

Water

I Define the following terms

1. Potable water :- The water which is fit for human consumption and for drinking purposes
2. Solute :- The substance which dissolves or disappears in the solvent i.e. liquid to form a solution is called a solute
[It is a dissolved substance, ex: salt]
3. Solvent :- The liquid or medium of dissolution which allows the solute to dissolve in it, so as to form a solution is called a solvent
[It is the substance which dissolves the solute, ex: water]
4. Solution :- A homogeneous mixture of a solute in a solvent is called a solution
[It is the mixture of the solute and solvent]
5. Solubility of a solute :- It is the maximum amount of solute in grams that will saturate 100g. of water at $+^{\circ}\text{C}$.
6. Super Saturated Solution :- It is one which can hold or contains more of the solute at a given temperature than that present in a saturated solution.
7. Crystallisation :- The process of separation or deposition of crystals from a hot saturated solution on gentle cooling of the solution.

Q Differentiate b/w the following

1. Saturated and Unsaturated solution

Saturated	Unsaturated
* Saturated solution is one in which cannot dissolve more of the solute at a given temperature	* Unsaturated solution is one which can dissolve more of the solute at a given temperature

Example :-

Example :-

2. Hydrated and Anhydrous crystals

Hydrated	Anhydrous
* Hydrated crystals contain definite number of water molecules in loose chemical combination with the crystal	* Anhydrous crystals do not contain any definite number of water molecules in loose chemical combination with the crystal

Ex:- Sodium carbonate (washing soda)
Calcium sulphate (gypsum)

Ex:- Sulphates of
Potassium - K_2SO_4
Ammonium - $(NH_4)_2SO_4$

3. Drying agent and dehydration agent

Drying agent	Dehydration agent
<p>These are the substances which absorb moisture from the other substances</p>	<p>These are the substances which remove chemically combined water from compounds due to their strong affinity for water</p>
<p>Example:- * Concentrated sulphuric acid * Quick Lime (CaO) * Phosphorus pentoxide (P_2O_5)</p>	<p>Example:- * Concentrated sulphuric acid</p>