights: - {Na = 23, Cl = 35.5, N=14, H=1, S = 32, Br = 79.9, K= 39.1,**

 **O = 16, C= 12, Br = 80, I = 127, Ca = 40, P = 31**

 **and Ba = 137} gm/mole.**