ECAT Chemistry Chapter 10 Electrochemistry

Sr	Questions	Answers Choice
1	In the electrolysis of aqueous solution of sodium nitrate, the ions which are reduced at the cathode are	A. H₃O⁺ B. Na⁺ C. OH⁻ D. NO³⁻
2	The equivalent conductivity of 0.1 M week acid is 100 times less than at infinite dilution. The degree of dissociation is	A. 100 B. 10 C. 0.01 D. 0.001
3	When aluminium electrode is coupled with copper electrode in a galvanic cell :	A. Reduction takes place at aluminium electrode. B. Oxidation takes place at copper electrode. C. Reduction takes place at copper electrode. D. Both (a) and (c)
4	The specific conductance of a 0.1 N KCl solution at 23°C is 0.012 $ohm^{-1}cm^{-1}$. The resistance of cell containing the solution at the same temperature was found to be 55 ohm. The cell constant will be	A. 0.142 cm⁻¹ B. 0.66 cm⁻¹ C. 0.916 cm⁻¹ D. 1.12 cm⁻¹
5	In a Galvanic cell, the electrons flow from	A. A node to cathode through the solution B. Cathode to anode through the external circuit C. Cathode to anode through the external circuit D. Anode to cathode through the external circuit
6	In a solution of $CuSO_4$how much time will be required to precipitate 2g copper by 0.5 ampere current?	A. 12157.48 sec B. 102 sec C. 510 sec D. 642 sec
7	During electrolysis, the reaction that takes place at cathode is :	A. Reduction B. Both (a) and (c) C. Oxidation D. No reaction occurs
8	Which statement is incorrect for NICAD battery	A. The electrolyte is alkali B. Cd acts as anode C. MnO₂acts as electrolyte D. NiO₂acts as cathode
9	The best electrode used in salt bridge is KCl. Which other electrolyte an also be used for the purpose :	A. NaCl B. NH₄NO₃<o:p></o:p> C. KNO₃<o:p></o:p> D. NaNO₃<o:p></o:p>
10	Purification of an impure copper is made by electrolytic cell, in which impure copper is anode and pure copper is cathode, and the electrolyte used is	A. H₂SO₄ B. CuSO₄ C. ZnSO₄ D. Na₂SO₄
11	The function of salt bridge in the galvanic or voltaic cell is to	A. Carry out oxidation at anode B. To carry out reduction at cathode C. Carry out electrolysis D. To prevent the net charge accumulation in either of the half cells
12	Which one of the following reactions is not spontaneous	
13	Strong oxidizing agents have	A. Greater positive value of standard reduction potential B. Lesser positive value of standard C. Greater negative value of standard D. None of these
14	During electrolysis of KNO_3, $H_2$is evolved	A. Anode B. Cathode C. Both a and b D. None
		A. ZnCl₂

15	The reference calomel electrode is made from which of the following?	B. CuSO₄ C. Hg₂Cl₂ D. HgCl₂
16	Lead accumulator stops discharging current when	A. Lead at anode converted to PbO₂ B. PbO₂at cathode converted to Pb C. Both electrodes are completely covered with PbSO₄ D. Both electrodes are completely covered with Pb(OH)₂
17	Question Image	A. -1.10 V B. +1.10 V C. -0.42 V D. +0.42 V
18	The reduction potential to copper electrode is +0.34 V and that of Zn electrode is -0.76 V. when these two are coupled the e.m.f. of the cell is	A. -0.42 V B. +0.42 C. -1.10 V D. +1.10 V
19	An electric current is passed through silver nitrate solution using silver electrodes.10.79 g of silver was found to be deposited on the cathode if the same amount of electricity is passed through copper sulphate solution using copper electrodes, the weight of copper deposited on the cathode is	A. 6.4 g B. 2.3 g C. 128.8 g D. 3.2 g
20	Li has the lowest reduction potential while the element with highest reduction potential is	A. H B. F C. O D. N