ECAT Chemistry Online Test

Sr	Questions	Answers Choice
1	Question Image	A. Reversible reaction B. Irreversible reaction C. Spontaneous reaction D. None of these
2	When rate of forward reaction is equal to rate of backward reaction, then the equilibrium established is called	A. Chemical equilibrium B. Static equilibrium C. Dynamic equilibrium D. None of these
3	Question Image	
4	Question Image	
5	The rate of which the reaction proceeds is directly proportional to the product of the active masses of the reactants is according to	A. Law of mass action B. Le Chateliers principle C. Equilibrium law D. Law of constant proportion
6	Question Image	A. At equilibrium there is no further change in the concentration of HI B. At equilibrium concentration of I₂remains constant C. At equilibrium concentration of H₂remains unaltered D. At equilibrium the rate of formation of HI is equal to the rate of decomposition of HI
7	Which of the following in an example of reversible reaction	
8	Li has the lowest reduction potential while the element with highest reduction potential is	A. H B. F C. O D. N
9	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
10	Metals like Fe, Mg, Al, Cr, Zn have more negative reduction potentials that is whey	A. These don't react with steam B. These react very slowly with steam to liberate H₂gas C. These react rapidly with steam to produce the metallic oxides and liberate H₂gas D. These react with cold water violently
11	Coinage metals like Au, Pt, Ag and Cu are the least reactive metals and don't liberate H_2gas when treated with acids because	A. These have very high positive values of reduction potentials B. These have very high negative values of reduction potentials C. Their ionization potentials are lowest D. Their reduction potentials are close to SHE
12	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
13	Question Image	A. Cu B. H

		C. N D. O
14	Strong reducing agents gave	A. Greater positive value of standard reduction potential B. Greater negative value of standard reduction potential C. Lesser positive value of standard reaction potential D. None of these
15	In a compound an atom has negative oxidation state because	A. Atom is negatively charged B. Atom acts as cathode C. Atom is more electronegative D. Atom has lowest ionization energy
16	The oxidation number of chromium in $K_2Cr_2O_7$is	A. 14 B. 12 C. 6 D. None of these
17	The oxidation state of an element is zero when	A. It forms an oxide B. It forms hydride C. It is in free state D. Only for noble gases
18	The oxidation number of Mn is $KMnO_4$is	A. +2 B. +4 C. +6 D. +7
19	Oxidation number of oxygen in $OF_2$is	A. +1 B. -1 C. +2 D. -2
20	The oxidation number of H is -1 in the compound	A. H₂O B. H₃BO₃ C. NaOH D. NaH
21	Which statement is correct for the fuel cells	A. These cells operate at low temperature B. These cells operate at low temperature C. No catalyst used for the formation of water D. MnO₂is used as electrolyte
22	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
23	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
24	Silver oxide battery has a voltage of	A. 2.0 V B. 1.5 V C. 2.5 V D. 1.0 V
25	During electrolysis of KNO_3, $H_2$is evolved	A. Anode B. Cathode C. Both a and b D. None
26	In electronic watches or electronic calculators the tiny batteries used are	A. Alkaline battery B. NICAD battery C. Fuel cell D. Silver oxide battery
27	A dry alkaline cell has porous Zn anode and MnO_2as cathode the electrolyte used is	A. Ca(OH)₂ B. NaOH C. KOH D. NH₄OH
28	Question Image	A. Fe is reduced B. Fe is oxidized C. Cl₂is oxidized D. None of these

29	Alkaline battery has a voltage of	A. 4.5 V B. 3.5 V C. 2.5 V D. 1.5 V
30	Which one of the following reactions is not spontaneous	