**CHEMISTRY**

**CLASS 12 (Solutions)**

Q1. Calculate the cryoscopic constant for Benzene if the freezing point is 5.45°C and heat of fusion 9.837 K.J. mole$^{-1}$.

**Ans:  5.11degree per molal**

Q2. 1 g of urea when dissolved in 100 gm of a certain solvent decreases its freezing point by 0.2°C. 1.6 gm of unknown substance when dissolved in 80 gm of same solvent depresses the freezing point by 0.36°C. Calculate the molecular weight of unknown compound.

**Ans: 66.7**

Q3. If the boiling point of an aqueous solution is 100.1°C, calculate its freezing point. Given Latent heat of fusion and Latent heat of vaporisation of water are 80 Cal g$^{-1}$ and 540 Cal g$^{-1}$ respectively. [C$_m$ same]

**Ans:  – 0.36°C**