

## ECAT Chemistry Online Test

Sr	Questions	Answers Choice
1	Reduction or oxidation potential of standard hydrogen electrode is :	A. 0.0 Volt B. 0.8Vlt C. 1.0Vlt D. 1.8Vlt
2	Cell potential depends upon :	A. Concentration of ions B. Nature of electrolyte C. Temperature D. All of above
3	The best electrode used in salt bridge is KCl. Which other electrolyte an also be used for the purpose :	A. NaCl B. $\text{NH}_4\text{NO}_3$ C. $\text{KNO}_3$ D. $\text{NaNO}_3$
4	K,Ca and Li metals may be arranged in decreasing order of their reduction potential as :	A. Li, k, Ca B. Ca, K, Li C. Li, Ca, K D. K, Ca, Li
5	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)
6	When fused $\text{PbBr}_2$ is electrolyzed :	A. Lead appears at anode. B. Lead appears at cathode. C. Bromine appears at cathode. D. Lead appears at both electrodes.
7	The cell in which a non-spontaneous redox reaction takes place as a result electricity is known as :	A. Electrolytic cell. B. Voltaic cell. C. Daniel cell. D. Dry cell.
8	A cell in which electric current is produced as a result spontaneous redox reaction is called :	A. Dry cell B. Electrolytic cell C. Galvanic cell D. Standard cell
9	Sodium can be obtained by :	A. Electrolysis of acidified water. B. By heating NaCl and water at $100^\circ\text{C}$ C. Electrolysis of molten sodium chloride. D. Electrolysis of aqueous sodium chloride.
10	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.
11	Which of the following correctly describes the process occurring at the electrodes when molten NaCl is electrolyzed:	A. No reaction at anode, reduction at cathode. B. No reaction at cathode, oxidation at anode. C. Oxidation at anodes, reduction at cathode. D. Oxidation at cathode, reduction at anode.
12	Which of the following yield both hydrogen and chlorine on electrolysis:	A. Electrolysis of acidified water. B. Electrolysis of molten NaCl C. Electrolysis of aqueous NaCl D. Electrolysis of saline water
13	The function of salt bridge is :	A. To increase movement anions. B. To increase the emf of cell. C. To decrease the temperate D. To maintain electrical neutrality
14	During electrolysis, electrons are :	A. Lost by anions and gained by cations B. Gained by anions and lost by cations C. Gained only D. Lost only

		D. Lost only
15	During electrolysis, the reaction that takes place at cathode is :	<p>A. Reduction</p> <p>B. Both (a) and (c)</p> <p>C. Oxidation</p> <p>D. No reaction occurs</p>
16	Which of the following cannot conduct electricity :	<p>A. NaCl fused.</p> <p>B. NaCl<sub>(aq)</sub></p> <p>C. NaCl<sub>(Solid)</sub></p> <p>D. Both (b) and (c)</p>
17	In electrolytic cells, the chemical changes may be :	<p>A. Either spontaneous or non-spontaneous</p> <p>B. Always spontaneous</p> <p>C. Always non-spontaneous</p> <p>D. More spontaneous and less non-spontaneous.</p>
18	When aqueous NaCl is electrolyzed, which of the following ions get discharged at anode :	<p>A. <math>\text{H}^+</math></p> <p>B. <math>\text{Na}^+</math></p> <p>C. <math>\text{OH}^-</math></p> <p>D. <math>\text{Cl}^-</math></p>
19	In an electrolytic cell, the electrons flow from :	<p>A. Cathode to anode or opposite</p> <p>B. Cathode to anode</p> <p>C. Anode to cathode</p> <p>D. Random flow</p>
20	Electrolysis is used for :	<p>A. Manufacture of caustic soda</p> <p>B. Refining of copper</p> <p>C. Electroplating</p> <p>D. All of above</p>
21	Ionization is the process in which ionic compounds when fused or dissolved in water split up into charged particles called :	<p>A. Atoms.</p> <p>B. Electrons.</p> <p>C. Protons .</p> <p>D. Ions</p>
22	Electrolytes in the form of solution or in the fused state have the ability to conduct :	<p>A. Light.</p> <p>B. Electricity.</p> <p>C. Ions.</p> <p>D. Electrons.</p>
23	Metallic conduction is also called as :	<p>A. Ionic conduction.</p> <p>B. Protonic conduction.</p> <p>C. Electronic conduction</p> <p>D. Super conduction</p>
24	Most metals are conductors of electricity because of the :	<p>A. Light weight.</p> <p>B. Immobility of the electrons.</p> <p>C. Lustrous surfaces</p> <p>D. Relatively free movement of their electrons</p>
25	The conversion of chemical energy into electrical energy requires :	<p>A. Electrolytic cell</p> <p>B. Galvanic cell</p> <p>C. Voltaic cell</p> <p>D. Both (b) and (c)</p>

26	Electrochemistry is concerned with the conversion of electrical energy into chemical energy in :	B. Electrolytic cell C. Voltaic cell D. Both (a) and (c)
27	5g of glucose is dissolved fro 100 cm of solution. Percentage of solution is :	A. 5 % v/w B. 5 % v/v C. 5 % w/v D. 5 % w/w
28	The ratio of moles of a particular component of solution to total moles of all components of solution is :	A. Mole fraction. B. Molality. C. Molarity. D. Normality.
29	The sum of mole percent of all the components of solution is always equal to :	A. Less than 100 B. One C. 100 D. 10
30	10g of NaOH has been dissolved per kg of solvent. The molality of solution is :	A. .25 m B. 1.5 m C. .5 m D. 2.5 m