

Most Repeated Questions in JEE Main Chemistry from Conductance

Q: The molar conductivity of a weak electrolyte when plotted against the square root of its concentration, which of the following is expected to be observed?

- (a) Molar conductivity increases sharply with increase in concentration.
- (b) Molar conductivity decreases sharply with increase in concentration.
- (c) A small increase in molar conductivity is observed at infinite dilution.
- (d) A small decrease in molar conductivity is observed at infinite dilution

Q: Which out of the following is a correct equation to show change in molar conductivity with respect to concentration for a weak electrolyte, if the symbols carry their usual meaning:

- (A) $\Lambda_m - \Lambda_0 m + AC^{1/2} = 0$
- (B) $\Lambda^2 mC + K\Lambda_0^2 m - K\Lambda_m \Lambda_0 = 0$
- (C) $\Lambda_m - \Lambda_0 m - AC^{1/2} = 0$
- (D) $\Lambda_m^2 C - K\Lambda_0^2 m + K\Lambda_m \Lambda_0 = 0$

Q: A conductivity cell with two electrodes (dark side) are half filled with infinitely dilute aqueous solution of a weak electrolyte. If volume is doubled by adding more water at constant temperature, the molar conductivity of the cell will

- (A) depend upon type of electrolyte
- (B) increase sharply
- (C) decrease sharply
- (D) remain same or can not be measured accurately

Q: 1×10^{-5} M AgNO_3 is added to 1 L of saturated solution of AgBr . The conductivity of this solution at 298 K is $___ \times 10^{-8} \text{ S m}^{-1}$. [Given: $K_{sp}(\text{AgBr}) = 4.9 \times 10^{-13}$ at 298 K]