CLASS – 12   SUBJECT : CHEMISTRY   CHAPTER- 3Electro Chemistry   M.M – 30

Q1.	Why$\wedge^0$m for CH_3COOIH cannot be determined experimentally.	1
Q2.	Give electrode reactions of lead storage battery during discharge.	2
Q3.	Define equivalent conductivity and derive its unit.	2
Q4	The molar conductances of NaOH, NaCl and $BaCl_2$ at infinite dilution are 2.481×10^{-2}, 1.265×10^{-2} and 2.800×10^{-2} S m^2 mol^{-1}. Respectively. Calculate $\wedge^0$m Ba(OH)$_2$.	3
Q5	Can a nickel spoon be used to stir a solution of silver nitrate? Support your answer with reason : $E^0 Ni^{2+}/Ni$ = -0.25V $E^0 Ag^+/Ag$ = +0.80V.	3
Q6	Calculate the emf of the following cell at 298K Fe(s) I Fe^{2+} (0.001M) II H$^+$(IM) I H$_2$(g)(1bar), Pts (Given E^{0}cell = +0.44V)	3
Q7.	Calculate the equilibrium constant for the following reaction at 298K. $Cu(s) + Cl_2(g) \longrightarrow CuCl_2$ (aq) R = 8.314 Jk^{-1} mol^{-1}, E^{0}cu^{2+} / Cu = 0.34V F = 96500 Cmol^{-1}, E^{0}1/2 Cl$_2$/ C1$^-$ = 1.36V	3
Q8.	The measured resistance of a conductance cell containing 7.5×10^{-3} M solution of KCl at 25^{0}C was 1005 ohms. Calculate a) specific conductance. b) Molar conductance of the solution . Cell constant = 1.25cm^{-1}.	3
Q9	Give reasons : i) Why does an alkaline medium inhibit the rusting of iron? ii) Why does a dry cell become dead after a long time even if it has not been used. iii) Conductivity of an electrolyte solution decreases with the decrease in concentration.	5
Q10.	Write on : a) Advantages of Fuel cell b) Sacrificial protection	5