

## ECAT Chemistry Online Test

Sr	Questions	Answers Choice
1	The substance having highest conductivity at room temperature among the following is	A. 0.1 N HCl B. 0.1 N NaCl C. Graphite D. Glass
2	The specific conductance of a 0.1 N KCl solution at 23°C is $0.012 \text{ ohm}^{-1}\text{cm}^{-1}$ . The resistance of cell containing the solution at the same temperature was found to be 55 ohm. The cell constant will be	A. $0.142 \text{ cm}^{-1}$ B. $0.66 \text{ cm}^{-1}$ C. $0.916 \text{ cm}^{-1}$ D. $1.12 \text{ cm}^{-1}$
3	Prevention of corrosion of iron by Zn coating is called	A. Galvanization B. Cathodic protection C. Electrolysis D. Photoelectrolysis
4	Pick out the wrong statement. In electrochemical cell	A. Electrons are released at anode B. Cathode is regarded as negative electrode C. Chemical energy is converted into electrical energy D. Salt bridge maintains the electrical neutrality of the solution
5	What will be the weight of deposited silver on passing 965 coulombs of electricity in solution of $\text{AgNO}_3$ ?	A. 1.08 g B. 2.16 g C. 0.54 g D. 0.27 g
6	The number of coulombs required for the deposition of 107.870 g of silver is	A. 96500 B. 48250 C. 193000 D. 10000
7	The art of electroplating was given by	A. Faraday B. Edison C. Thomas Gradam D. Brugan
8	96500 C electricity is passed through $\text{CuSO}_4$ . The amount of copper precipitated is	A. 0.25 mole B. 0.5 mole C. 1.0 mole D. 2.00 mole
9	Reaction takes place at anode is	A. Ionization B. Reduction C. Oxidation D. Hydrolysis
10	2.5 faradays of electricity is passed through solution of $\text{CuSO}_4$ . The number of gram equivalents of copper deposited on the cathode would be	A. 1 B. 2 C. 2.5 D. 1.25
11	In a solution of $\text{CuSO}_4$ 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
12	Which of the following is the use of electrolysis?	A. Eletrorefining B. Electroplating C. Both A and B D. None of the above
13	96500 C of electricity liberates from $\text{CuSO}_4$ solution	A. 63.5 g of Cu B. 31.75 g of Cu C. 96500 g of Cu D. 100 g of Cu
14	Pure water does not conduct electricity because it	A. Has low boiling point B. Is almost unionized C. Is neutral D. Is readily decomposed

A.  $\text{Ca}(\text{NO}_3)_2$

15	Which of the following is a strong electrolyte?	$\text{CH}_3\text{COOH}$ $\text{NH}_4\text{OH}$ $\text{HCN}$ $\text{H}_2\text{O}$
16	When electricity is passed through molten electrolyte consisting of alumina and cryolite, 13.5 g of Al are deposited. The number of faradays of electricity passed must be	A. 2.0 B. 1.5 C. 1.0 D. 0.5
17	In a Galvanic cell	A. Chemical energy is converted into electricity B. Chemical energy is converted into heat C. Electrical energy is converted into heat D. Electrical energy is converted into chemical energy
18	The amount of electricity that can deposit 108 g of silver from silver nitrate solution is	A. 1 ampere B. 1 coulomb C. 1 faraday D. 2 ampere
19	The conductivity of strong electrolyte	A. Increases on dilution slightly B. Does not change on dilution C. Decreases on dilution D. Depends on density of electrolyte it self
20	Out of Cu, Ag, Fe and Zn the metal which can displace all others from their salt solution is	A. Ag B. Cu C. Zn D. Fe
21	A certain current liberate 0.5 g of hydrogen in 2 h. How many grams of copper can be liberated by the same time in a copper sulphate solution?	A. 12.7 gm B. 15.9 gm C. 31.8 gm D. 63.5 gm
22	A current of 9.65 ampere flowing for 10 minutes deposits 3.0 g of the metal which is monovalent. The atomic mass of the metal is	A. 10 B. 50 C. 30 D. 96.5
23	A solution of sodium sulphate was electrolysed using some inert electrodes. The products at the electrodes are	$\text{O}_2$ , $\text{H}_2$ $\text{O}_2$ , Na $\text{O}_2$ , $\text{SO}_2$ $\text{O}_2$ , $\text{S}_2\text{O}_8^{2-}$
24	A cell constant is generally found by measuring the conductivity of aqueous solution of	$\text{BaCl}_2$ $\text{KCl}$ $\text{NaCl}$ $\text{MgCl}_2$
25	An electrolyte	A. Forms complex ions solution B. Gives ions only when electricity is passed C. Possesses ions even in solid state D. Gives ions only when dissolved in water
26	When electricity is passed through molten $\text{Al}_2\text{O}_3 + \text{Na}_3\text{AlF}_6$ and 13.5 gms of Al are deposited, the number of faraday must be	A. 0.5 B. 1.0 C. 1.5 D. 2.0
27	The reference calomel electrode is made from which of the following?	$\text{ZnCl}_2$ $\text{CuSO}_4$ $\text{Hg}_2\text{Cl}_2$ $\text{HgCl}_2$
28	If a salt bridge is removed between the two half cells, the voltage	A. Drops to zero B. Does not change C. Increases gradually D. Increases rapidly
29	When quantity of electricity passed is one faraday then the mass deposited at the electrode is equal to	A. One gm, atomic weight B. One gm, Equivalent C. Electrochemical equivalent D. None of the above
30	Which of the substances Na, Hg, S, Pt and graphite can be used as electrodes in electrolytic cells having aqueous solution?	A. Na, Pt and graphite B. Na and Hg C. Pt and graphite only D. Na and S only

