ECAT Chemistry Chapter 10 Electrochemistry Online Test

Sr	Questions	Answers Choice
1	The electrode through which the electrons enter the electrolytic solution is electrolytic solution is	A. Anode B. Cathode C. May be anode or cathode D. None of these
2	During electrolysis of KNO_3, H_2 is evolved	A. Anode B. Cathode C. Both a and b D. None
3	Which statement is incorrect for NICAD battery	A. The electrolyte is alkali B. Cd acts as anode C. MnO_2 acts as electrolyte D. NiO_2 acts as cathode
4	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
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	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
7	When aluminium electrode is coupled with copper electrode in a galvanic cell :	A. Reduction takes place at aluminium electrode. B. Oxidation takes place at copper electrode. C. Reduction takes place at copper electrode. D. Both (a) and (c)
8	In an electrolytic cell, the electrons flow from :	A. Cathode to anode or opposite B. Cathode to anode C. Anode to cathode D. Random flow
9	The electrolysis of $CuSO_4$ aqueous solution using copper as cathode as well an anode the substance which deposits at cathode is	A. H_2SO_4 B. Oxygen C. Copper D. Hydrogen
10	Which of the following is a strong electrolyte?	A. $Ca(NO_3)_2$ B. HCN C. CH_3COOH D. NH_4OH
11	Time required to deposit one millimole of aluminium metal by the passage of 9.65 amperes through molten electrolyte containing aluminium ion is	A. 30 s B. 10 s C. 30,000 s D. 10,000 s
12	Metallic conduction is due to the	A. Movement of electrons B. Movement of ions C. Both a and b D. None of these
13	In KO_2 the oxidation state of oxygen is	A. -2 B. -1 C. +1/2 D. -1/2
14	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.
15	An electric current is passed through silver nitrate solution using silver electrodes.10.79 g of silver was found to be deposited on the cathode if the same amount of electricity is passed through copper sulphate solution using copper electrodes, the weight of copper deposited on the cathode is	A. 6.4 g B. 2.3 g C. 128.8 g D. 3.2 g

16	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
17	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
18	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
19	Which of the following is the use of electrolysis?	A. Eletrorefining B. Electroplating C. Both A and B D. None of the above
20	Fe can displace Cu form CuSO4solution 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
21	A solution of sodium sulphate was electrolysed using some insert electrodes. The products at the electrodes are	A. O_2, H_2 B. O_2, Na C. O_2, SO_2 D. O_2, $S_2O_8^{2}$
22	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
23	In electrolysis of NaCl when Pt electrode is taken then $H_2$is liberated at cathode while with Hg cathode it forms sodium amalgam	A. Hg is more inert than Pt B. More voltage is required to deduce H^+at Hg than Pt C. Na is dissolved in Hg while it does not dissolve in Pt D. Conc. of H^+ions is larger when Pt electrode is taken
24	Corrosion is basically a	A. Altered reaction in presence of H_2O B. Electrochemical phenomenon C. Interaction D. Union between two light metals and a heavy metal
25	The oxidation number of chromium in $K_2Cr_2O_7$is	A. 14 B. 12 C. 6 D. None of these
26	The conductivity of strong electrolyte	A. Increases on dilution slightly B. Does not change on dilution C. Decreases on dilution D. Depends on density of electrolyte it self
27	Question Image	A. Cu B. H C. N D. O
28	The cathodic reaction in the electrolysis of dill $H_2SO_4$with Pt electrodes	A. Reduction B. Oxidation C. Both oxidation and reduction D. neither oxidation or reduction
29	Calculate the amount of charge flowing in 2 minute in a wire of resistance 10$\Omega$when a potential difference of 20 V is applied	A. 120 C B. 240 C C. 20 C D. 4 C
30	In the electrolysis of fused bauxite ($Al_2O_32H_2O$) with fused Cryolite (Na_3AlF_6) using carbon rods as anode. The product obtained at cathode is	A. Na metal B. F_2gas C. Al metal D. O_2gas
31	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
32	Question Image	A. Iodine can oxidise iron B. Bromine can oxidise iron C. Iodine can oxidise bromine D. Iron can oxidise bromine

33	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}
34	If the salt bridge is not used between two half cells, then the voltage	A. Decrease rapidly B. Decrease slowly C. Does not change D. Drops to zero
35	When fused $PbBr_2$ is electrolyed then	A. Bromine appears at cathode B. Lead deposited at the cathode C. Lead appears at the anode D. None of these happens
36	Sodium can be obtained by :	A. Electrolysis of acidified water. B. By heating NaCl and water at 100°<p class="MsoNormal">_{<o:p></o:p>}</p> C. Electrolysis of molten sodium chloride. D. Electrolysis of aqueous sodium chloride.
37	When electric current is used to carry out non-spontaneous redox, the process is called	A. Hydrolysis B. Electrolysis C. Decomposition D. Neutralization
38	The art of electroplating was given by	A. Faraday B. Edison C. Thomas Gradam D. Brugan
39	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.
40	By using graphite electrode the electrolysis of aqueous solution of NaCl produces at anode	A. H_2 gas B. Cl_2 gas C. NaOH D. No metal
41	K,Ca and Li metals may be arranged in decreasing order of their reduction potential as :	A. Li, k, Ca B. Ca, K, Li C. Li, Ca, K D. K, Ca, Li
42	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^{+}
43	Prevention of corrosion of iron by Zn coating is called	A. Galvanization B. Cathodic protection C. Electrolysis D. Photoelectrolysis
44	When fused $PbBr_2$ is electrolyzed	A. Bromine appears at he cathode B. Lead is deposited at the cathode C. Lead appears at the anode D. None of these happens
45	Which of the following statements is true about Galvanic cell	A. Anode is negatively charged B. Reduction occurs at anode C. Cathode is positively charge D. Reduction occurs at cathode
46	A current of 9.65 ampere flowing for 10 minutes deposits 3.0 g of the metal which is monovalent. The atomic mass of the metal is	A. 10 B. 50 C. 30 D. 96.5
47	The amount of electricity that can deposit 108 g of silver from silver nitrate solution is	A. 1 ampere B. 1 coulomb C. 1 faraday D. 2 ampere
48	In electronic watches or electronic calculators the tiny batteries used are	A. Alkaline battery B. NICAD battery C. Fuel cell D. Silver oxide battery
49	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	A. 1.0×10^{10} B. 2.0×10^{11} C. 4.0×10^{12} D. 1.0×10^{2}
		A. 1.08 g

50	What will be the weight of deposited silver on passing 965 coulombs of electricity in solution of $AgNO_3$?	B. 2.16 g C. 0.54 g D. 0.27 g
51	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
52	A dry alkaline cell has porous Zn anode and MnO_2 as cathode the electrolyte used is	A. $Ca(OH)_2$ B. NaOH C. KOH D. NH_4OH
53	Most metals are conductors of electricity because of the :	A. Light weight. B. Immobility of the electrons. C. Lustrous surfaces D. Relatively free movement of their electrons
54	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
55	Coupling of Pb with its Pb^{++}/Pb = -0.13 V and Ag with Ag^+/Ag = +0.80 V, the cell reaction	
56	The equivalent conductivity of 0.1 M week acid is 100 times less than at infinite dilution. The degree of dissociation is	A. 100 B. 10 C. 0.01 D. 0.001
57	Corrosion reaction are	A. Spontaneous redox reaction B. Non-spontaneous acid-base reactions C. Spontaneous acid-base reactions D. None of these
58	A cell in which electric current is produced as a result spontaneous redox reaction is called :	A. Dry cell B. Electrolytic cell C. Galvanic cell D. Standard cell
59	Out of Cu, Ag, Fe and Zn the metal which can displace all others from theri salt solution is	A. Ag B. Cu C. Zn D. Fe
60	The standard EMF of Daniel cell is 1.10 volt. The maximum electrical work obtained from the Daniel cell is	A. 212.3 kJ B. 175.4 kJ C. 106.15 kJ D. 53.07 kJ
61	During electrolysis, the reaction that takes place at cathode is :	A. Reduction B. Both (a) and (c) C. Oxidation D. No reaction occurs
62	Metals like Fe, Mg, Al, Cr, Zn have more negative reduction potentials that is whey	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
63	Metals which are above SHE in electrochemical series	A. Can liberate H_2 from acid B. Cannot liberate H_2 from acid C. Cannot always liberate H_2 from acid D. None of these
64	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
65	For spontaneity of a cell, which is correct?	A. $\Delta G = 0$, $\Delta E = 0$ B. ΔG = -ve , $\Delta E = 0$ C. ΔG = +ve , $\Delta E = 0$ D. ΔG = -ve
66	Question Image	A. Fe is reduced B. Fe is oxidized C. Cl_2 is oxidized D. None of these

67	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
68	Which statement is incorrect about standard hydrogen electrode	A. Its oxidation and reduction potential is zero B. It consists of Pt wire dipped on 1 molar HCl solution C. The electrolyte is 1 molar NaOH solution D. H_2 gas is passes in it at 1 atmospheric pressure
69	When during electrolysis of a solution of $AgNO_3$, 9650 coulombs of charge pass through the electroplating bath, the mass of silver deposited on the cathode will be	A. 1.08 g B. 10.8 g C. 21.6 g D. 108 g
70	Which statement is incorrect for balancing of redox reactions by ion-electron method	A. The reaction is splitted into two half reactions B. H_2O 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
71	Matals 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
72	F_2, Cl_2, Br_2 and I_2 lie below SHE is 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
73	Question Image	A. -1.10 V B. +1.10 V C. -0.42 V D. +0.42 V
74	96500 C of electricity liberates from $CuSO_4$ solution	A. 63.5 g of Cu B. 31.75 g of Cu C. 96500 g of Cu D. 100 g of Cu
75	2.5 faradays of electricity is passed through solution of $CuSO_4$. The number of gram equivalents of copper deposited on the cathode would be	A. 1 B. 2 C. 2.5 D. 1.25
76	Strong reducing agents gave	A. Greater positive value of standard reduction potential B. Greater negative value of standard reduction potential C. Lesser positive value of standard reaction potential D. None of these
77	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.
78	Electrochemistry is concerned with the conversion of electrical energy into chemical energy in :	A. Galvanic cell B. Electrolytic cell C. Voltaic cell D. Both (a) and (c)
79	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
80	96500 C electricity is passed through $CuSO_4$. The amount of copper precipitated is	A. 0.25 mole B. 0.5 mole C. 1.0 mole D. 2.00 mole
81	When quantity of electricity passed is one faraday then the mass deposited at the electrode is equal to	A. One gm, atomic weight B. One gm, Equivalent C. Eletrochemical equivalent D. None of the above
82	A standard hydrogen electrode is used as standard electrode of which electrode potential is arbitrarily taken as	A. +1 B. -1 C. 0.1 D. Zero
		A. 12157.48 sec

83	In a solution of $CuSO_4$ how much time will be required to precipitate 2g copper by 0.5 ampere current?	B. 102 sec C. 510 sec D. 642 sec
84	Which of the following (1 M) conducts more electricity?	A. Sulphuric acid B. Boric acid C. Nitric acid D. Phosphorus acid
85	What are the products electrolysis of aqueous sodium chloride at two electrodes	A. Chlorine at anode and oxygen at cathode. B. Hydrogen at anode and chlorine at cathode. C. Chlorine at anode and hydrogen at cathode. D. Chlorine at anode and sodium at cathode.
86	Strong oxidizing agents have	A. Greater positive value of standard reduction potential B. Lesser positive value of standard C. Greater negative value of standard D. None of these
87	The oxidation number of free element is always taken to be	A. 0 B. 1 C. 2 D. -1
88	Cell potential depends upon :	A. Concentration of ions B. Nature of electrolyte C. Temperature D. All of above
89	During electrolysis, electrons are :	A. Lost by anions and gained by cations B. Gained by anions and lost by cations C. Gained only D. Lost only
90	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
91	Question Image	A. Adding H_2O and H^+ ions B. Adding OH^- ions C. Adding O^{2} molecules D. Adding O atoms
92	The best electrode used in salt bridge is KCl. Which other electrolyte an also be used for the purpose :	A. NaCl B. <p class="MsoNormal">NH_4NO_3<o:p></o:p></p> C. <p class="MsoNormal">KNO_3<o:p></o:p></p> D. <p class="MsoNormal">$NaNO_3$<o:p></o:p></p>
93	Oxidation number of oxygen in OF_2 is	A. +1 B. -1 C. +2 D. -2
94	Cell in which an electric current drives a non-spontaneous reaction is called	A. Electrolytic cell B. Voltaic cell C. Biological cell D. Electrochemical cell
95	When aqueous NaCl is electrolyzed, which of the following ions get discharged at anode :	A. <p class="MsoNormal">H^+<o:p></o:p></p> B. <p class="MsoNormal">Na^+<o:p></o:p></p> C. <p class="MsoNormal">OH^-<o:p></o:p></p> D. <p class="MsoNormal"><span style="font-size: 10.5pt; line-height: 107%; font-family: Arial, sans-serif; background-image: initial; background-position: initial; background-size: initial; background-repeat: initial;

96	The galvanic or voltaic cells which are rechargeable called as	A. Primary cells B. Secondary cells C. Dry cells D. Infinite cells
97	The difference of potential of two electrodes when concentration of solution is 1M each at 25°C and1 atm is called :	A. Cell reaction. B. Electrode potential. C. Cell voltage. D. Standard cell potential.
98	Which of the following correctly describes the process occurring at the electrodes when molten NaCl is electrolyzed:	A. No reaction at anode, reduction at cathode. B. No reaction at cathode, oxidation at anode. C. Oxidation at anodes, reduction at cathode. D. Oxidation at cathode, reduction at anode.
99	Question Image	A. Zn B. H C. S D. O
100	Same amount of electric current is passed through solutions of $AgNO_3$ and 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
101	The oxidation number of H is -1 in the compound	A. H_2O B. H_3BO_3 C. NaOH D. NaH
102	Caustic soda is obtained by electrolysis of conc. aqueous solution of NaCl in a cell called	A. Daniell's cell B. Nelson's cell C. Down's cell D. Voltaic cell
103	The reference electrode is made by using	A. $ZnCl_2$ B. $CuSO_4$ C. $HgCl_2$ D. Hg_2Cl_2
104	The conversion of chemical energy into electrical energy requires :	A. Electrolytic cell B. Galvanic cell C. Voltaic cell D. Both (b) and (c)
105	The voltaic or galvanic cells which cannot be recharged are called	A. Primary cells B. Secondary cells C. Infinite cells D. Fuel cells
106	Specific conductivity of a solution	A. Increases with dilution B. Decreases with dilution C. Remains unchanged with dilution D. Depends on mass of electrolyte
107	A smuggler could not carry gold by chemically depositing iron on the gold surface since	A. Gold is denser B. Iron rusts C. Gold has higher reduction potential then iron D. Gold has lower reduction potential then iron
108	Electrolytes in the form of solution or in the fused state have the ability to conduct :	A. Light. B. Electricity. C. Ions. D. Electrons.
109	The number of coulombs required for the deposition of 107.870 g of silver is	A. 96500 B. 48250 C. 193000 D. 10000
110	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
111	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_2O
112	Lead accumulator contains	A. 30% NaCl solution as electrolyte B. 30% HCl solution as electrolyte C. 30% H_2SO_4 solution as electrolyte D. 30% NaOH solution as electrolyte

113	The value of SHE is cathode and anode is always taken to be	A. One B. Zero C. Different D. Same
114	Pick out the wrong statement. In electrochemical cell	A. Electrons are released at anode B. Cathode is regarded as negative electrode C. Chemical energy is converted into electrical energy D. Salt bridge maintains the electrical neutrality of the solution
115	Li has the lowest reduction potential while the element with highest reduction potential is	A. H B. F C. O D. N
116	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 lowest D. Their reduction potentials are close to SHE
117	An electrolyte	A. Forms complex ions solution B. Gives ions only when electricity is passed C. Possesses ions even in solid state D. Gives ions only when dissolved in water
118	In a compound an atom has negative oxidation state because	A. Atom is negatively charged B. Atom acts as cathode C. Atom is more electronegative D. Atom has lowest ionization energy
119	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
120	During redox reaction an oxidizing agent	A. Gains electrons B. Is oxidized C. Loses electrons D. Hydrolysed
121	Which one of the following reaction takes place spontaneously	
122	The function of salt bridge is :	A. To increase movement onions. B. To increase the emf of cell. C. To decrease the temperate D. To maintain electrical neutrality
123	Electrochemical series is a list of element S arranged into the increasing order of their	A. Standard oxidation potential B. Standard reduction potential C. Cell voltage D. Ionization potential
124	The oxidation number of Mn is $KMnO_4$ is	A. +2 B. +4 C. +6 D. +7
125	Question Image	A. A strong reducing agent B. A strong oxidising agent C. Better oxidising agent than hydrogen D. Less reducing agent than hydrogen
126	If the standard electrode potential of CU^{2+}/Cu electrode is 0.34 V, what is the electrode potential of 0.01 M concentration of Cu^{2+}? (T=298)	A. 0.399 V B. 0.281 V C. 0.222 V D. 0.176 V
127	Alkaline battery has a voltage of	A. 4.5 V B. 3.5 V C. 2.5 V D. 1.5 V
128	A half reaction can be defines as :	A. It always occurs at cathode. B. Involves only half of a mole of electrolyte. C. Occurs at one of the electrode. D. Goes only half way to completion.
129	The specific conductance of 0.1 M NaCl solution is $1.06 \times 10^{-2} ohm^{-1}mol^{-1}$. Its molar conductance in $ohm^{-1}cm^2mol^{-1}$ is	A. 1.06×10^2 B. 1.06×10^3 C. 1.06×10^4 D. 53
130	Sodium metal is obtained by the electrolysis of fused NaCl in cell is called	A. Nelson's cell B. Down's cell C. Daniell cell

		C. Daniell cell
		D. Voltaic cell
131	Reduction or oxidation potential of standard hydrogen electrode is :	A. 0.0 Volt B. 0.8Volt C. 1.0Volt D. 1.8Volt
132	In the electrolysis of aqueous solution of sodium nitrate, the ions which are reduced at the cathode are	A. H_3O^+ B. Na^+ C. OH^- D. NO_3^-
133	Which of the following yield both hydrogen and chlorine on electrolysis:	A. Electrolysis of acidified water. B. Electrolysis of molten NaCl C. Electrolysis of aqueous NaCl D. Electrolysis of saline water
134	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	A. One pascal B. One kilo pascal C. One atmoshpere D. Then atmoshpere
135	Which of the following cannot conduct electricity :	A. NaCl fused. B. NaCl(aq) C. NaCl(Solid) D. Both (b) and (c)
136	The reaction is galvanic cell is	A. Spontaneous B. Non-spontaneous C. Acid-base D. None of these
137	If a salt bridge is removed between the two half cells, the voltage	A. Drops to zero B. Does not change C. Increases gradually D. Increases rapidly
138	The function of salt bridge in the galvanic or voltaic cell is to	A. Carry out oxidation at anode B. To carry out reduction at cathode C. Carry out electrolysis D. To prevent the net charge accumulation in either of the half cells
139	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
140	Silver oxide battery has a voltage of	A. 2.0 V B. 1.5 V C. 2.5 V D. 1.0 V
141	An electrochemical cell is based upon	A. Acid-base reaction B. Redox reaction C. Nuclear reaction D. None of the above
142	Reaction takes place at anode is	A. Ionization B. Reduction C. Oxidation D. Hydrolysis
143	In a Galvanic cell, the electrons flow from	A. A node to cathode through the solution B. Cathode to anode through the external circuit C. Cathode to anode through the external circuit D. Anode to cathode through the external circuit
144	An electric current is passed through silver voltameter connected to a water voltmeter. The cathode of the silver voltameter is 0.108 g more at the end of the electrolysis. The volume of oxygen evolved at STP is	A. 56 cm^3 B. 550 cm^3 C. 5.6 cm^3 D. 11.2 cm^3
145	Which one of the following reactions is not spontaneous	
146	Lead accumulator stops discharging current when	A. Lead at anode converted to PbO_2 B. PbO_2 at cathode converted to Pb C. Both electrodes are completely covered with $PbSO_4$ D. Both electrodes are completely covered with $Pb(OH)_2$

147	The two half cells of a galvanic cell are connected by	A. Ammeter B. Salt bridge C. Hydrogen electrode D. Copper electrode
148	Electrolysis is used for :	A. Manufacture of caustic soda B. Refining of copper C. Electroplating D. All of above
149	The process of electrical coating of one metal on another to protect, decorate or to have greater resistance to corrosion is called	A. Electroplating B. Electrolysis C. Conduction D. Induction
150	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
151	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	A. -0.42 V B. +0.42 C. -1.10 V D. +1.10 V
152	A certain current liberate 0.5 g of hydrogen in 2 h. How many grams of copper can be liberated by the same time in a copper sulphate solution?	A. 12.7 gm B. 15.9 gm C. 31.8 gm D. 63.5 gm
153	Pure water does not conduct electricity because it	A. Has low boiling point B. Is almost unionized C. Is neutral D. Is readily decomposed
154	Metallic conduction is also called as :	A. Ionic conduction. B. Protonic conduction. C. Electronic conduction D. Super conduction
155	The reference calomel electrode is made from which of the following?	A. $ZnCl_2$ B. $CuSO_4$ C. Hg_2Cl_2 D. $HgCl_2$
156	The unit of specific conductivity is	A. Ohm cm^{-1} B. Ohm cm^{-2} C. Ohm^{-1}cm D. Ohm^{-1}cm^{-1}
157	Which of the substances Na, Hg, S Pt and graphite can be used as electrodes in electrolytic cells having aqueous solution?	A. Na, Pt and graphite B. Na and Hg C. Pt and graphite only D. Na and S only
158	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
159	In the presence of copper electrodes the electrolysis of aqueous $CuSO_4$produces at cathode	A. H_2gas B. O_2gas C. SO$_2$gas D. Cu metal
160	In lead accumulator the electrolyte is H_2SO_4solution is	A. 30% H_2SO_4 B. 60% H_2SO_4 C. 80% H_2SO_4 D. 90% H_2SO_4
161	Purification of an impure copper is made by electrolytic cell, in which impure copper is anode and pure copper is cathode, and the electrolyte used is	A. H_2SO_4 B. $CuSO_4$ C. $ZnSO_4$ D. Na_2SO_4
162	A cell constant is generally found by measuring the conductivity of aqueous solution of	A. $BaCl_2$ B. KCl C. NaCl D. $MgCl_2$