

ECAT Chemistry Chapter 10 Electrochemistry

Sr	Questions	Answers Choice
1	The two half cells of a galvanic cell are connected by	A. Ammeter B. Salt bridge C. Hydrogen electrode D. Copper electrode
2	The conversion of chemical energy into electrical energy requires :	A. Electrolytic cell B. Galvanic cell C. Voltaic cell D. Both (b) and (c)
3	Pure water does not conduct electricity because it	A. Has low boiling point B. Is almost unionized C. Is neutral D. Is readily decomposed
4	Which one of the following reaction takes place spontaneously	
5	An electrochemical cell is based upon	A. Acid-base reaction B. Redox reaction C. Nuclear reaction D. None of the above
6	Same amount of electric current is passed through solutions of AgNO3and HCl. If 1.08 g of silver is obtained in the first case, the amount of hydrogen liberated as S.T.P in the second case is	A. 112 cm ³ B. 22400 cm ³ C. 224 cm ³ D. 1.008 g
7	Standard reduction of $Zn = -0.76 \text{ V}$ 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
8	The reduction potential to copper electrode is +0.34 V and that of Zn electrode is -0.76 V. when these two are coupled the e.m.f. of the cell is	A0.42 V B. +0.42 C1.10 V D. +1.10 V
9	The oxidation number of free element is always taken to be	A. 0 B. 1 C. 2 D1
10	Which of the following cannot conduct electricity :	A. NaCl fused. B. NaCl B. NaCl Span style="font-family: Arial sans-serif; font-size: 10.5pt; vertical-align: sub;">(aq) _{<o:p></o:p>} C. NaCl (Solid) _{<o:p></o:p>} Class="MsoNormal"> _{<o:p></o:p>} D. Both (b) and (c)
11	The oxidation number of Mn is KMnO ₄ is	A. +2 B. +4 C. +6 D. +7
12	A standard hydrogen electrode is used as standard electrode of which electrode potential is arbitrarily taken as	A. +1 B1 C. 0.1 D. Zero
13	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	A. These have very high positive values of reduction potentials B. These have very high negative values of reduction potentials C. Their ionization potentials are

		D. Their reduction potentials are close to SHE
14	Question Image	A. lodine can oxidise iron B. Bromine can oxidise iron C. lodine can oxidise bromine D. Iron can oxidise bromine
15	Which of the following statement is incorrect about SHE(Standard hydrogen electrode):	A. Reduction potential of Cu ⁺² is smaller than H ⁺ ions whenit is coupled with copper electrode. B. gas is passed in it at 1 atm pressure. C. Its oxidation potential and reduction potential is zero. D. It is made of platinum wire dipped in HCl solution
16	When fused PbBr2 is electrolyzed :	A. Lead appears at anode.B. Lead appears at cathode.C. Bromine appears at cathode.D. Lead appears at both electrodes.
17	The oxidation state of an element is zero when	A. It forms an oxide B. It forms hydride C. It is in free state D. Only for noble gases
18	Which statement is incorrect for balancing of redox reactions by ion-electron method	A. The reaction is splitted into two half reactions B. H ₂ O and H ⁺ ions are added for acidic or neutral reaction to balance O and H atoms C. To balance H, HCi, is added D. To balance O and H in the alkaline reaction OH ⁻ added
19	When electrically is passed through molten Al_2O_3 + Na_3AlF_6 and 13.5 gms of Al are deposited, the number of farady must be	A. 0.5 B. 1.0 C. 1.5 D. 2.0
20	When aqueous solution of NaOH is electrolysed useing graphite electrodes, the product obtained at anode is	A. O ₂ gas B. H ₂ gas C. Na metal D. Na ₂ O

lowest