ECAT Chemistry Chapter 10 Electrochemistry

Sr	Questions	Answers Choice
1	In the reaction $K_2Cr_2O_7$+ HCl + $CrCl_3$+ Cl_2+ H_2O the element which is reduced is	A. K B. Cl C. Cr D. H
2	Which of the following cannot conduct electricity :	A. NaCl fused. B. NaCl(aq) _{<o:p></o:p>} C. NaCl(Solid) _{<o:p></o:p>} <o:p></o:p> D. Both (b) and (c)
3	In a hydrogen-oxygen fuel cell, combustion of hydrogen occurs to	A. Generate heat B. Remove adsorbed oxygen from electrode surfaces C. Produce High purity water D. Create potential difference between two electrodes
4	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
5	Metals which are above SHE in electrochemical series	A. Can liberate H₂from acid B. Cannot liberate H₂from acid C. Cannot always liberate H₂from acid D. None of these
6	The specific conductance of a 0.1 N KCl solution at 23°C is 0.012 $ohm^{-1}cm^{-1}$. 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 cm⁻¹ B. 0.66 cm⁻¹ C. 0.916 cm⁻¹ D. 1.12 cm⁻¹
7	A cell in which spontaneous redox reaction generates an electric current is called	A. Electrolytic cell B. Electrochemical cell C. Voltaic or Galvanic cell D. Biological cell
8	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	A. 2.0 B. 1.5 C. 1.0 D. 0.5
9	Question Image	A. Adding H₂O and H⁺ions B. Adding OH^-ions C. Adding O²molecules D. Adding O atoms
10	The cell in which a non-spontaneous redox reaction takes place as a result electricity is known as :	A. Electrolytic cell. B. Voltaic cell. C. Daniel cell. D. Dry cell.
11	Calculate the amount of charge flowing in 2 minute in a wire of resistance 10Ωwhen a potential difference of 20 V is applied	A. 120 C B. 240 C C. 20 C D. 4 C
12	Standard reduction electrode potential of three metals A, B and C are erespectively + 0.05 V, -3.0 and -1.2V. The reducting power of	A. B > C > A B. A > B > C C. C > B > A

		D. A > C > B
13	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
14	Best way to prevent rusting of iron is by	A. Making iron cathode B. Putting it in saline water C. Both of these D. None of these
15	In a Galvanic cell	A. Chemical energy is converted into electricity B. Chemical energy is converted into heat C. Electrical energy is converted into heat D. Electrical energy is converted into chemical energy
16	The two half cells of a galvanic cell are connected by	A. Ammeter B. Salt bridge C. Hydrogen electrode D. Copper electrode
17	Question Image	A. Iodine can oxidise iron B. Bromine can oxidise iron C. Iodine can oxidise bromine D. Iron can oxidise bromine
18	When aqueous solution of NaOH is electrolysed useing graphite electrodes, the product obtained at anode is	A. O₂gas B. H₂gas C. Na metal D. Na₂O
19	Ionization is the process in which ionic compounds when fused or dissolved in water split up into charged particles called :	A. Atoms. B. Electrons. C. Protons . D. Ions
20	In electrolytic cells, the chemical changes may be :	A. Either spontaneous or non-spontaneous B. Always spontaneous C. Always non-spontaneous D. More spontaneous and less non-spontaneous.