**ILMI BLOG.COM FSC 1ST YEAR CHEMISTRY CHAPTER 9 TEST**

**STUDENT NAME-------------------------- ROLL # ------------------------------- DATE: / /**

**Class 1 year Chapter 9 T. Marks: 40 Subject Chemistry Time 45 min Obtain marks------------------**

**Q # 1 encircle the correct option 1\*10=10**

1. Pure an aqueous solution of ethanol in water may have vapor pressure: A) equal to that of water B) equal to ethanol C) equal to propanol D) more than water
2. Molal boiling point constant is ratio elevation in boiling point to: A) Molarity B) Molality C) Mole fraction D) None
3. When azeotropic mixture is distilled its remain constant: A) Composition B) Temperature C) Solubility D) None
4. When KNO3 dissolve in water temperature in solution: A) Decrease B) Increase C) Remain constant D) None
5. Kb of water is: A) 0.052 B) 0.0052 C) 0.52 D) None
6. Na2SO4. 10H2O show: A) continuous solubility curve B) discontinuous solubility curve C) Both D) None
7. Solubility of CuSO4 in water at 0 C is 100g: A) 37.5 g B) 14.66 g C) 75 g D) 14.3 g
8. Solubility is expressed in term of number of gram of solution in gram of solvent: A) 100 g B) 10 g C) 99 g D) 1000g
9. Relative lowering of vapour pressure is of temperature: A) dependent B) Independent C) Both D) none
10. Saturated solution of NaCl in water at 0 C contain gram: A) 14.3 g B) 37.5 g C) 75.4 g D) 100 g

**Q # 2: Short Question 10 \* 2= 20**

1. What are ideal and non ideal solutions?
2. Define fractional crystallization.
3. What condition should be followed to observe colligative properties?
4. What is infinite solution?
5. Define hydration energy of ions.
6. What is meant by heat of solution?
7. Write application of boiling point elevation and freezing point depression.
8. Why freezing point of solvent is lowered due to addition solute?
9. Differentiate between ideal and non ideal solution.
10. What are continuous and discontinuous solubility curve.

**Q # 3 Long Questions 2\* 5 =10**

1. Explain Roult’s Law.
2. Explain measurement of boiling point elevation.