Electrochemistry

1.Derive relationship B/W conductivity and molar conductivity.

2.What is equivalent conductivity.

3. The Conductivity of 0.20 M KCl solution at 298K is 0.0248S cm^{-1}. Calculate its molar conductivity?

4.Resistance of a conductivity cell filled with 0.1 M KCl Solution is 100 ohm. If resistance of the same cell when filled with 0.02 M KCl Solution is 520 ohm. . Calculate conductivity and molar conductivity of 0.02 M KCl Solution (Conductivity of 0.1 M KCl Solution is 1.29$Sm^{-1.}$) .

5.The electrical resistance of a column of 0.05 M NaOH solution of diameter 1cm and 50 cm length is 5.55 X 10^3 ohm. Calculate resistivity,conductivity and molar conductivity.

6.The resistance of a conductivity cell containing 0.001 M KCl solution at 298 is 1500 ohm . What is cell constant if conductivity of 0.001 M KCl solutions at 298 K is 0.146 x 10^{-3} Scm^{-1}