

## ECAT Chemistry Chapter 10 Electrochemistry

Sr	Questions	Answers Choice
1	A solution of sodium sulphate was electrolysed using some inert electrodes. The products at the electrodes are	<p>A. <math>O_2</math>, <math>H_2</math></p> <p>B. <math>O_2</math>, Na</p> <p>C. <math>O_2</math>, <math>SO_2</math></p> <p>D. <math>O_2</math>, <math>S_2O_8^{2-}</math></p>
2	When fused $PbBr_2$ is electrolyzed :	<p>A. Lead appears at anode.</p> <p>B. Lead appears at cathode.</p> <p>C. Bromine appears at cathode.</p> <p>D. Lead appears at both electrodes.</p>
3	Question Image	<p>A. Fe is reduced</p> <p>B. Fe is oxidized</p> <p>C. <math>Cl_2</math> is oxidized</p> <p>D. None of these</p>
4	Alkaline battery has a voltage of	<p>A. 4.5 V</p> <p>B. 3.5 V</p> <p>C. 2.5 V</p> <p>D. 1.5 V</p>
5	When quantity of electricity passed is one faraday then the mass deposited at the electrode is equal to	<p>A. One gm, atomic weight</p> <p>B. One gm, Equivalent</p> <p>C. Electrochemical equivalent</p> <p>D. None of the above</p>
6	Which of the substances Na, Hg, S, Pt and graphite can be used as electrodes in electrolytic cells having aqueous solution?	<p>A. Na, Pt and graphite</p> <p>B. Na and Hg</p> <p>C. Pt and graphite only</p> <p>D. Na and S only</p>
7	In the reaction $K_2Cr_2O_7 + HCl + CrCl_3 + Cl_2 + H_2O$ the element which is reduced is	<p>A. K</p> <p>B. Cl</p> <p>C. Cr</p> <p>D. H</p>
8	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>
9	When electricity is passed through molten $Al_2O_3 + Na_3AlF_6$ and 13.5 gms of Al are deposited, the number of farady must be	<p>A. 0.5</p> <p>B. 1.0</p> <p>C. 1.5</p> <p>D. 2.0</p>
10	Question Image	<p>A. Adding <math>H_2O</math> and <math>H^+</math> ions</p> <p>B. Adding <math>OH^-</math> ions</p> <p>C. Adding <math>O^{2-}</math> molecules</p> <p>D. Adding O atoms</p>
11	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	<p>A. 2.0</p> <p>B. 1.5</p> <p>C. 1.0</p> <p>D. 0.5</p>
12	Corrosion reaction are	<p>A. Spontaneous redox reaction</p> <p>B. Non-spontaneous acid-base reactions</p> <p>C. Spontaneous acid-base reactions</p> <p>D. None of these</p>
13	The best electrode used in salt bridge is KCl. Which other electrolyte can also be used for the purpose :	<p>A. NaCl</p> <p>B. <math>NH_4NO_3</math></p> <p>C. <math>KNO_3</math></p> <p>D. <math>NaNO_3</math></p>
14	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>

15	The standard e.m.f. of a galvanic cell involving cell reaction with $n = 2$ is found to be 0.2965 V at 25°C. The equilibrium constant of the reaction would be	<p>A. <math>1.0 \times 10^{10}</math></p> <p>B. <math>2.0 \times 10^{11}</math></p> <p>C. <math>4.0 \times 10^{12}</math></p> <p>D. <math>1.0 \times 10^2</math></p>
16	96500 C electricity is passed through $\text{CuSO}_4$ . The amount of copper precipitated is	<p>A. 0.25 mole</p> <p>B. 0.5 mole</p> <p>C. 1.0 mole</p> <p>D. 2.00 mole</p>
17	Which of the following yield both hydrogen and chlorine on electrolysis:	<p>A. Electrolysis of acidified water.</p> <p>B. Electrolysis of molten NaCl</p> <p>C. Electrolysis of aqueous NaCl</p> <p>D. Electrolysis of saline water</p>
18	An electrolyte	<p>A. Forms complex ions solution</p> <p>B. Gives ions only when electricity is passed</p> <p>C. Possesses ions even in solid state</p> <p>D. Gives ions only when dissolved in water</p>
19	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>
20	Which of the following will be good conductor of electricity	<p>A. Pure distilled water</p> <p>B. Molten NaCl</p> <p>C. Dilute solution of glucose</p> <p>D. Chloroform</p>