

## ECAT Chemistry Online Test

Sr	Questions	Answers Choice
1	Which one of the following reaction takes place spontaneously	
2	Which statement is incorrect about standard hydrogen electrode	A. Its oxidation and reduction potential is zero B. It consists of Pt wire dipped in 1 molar HCl solution C. The electrolyte is 1 molar NaOH solution D. $H_2$ gas is passed in it at 1 atmospheric pressure
3	While balancing an equation by ion electron method, the number of oxygen atoms are balanced by	A. $OH^-$ B. $H_2O$ C. $O_2$ D. $H^+$
4	Lead accumulator contains	A. 30% NaCl solution as electrolyte B. 30% HCl solution as electrolyte C. 30% $H_2SO_4$ solution as electrolyte D. 30% NaOH solution as electrolyte
5	In lead accumulator the electrolyte is $H_2SO_4$ solution is	A. 30% $H_2SO_4$ B. 60% $H_2SO_4$ C. 80% $H_2SO_4$ D. 90% $H_2SO_4$
6	The galvanic or voltaic cells which are rechargeable called as	A. Primary cells B. Secondary cells C. Dry cells D. Infinite cells
7	The voltaic or galvanic cells which cannot be recharged are called	A. Primary cells B. Secondary cells C. Infinite cells D. Fuel cells
8	Electrochemical series is a list of element S arranged into the increasing order of their	A. Standard oxidation potential B. Standard reduction potential C. Cell voltage D. Ionization potential
9	The value of SHE is cathode and anode is always taken to be	A. One B. Zero C. Different D. Same
10	Coupling of Pb with its $Pb^{2+}/Pb = -0.13$ V and Ag with $Ag^+/Ag = +0.80$ V, the cell reaction	
11	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 V C. -1.10 V D. +1.10 V
12	A standard hydrogen electrode is used as standard electrode of which electrode potential is arbitrarily taken as	A. +1 B. -1 C. 0.1 D. Zero
13	When a metal is dipped in 1 molar of its solution at 298 K. then potential set up is called	A. Standard electrode potential B. Electric charge C. Ionization potential D. Electroplating
14	The oxidation number of free element is always taken to be	A. 0 B. 1 C. 2 D. -1
15	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

16	The cell which generates electricity as a result of spontaneous oxidation-reduction reaction is called	A. Electrolytic cell B. Nelson's cell C. Galvanic cell D. Down's cell
17	The two half cells of a galvanic cell are connected by	A. Ammeter B. Salt bridge C. Hydrogen electrode D. Copper electrode
18	The process of electrical coating of one metal on another to protect, decorate or to have greater resistance to corrosion is called	A. Electroplating B. Electrolysis C. Conduction D. Induction
19	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. $\text{H}_2\text{SO}_4$ B. $\text{CuSO}_4$ C. $\text{ZnSO}_4$ D. $\text{Na}_2\text{SO}_4$
20	Caustic soda is obtained by electrolysis of conc. aqueous solution of NaCl in a cell called	A. Daniell's cell B. Nelson's cell C. Down's cell D. Voltaic cell
21	In the electrolysis of aqueous solution of sodium nitrate, the ions which are reduced at the cathode are	A. $\text{H}^+ + \text{O}^{2-}$ B. $\text{Na}^+$ C. $\text{OH}^-$ D. $\text{NO}_3^-$
22	Metallic conduction is due to the	A. Movement of electrons B. Movement of ions C. Both a and b D. None of these
23	Cell in which an electric current drives a non-spontaneous reaction is called	A. Electrolytic cell B. Voltaic cell C. Biological cell D. Electrochemical cell
24	The electrolysis of $\text{CuSO}_4$ aqueous solution using copper as cathode as well an anode the substance which deposits at cathode is	A. $\text{H}_2\text{SO}_4$ B. Oxygen C. Copper D. Hydrogen
25	By using graphite electrode the electrolysis of aqueous solution of NaCl produces at anode	A. $\text{H}_2$ gas B. $\text{Cl}_2$ gas C. NaOH D. No metal
26	When electric current is used to carry out non-spontaneous redox, the process is called	A. Hydrolysis B. Electrolysis C. Decomposition D. Neutralization
27	The reaction in galvanic cell is	A. Spontaneous B. Non-spontaneous C. Acid-base D. None of these
28	When fused $\text{PbBr}_2$ is electrolyzed	A. Bromine appears at the cathode B. Lead is deposited at the cathode C. Lead appears at the anode D. None of these happens
29	If the salt bridge is not used between two half cells, then the voltage	A. Decrease rapidly B. Decrease slowly C. Does not change D. Drops to zero
30	The electrode through which the electrons enter the electrolytic solution is electrolytic solution is	A. Anode B. Cathode C. May be anode or cathode D. None of these