CHM191
======

1. Define standard solution?

    A solution of which the concentration is partially known

    Concentration which has 1 mol dissolved in 1 dm3 of solvent

--->> A solution of which the concentration is accurately known

    A solution containing a pure substance dissolve in a known volume of solvent

2. A substance which loses water of hydration upon exposure to atmosphere is called?

    Deliquescent substance

--->> Efflorescence substance

    Anhydrous substance

    Hygroscopic substance

3. What is the percentage w/w % ethanol if 5 g of ethanol is dissolved in 20 g of water?

    $$72 \% w/w$$

--->> $$20 \% w/w$$

    $$5 \% w/w$$

    $$25 \% w/w$$

4. In a chemistry laboratory a stoke bottle of acid solution reads, Ã¢â‚¬Å"1.25 specific gravityÃ¢â‚¬Â□; what does that mean?

    It means $$100 cm{^3}$$ of that solution weight 12500 g

    It means $$1 cm{^3}$$ of that solution weight 1250 g

    It means $$1 cm{^3}$$ of the weight 125 g

--->> $$1 cm{^3}$$ of that solution weight 1.25 g

5. If 2 cm3 of a stoke solution contains 1 mole of an acid how would you prepare 1 molar concentration of that acid in 250 cm3 of water?

Dissolve $$1 cm{^3}$$ of the stoke solution in $$250 cm{^3}$$ of water

--->> Dissolve $$2 cm{^3}$$ of the stoke solution in $$248 cm{^3}$$ of water

Dissolve $$1 cm{^3}$$ of the stoke solution in $$249 cm{^3}$$ of water

6. What is the w/v percentage concentration of 300ml of NaCl(aq) containing 5 g NaCl?

   --->> $$1.66 \% w/v$$

   $$305 \% w/v$$

   $$150 \% w/v$$

   $$60 \% w/v$$

7. In preparing a standard solution, two factors must be considered?

       1. The solute must be solid and 2. the solvent must be liquid

   --->> 1.The solute must be pure and 2. a suitable solvent be measured todefinite volume

       1.The solvent must be water and 2. the solute must be crystal form

       1.The soluteÃ¢â¬â„¢s nature must be known and 2. the solvent can be unknown

8. Calculate the mass of NaCl in 450 g of NaCl solution containing NaCl w/w %?

       485 g

       450 g

       35 g

   --->> 157.5 g

9. A solution contains 1.2 Molar concentration, what volume of it must be diluted with water to give 600 mls of 0.5 Molar solution?

   --->> 25 mls

       300 mls

       600 mls

10. A substance which takes in only moisture upon exposure to atmosphere is refer to as?

--->> Deliquescence substance

Anhydrous substance

Efflorescence substance

Hygroscopic substance