

ECAT Chemistry Chapter 10 Electrochemistry Online Test

Sr	Questions	Answers Choice
1	Corrosion reaction are	A. Spontaneous redox reaction B. Non-spontaneous acid-base reactions C. Spontaneous acid-base reactions D. None of these
2	Standard reduction of Zn = -0.76 V and that of Ni is -0.25 V. On coupling them by a salt bridge which of these will act as anode	A. Salt bridge will act as anode B. Zn will act as anode C. Ni will act as anode D. None of these
3	Zn does not displace Mg from MgSO_4 solution because	A. Zn is more electropositive than Mg B. Zn is below Mg in electropositive series C. Zn is above Mg in electrochemical series D. Zn is trivalent Mg is divalent
4	Fe can displace Cu from CuSO_4 solution because	A. Fe is ferromagnetic B. Fe is below Cu in electrochemical series C. Fe is above Cu in electrochemical series D. Fe exists in divalent oxidation state
5	Which of the following will be good conductor of electricity	A. Pure distilled water B. Molten NaCl C. Dilute solution of glucose D. Chloroform
6	In KO_2 the oxidation state of oxygen is	A. -2 B. -1 C. +1/2 D. -1/2
7	F_2 , Cl_2 , Br_2 and I_2 lie below SHE in the Electro chemical series that is why these	A. Undergo reduction B. Undergo oxidation C. Liberate H_2 gas with steam D. None of these
8	In the electrolysis of fused bauxite ($\text{Al}_2\text{O}_3 \cdot 2\text{H}_2\text{O}$) with fused Cryolite (Na_3AlF_6) using carbon rods as anode. The product obtained at cathode is	A. Na metal B. F_2 gas C. Al metal D. O_2 gas
9	During redox reaction an oxidizing agent	A. Gains electrons B. Is oxidized C. Loses electrons D. Hydrolysed
10	When aqueous solution of NaOH is electrolysed using graphite electrodes, the product obtained at anode is	A. O_2 gas B. H_2 gas C. Na metal D. Na_2O
11	In passage of electricity through aqueous solution of AgNO_3 silver dissolves at anode to form Ag^+ , the electrodes are	A. Silver metal B. Pt metal C. Graphite D. Copper metal
12	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
13	Li has the lowest reduction potential while the element with highest reduction potential is	A. H B. F C. O D. N

A. The reaction is splitted into two half reactions
B. H_2 and H^+

14	Which statement is incorrect for balancing of redox reactions by ion-electron method	<p>ions are added for acidic or neutral reaction to balance O and H atoms</p> <p>C. To balance H, HCl, is added</p> <p>D. To balance O and H in the alkaline reaction OH⁻ is added</p>
15	Metals like Fe, Mg, Al, Cr, Zn have more negative reduction potentials that is why	<p>A. These don't react with steam</p> <p>B. These react very slowly with steam to liberate H₂ gas</p> <p>C. These react rapidly with steam to produce the metallic oxides and liberate H₂ gas</p> <p>D. These react with cold water violently</p>
16	Coinage metals like Au, Pt, Ag and Cu are the least reactive metals and don't liberate H ₂ gas when treated with acids because	<p>A. These have very high positive values of reduction potentials</p> <p>B. These have very high negative values of reduction potentials</p> <p>C. Their ionization potentials are lowest</p> <p>D. Their reduction potentials are close to SHE</p>
17	Metals which are above SHE in electrochemical series	<p>A. Can liberate H₂ from acid</p> <p>B. Cannot liberate H₂ from acid</p> <p>C. Cannot always liberate H₂ from acid</p> <p>D. None of these</p>
18	Question Image	<p>A. Cu</p> <p>B. H</p> <p>C. N</p> <p>D. O</p>
19	Strong reducing agents have	<p>A. Greater positive value of standard reduction potential</p> <p>B. Greater negative value of standard reduction potential</p> <p>C. Lesser positive value of standard reaction potential</p> <p>D. None of these</p>
20	In a compound an atom has negative oxidation state because	<p>A. Atom is negatively charged</p> <p>B. Atom acts as cathode</p> <p>C. Atom is more electronegative</p> <p>D. Atom has lowest ionization energy</p>
21	The oxidation number of chromium in K ₂ Cr ₂ O ₇ is	<p>A. 14</p> <p>B. 12</p> <p>C. 6</p> <p>D. None of these</p>
22	The oxidation state of an element is zero when	<p>A. It forms an oxide</p> <p>B. It forms hydride</p> <p>C. It is in free state</p> <p>D. Only for noble gases</p>
23	The oxidation number of Mn in KMnO ₄ is	<p>A. +2</p> <p>B. +4</p> <p>C. +6</p> <p>D. +7</p>
24	Oxidation number of oxygen in OF ₂ is	<p>A. +1</p> <p>B. -1</p> <p>C. +2</p> <p>D. -2</p>
25	The oxidation number of H is -1 in the compound	<p>A. H₂O</p> <p>B. H₃BO₃</p> <p>C. NaOH</p> <p>D. NaH</p>
26	Which statement is correct for the fuel cells	<p>A. These cells operate at low temperature</p> <p>B. These cells operate at low temperature</p> <p>C. No catalyst used for the formation of water</p> <p>D. MnO₂ is used as electrolyte</p>
27	Which statement is incorrect for NICAD battery	<p>A. The electrolyte is alkali</p> <p>B. Cd acts as anode</p> <p>C. MnO₂ acts as electrolyte</p>

		<p>Correct option</p> <p>D. $\text{NiO}_{2\text{}}$ acts as cathode</p>
28	Lead accumulator stops discharging current when	<p>A. Lead at anode converted to $\text{PbO}_{2\text{}}$</p> <p>B. $\text{PbO}_{2\text{}}$ at cathode converted to Pb</p> <p>C. Both electrodes are completely covered with $\text{PbSO}_{4\text{}}$</p> <p>D. Both electrodes are completely covered with $\text{Pb(OH)}_{2\text{}}$</p>
29	Silver oxide battery has a voltage of	<p>A. 2.0 V</p> <p>B. 1.5 V</p> <p>C. 2.5 V</p> <p>D. 1.0 V</p>
30	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>