

ECAT Chemistry Chapter 10 Electrochemistry

Sr	Questions	Answers Choice
1	A dry alkaline cell has porous Zn anode and MnO_2 as cathode the electrolyte used is	A. $\text{Ca}(\text{OH})_2$ B. NaOH C. KOH D. NH_4OH
2	Metals usually conduct electricity because	A. There are mobile electrons in the metallic structure B. Metals are decomposed by current C. Metals have high resistance D. In metals the ions are free to move
3	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
4	For spontaneity of a cell, which is correct?	A. $\Delta G = 0, \Delta E = 0$ B. $\Delta G = -ve, \Delta E = 0$ C. $\Delta G = +ve, \Delta E = 0$ D. $\Delta G = -ve$
5	Question Image	A. A strong reducing agent B. A strong oxidising agent C. Better oxidising agent than hydrogen D. Less reducing agent than hydrogen
6	In the reaction $\text{K}_2\text{Cr}_2\text{O}_7 + \text{HCl} + \text{CrCl}_3 + \text{Cl}_2 + \text{H}_2\text{O}$ the element which is reduced is	A. K B. Cl C. Cr D. H
7	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
8	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^+
9	Metals like Fe, Mg, Al, Cr, Zn have more negative reduction potentials that is why	A. These don't react with steam B. These react very slowly with steam to liberate H_2 gas C. These react rapidly with steam to produce the metallic oxides and liberate H_2 gas D. These react with cold water violently
10	Which statement is correct for the fuel cells	A. These cells operate at low temperature B. These cells operate at low temperature C. No catalyst used for the formation of water D. MnO_2 is used as electrolyte
		A. Reduction potential of Cu^{2+} is smaller than H^+ ions when it is coupled

11	Which of the following statement is incorrect about SHE(Standard hydrogen electrode):	<p>with copper electrode.</p> <p>B. gas is passed in it at 1 atm pressure.</p> <p>C. Its oxidation potential and reduction potential is zero.</p> <p>D. It is made of platinum wire dipped in HCl solution</p>
12	Which statement is incorrect for NICAD battery	<p>A. The electrolyte is alkali</p> <p>B. Cd acts as anode</p> <p>C. MnO_2 acts as electrolyte</p> <p>D. NiO_2 acts as cathode</p>
13	The cell in which a non-spontaneous redox reaction takes place as a result electricity is known as :	<p>A. Electrolytic cell.</p> <p>B. Voltaic cell.</p> <p>C. Daniel cell.</p> <p>D. Dry cell.</p>
14	A standard hydrogen electrode (S.H.E) consists of a platinized platinum electrode dipped in 1 molar solution of H^+ ions and hydrogen gas is passed at a pressure of	<p>A. One pascal</p> <p>B. One kilo pascal</p> <p>C. One atmosphere</p> <p>D. Ten atmosphere</p>
15	K, Ca and Li metals may be arranged in decreasing order of their reduction potential as :	<p>A. Li, K, Ca</p> <p>B. Ca, K, Li</p> <p>C. Li, Ca, K</p> <p>D. K, Ca, Li</p>
16	In passage of electricity through aqueous solution of AgNO_3 silver dissolves at anode to form Ag^+ , the electrodes are	<p>A. Silver metal</p> <p>B. Pt metal</p> <p>C. Graphite</p> <p>D. Copper metal</p>
17	A smuggler could not carry gold by chemically depositing iron on the gold surface since	<p>A. Gold is denser</p> <p>B. Iron rusts</p> <p>C. Gold has higher reduction potential than iron</p> <p>D. Gold has lower reduction potential than iron</p>
18	In a Galvanic cell	<p>A. Chemical energy is converted into electricity</p> <p>B. Chemical energy is converted into heat</p> <p>C. Electrical energy is converted into heat</p> <p>D. Electrical energy is converted into chemical energy</p>
19	During electrolysis of KNO_3 , H_2 is evolved	<p>A. Anode</p> <p>B. Cathode</p> <p>C. Both a and b</p> <p>D. None</p>
20	Which of the following statements is true about Galvanic cell	<p>A. Anode is negatively charged</p> <p>B. Reduction occurs at anode</p> <p>C. Cathode is positively charged</p> <p>D. Reduction occurs at cathode</p>