Salahaddin University-Erbil

College of Science

Department of Biology

1st Year Students

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**Subject: Practical General Chemistry**

**Q1/** Describe the following :-

Sublimation , freezing point

**Q2**/ Define Boiling point and melting point

**Q3/** A/How are impurities removed during re-crystallization? Write properties of the best solvent for recrystallization of solid compound. Q4/ Write the main factors can be influence melting point determination.

**Q5/** The freezing point of (8ml) of dioxine is equal to (–0.5C0), when we put (0.4gm) of camphor the freezing point will be decreased to( -4C0 ), calculate M.wt of the camphor. Kf =5.12

**Q6/** Give the reason

1. Using chloroform to extract caffeine.

**Q7/** Why Using water to extract caffeine from tea leaves.

**Q8/** Define the following :-

1. Standard solution

2. Boiling point

**Q9/** Use hot water to extract the caffeine from tea leaves.

**Q10/** Not use NaoH as the primary standard.

**Q11/** How are impurities removed during Re-crystallization?

**Q12/** The freezing point of (8ml) of dioxine is equal to (–0.5C0), when we put (0.4gm) of camphor the freezing point will be decreased to( -4C0 ), calculate M.wt of the camphor. Kf =5.12

**Q13/** Write the main differences between End point and Equivalence point ?

**Q14/** Write a short report about precipitation reaction.

**Q 15/** Write the types of hardness, the methods of releasing them.

**Q16 /** Describe the followings:

Purification melting point

**Q17/** Write two methods for purification of solid materials.

**Q18/** why does diet soda freeze at a higher temperature that regular soda?

**Q19/** In order to find the molar mass of an unknown compound, a research scientist prepared a solution of 0.930 g of unknown in 125 g of a solvent. The pure solvent had a freezing point of 74.2 °C, and the solution had a freezing point of 73.4 °C. Given the solvent's freezing-point depression constant, $Kf$ = 5.50 °C/$m$, find the molar mass of the unknown.

**Q20/** Write aim of re-crystallization.