

## ECAT Chemistry Chapter 10 Electrochemistry

Sr	Questions	Answers Choice
1	In $KO_2$ the oxidation state of oxygen is	A. -2 B. -1 C. +1/2 D. -1/2
2	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.
3	What will be the weight of deposited silver on passing 965 coulombs of electricity in solution of $AgNO_3$ ?	A. 1.08 g B. 2.16 g C. 0.54 g D. 0.27 g
4	A dry alkaline cell has porous Zn anode and $MnO_2$ as cathode the electrolyte used is	A. $Ca(OH)_2$ B. NaOH C. KOH D. $NH_4OH$
5	In electronic watches or electronic calculators the tiny batteries used are	A. Alkaline battery B. NiCAD battery C. Fuel cell D. Silver oxide battery
6	The function of salt bridge is :	A. To increase movement of ions. B. To increase the emf of cell. C. To decrease the temperature D. To maintain electrical neutrality
7	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
8	The specific conductance of 0.1 M NaCl solution is $1.06 \times 10^{-2} \text{ ohm}^{-1} \text{ mol}^{-1}$ . Its molar conductance in $\text{ohm}^{-1} \text{ cm}^2 \text{ mol}^{-1}$ is	A. $1.06 \times 10^{-2}$ B. $1.06 \times 10^{-3}$ C. $1.06 \times 10^{-4}$ D. 53
9	In a solution of $CuSO_4$ 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
10	Question Image	A. Zn B. H C. S D. O
11	A cell in which electric current is produced as a result of spontaneous redox reaction is called :	A. Dry cell B. Electrolytic cell C. Galvanic cell D. Standard cell
12	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
13	The specific conductance of a 0.1 N KCl solution at $23^\circ\text{C}$ 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. $1.12 \text{ cm}^{-1}$
14	When during electrolysis of a solution of $AgNO_3$ , 9650 coulombs of charge pass through the electroplating bath, the mass of silver deposited on the cathode will be	A. 1.08 g B. 10.8 g C. 21.6 g D. 108 g

15	Sodium can be obtained by :	<p>A. Electrolysis of acidified water.</p> <p>B. By heating NaCl and water at 100°C</p> <p>C. Electrolysis of molten sodium chloride.</p> <p>D. Electrolysis of aqueous sodium chloride.</p>
16	The value of SHE is cathode and anode is always taken to be	<p>A. One</p> <p>B. Zero</p> <p>C. Different</p> <p>D. Same</p>
17	An electrochemical cell is based upon	<p>A. Acid-base reaction</p> <p>B. Redox reaction</p> <p>C. Nuclear reaction</p> <p>D. None of the above</p>
18	When aqueous solution of NaOH is electrolysed using graphite electrodes, the product obtained at anode is	<p>A. O<sub>2</sub> gas</p> <p>B. H<sub>2</sub> gas</p> <p>C. Na metal</p> <p>D. Na<sub>2</sub>O</p>
19	Fe can displace Cu from CuSO <sub>4</sub> solution because	<p>A. Fe is ferromagnetic</p> <p>B. Fe is below Cu in electrochemical series</p> <p>C. Fe is above Cu in electrochemical series</p> <p>D. Fe exists in divalent oxidation state</p>
20	Calculate the amount of charge flowing in 2 minute in a wire of resistance 10 Ω when a potential difference of 20 V is applied	<p>A. 120 C</p> <p>B. 240 C</p> <p>C. 20 C</p> <p>D. 4 C</p>