CHEMISTRY

CLASS 12

Colligative property (CHAPTER 1)

Q1. The cryoscopic constant of water is 1.86 K mol^{-1} kg. An aqueous solution of urea freezes at -0.374ºC. Calculate the molality of the solution.

Q2. 0.65 g naphthalene ($C_{10}H_8$) was dissolved in 100 g methyl acetate. Elevation of boiling point of pure methyl acetate solution is 103ºC. If boiling point of pure methyl acetate is 57ºC, calculate its molar heat of vaporization. (Ans = 7887.66 Cal)

Q3. Why Depression of freezing point is a colligative property?