ECAT Chemistry Chapter 10 Electrochemistry

Sr	Questions	Answers Choice
1	Pure water does not conduct electricity because it	A. Has low boiling point B. Is almost unionized C. Is neutral D. Is readily decomposed
2	Metals which are above SHE in electrochemical series	A. Can liberate H₂from acid B. Cannot liberate H₂from acid C. Cannot always liberate H₂from acid D. None of these
3	The oxidation number of free element is always taken to be	A. 0 B. 1 C. 2 D. -1
4	During electrolysis of KNO_3, $H_2$is evolved	A. Anode B. Cathode C. Both a and b D. None
5	Which statement is incorrect for balancing of redox reactions by ion-electron method	A. The reaction is splitted into two half reactions B. H₂O and H⁺ions are added for acidic or neutral reaction to balance O and H atoms C. To balance H, HCi, is added D. To balance O and H in the alkaline reaction OH⁻added
6	Corrosion is basically a	A. Altered reaction in presence of H₂O B. Electrochemical phenomenon C. Interaction D. Union between two light metals and a heavy metal
7	When electrically is passed through molten Al_2O_3+ $Na_3AlF_6$and 13.5 gms of Al are deposited, the number of farady must be	A. 0.5 B. 1.0 C. 1.5 D. 2.0
8	A half reaction can be defines as :	A. It always occurs at cathode. B. Involves only half of a mole of electrolyte. C. Occurs at one of the electrode. D. Goes only half way to completion.
9	96500 C of electricity liberates from $CuSO_4$solution	A. 63.5 g of Cu B. 31.75 g of Cu C. 96500 g of Cu D. 100 g of Cu
10	In the electrolysis of fused bauxite ($Al_2O_32H_2O$) with fused Cryolite (Na_3AlF_6) using carbon rods as anode. The product obtained at cathode is	A. Na metal B. F₂gas C. Al metal D. O₂gas
11	Reduction or oxidation potential of standard hydrogen electrode is :	A. 0.0 Volt B. 0.8Volt C. 1.0Volt D. 1.8Volt
12	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)
		A. Hg is more inert than Pt

13	In electrolysis of NaCl when Pt electrode is taken then $H_2$is liberated at cathode while with Hg cathode it forms sodium amalgam	B. More voltage is required to deduce H⁺at Hg than Pt C. Na is dissolved in Hg while it does not dissolve in Pt D. Conc. of H⁺ions is larger when Pt electrode is taken
14	Oxidation number of oxygen in $OF_2$is	A. +1 B. -1 C. +2 D. -2
15	Standard reduction of Zn = -0.76 V and that of Ni is -0.25 V. On coupling them by a salt bridge which of these will act as anode	A. Salt bridge will act as anode B. Zn will act as anode C. Ni will act as anode D. None of these
16	A solution of sodium sulphate was electrolysed using some insert electrodes. The products at the electrodes are	A. O₂, H₂ B. O₂, Na C. O₂, SO₂ D. O₂, S₂O₈²
17	Coupling of Pb with its Pb^{++}/Pb = -0.13 V and Ag with Ag^{+}/ Ag = +0.80 V, the cell reaction	
18	During redox reaction an oxidizing agent	A. Gains electrons B. Is oxidized C. Loses electrons D. Hydrolysed
19	A standard hydrogen electrode (S.H.E) consists of a platinized platinum electrode dipped in 1 molar solution of H^{+}ions and hydrogen gas is passed at a pressure of	A. One pascal B. One kilo pascal C. One atmoshpere D. Then atmoshpere
20	What are the products electrolysis of aqueous sodium chloride at two electrodes	A. Chlorine at anode and oxygen at cathode. B. Hydrogen at anode and chlorine at cathode. C. Chlorine at anode and hydrogen at cathode. D. Chlorine at anode and sodium at cathode.