

1	The mass of one mole of electrons is:				
A	1.008 mg	B	0.55 mg	C	0.184 mg
D	1.637 mg				
2	The volume occupied by 1.4 g of N ₂ at STP is:				
A	2.24 dm ³	B	22.4 dm ³	C	1.12 dm ³
D	112 cm ³				
3	The size of atom is in the range of:				
A	2×10^{-5} m	B	2×10^{-10} m	C	2×10^{-11} m
D	2×10^{-12} m				
4	10 A = ...				
A	45575	B	45576	C	45577
D	45580				
5	One amu is equal to:				
A	1.661×10^{27} kg	B	1.661×10^{-27} kg	C	1.661×10^{24} kg
D	1.661×10^{-27} g				
6	J. Berzelius determined the:				
A	Atomic mass	B	Atomic number	C	Isotopes
D	Relative abundance				
7	How many times a haemoglobin molecule is heavier than hydrogen atom?				
A	38000 times	B	58000 times	C	68000 times
D	88000 times				
8	The atomicity of C ₆ H ₁₂ O ₆ :				
A	6	B	12	C	3
D	24				
9	which is not a molecular ion?				
A	He ⁺	B	CH ⁴⁺	C	NH ⁴⁺
D	CO ⁺				
10	Silver has isotopes:				
A	9	B	16	C	17
D	18				
11	Tin has isotopes:				
A	7	B	9	C	11
D	5				
12	Isotopes are atoms of same element with similar chemical properties but different:				
A	Atomic number	B	Atomic volume	C	Atomic weight
D	Atomic structure				
13	Bromine has isotopes:				
A	8	B	6	C	4
D	2				
14	Nickel has isotopes:				
A	3	B	5	C	6
D	11				

15	Dempster's mass spectrometer was designed for the identification of isotopes of the elements which were available in:				
A	Gaseous state	B	Liquid state	C	Solid state
D	Plasma state				
16	The pressure of vapours maintained in ionization chamber of mass spectrometer during isotopic analysis is:				
A	10^3 torr	B	Around 10^{-3} torr	C	Around 10^{-7} torr
D	10^{-9} torr				
17	One of the substance is used to absorb CO ₂ gas in combustion analysis, which is that substance:				
A	50 % KOH	B	Al ₂ O ₃	C	MgClO ₄₂
D	SiO ₂				
18	In combustion analysis water vapors are absorbed in:				
A	50% KOH	B	MgClO ₄₂	C	NaOH
D	MgCl ₂				
19	Emperical formula of glucose is:				
A	CHO	B	C ₂ H ₄ O ₂	C	CH ₂ O
D	C ₆ H ₁₂ O ₆				
20	The largest number of molecules are present:				
A	3.6 g of H ₂ O	B	4.8 g of C ₂ H ₅ OH	C	2.8 g of CO
D	5.4 g of N ₂ O ₅				
21	The number of moles of CO ₂ which contain 8.0 g of oxygen:				
A	0.25	B	0.5	C	1
D	1.5				
22	Formula mass of CaCO ₃ is:				
A	100	B	90	C	120
D	106				
23	The word porosite means:				
A	Size of pores	B	Number of pores	C	Quality of pores
D	Nature of pores				
24	Gooch crucible is made of:				
A	Glass	B	Paper	C	Teflon
D	Porcelain				
25	One of these substances is not used as drying agent in the decolorizing agent?				
A	P ₂ O ₅	B	Cone. H ₂ SO ₄	C	Silica gel
D	50% KOH				
26	Which one of the following substances is used as decolorizing agent?				
A	Animal charcoal	B	Cone. H ₂ SO ₄	C	CaCl ₂
D	Silica gel				
27	Which one of the following substances is not a drying agent?				
A	NaCl	B	CaCl ₂	C	Silica gel
D	Phosphorous pentaoxide				
28	Drying agent used in in crystallization is:				
A	P ₂ O ₅	B	Animal charcoal	C	KMnO ₄
D	Water				
29	The drying agent used in desiccator is:				
A	NH ₄ Cl	B	AgCl	C	NaCl
D	CaCl ₂				
30	Direct converion of solid into vapours is called:				
A	Crystallization	B	Sublimation	C	Distribution
D	Vaporization				
31	Which one is not example of a sublimand:				
A	Ammonium chloride	B	Iodine	C	Sodium chloride
D	Benzoic acid				
32	Repeated extractions using small portions of solvent are more:				
A	Accurate	B	Efficient	C	Slow
D	Rapid				
33	In solvent extraction, the law applied:				
A	Law of mass action	B	Distribution law	C	Coulomb's law
D	Boyle's law				
34	In technique a solute distribute between two immiscible liquids:				
A	Crystallization	B	Solvent extraction	C	Filtration
D	Distillation				
35	The chromatography in which stationary phase is liquid is called:				
A	Partition chromatography	B	Adsorption chromatograph	C	Bolumn chromatograph
D	All of thse				
36	In paper chromatography, the to which the solvent rises to maximum extent is called:				

A	Eluent	B	Chromatography	C	Solvent front	D	Base line
37	In paper chromatography, the mobile phase is usually:						
A	Liquid ammonia	B	Water	C	Organic liquid	D	None of these
38	Solvent extraction is a equilibrium an it is controlled by:						
A	Law of mass action	B	Amount of solvent	C	Distribution law	D	The amount of solute
39	Solvent extraction technique is particularly useful technique for the separation when the prodeuct to be separated is:						
A	Non-volatile or thermally unstable	B	Volatile or thermally stable	C	Non-volatile or thermally stable	D	Volatile or thermally unstable
40	The comparative rate at which solute moves in paper chormatography depends upon:						
A	The size of paper	B	Rf value of solute	C	Temperature of experiment	D	Size of chromatography tank used
41	One torr is equal to:						
A	One pascal	B	One mm of Hg	C	76 cm Hg	D	One atmosphere
42	The commonly used unit of pressure by meterorologists is:						
A	Atmosphere	B	Pascal	C	Millibar	D	Pound inch-2
43	The constant factor in Charles's law is:						
A	Volume	B	Temperature	C	Pressure	D	All of these
44	If absolute temperature of a gas is doubled and pressure is reduced to one half, the volume of the gas will:						
A	Remains unchanged	B	Reduce to 1/4	C	Increases four times	D	Be doubled
45	Felling uncomfortable breathing in un-pressurized cabins is due to:						
A	High pressure of CO ₂	B	Fatigue	C	Low pressure of O ₂	D	Law pressure of CO ₂
46	Partial pressure of O2 in lungs is:						
A	760 torr	B	320 torr	C	116 torr	D	159 torr
47	Which gas will diffuse more rapidly?						
A	CO ₂	B	HCl	C	NH ₃	D	SO ₂
48	Which gas will diffuse more rapidly among the following?						
A	N ₂	B	H ₂	C	CO	D	NH ₃
49	The order of rate of diffusion of gases NH ₃ , SO ₂ , Cl ₂ and CO ₂ :						
A	NH ₃ >SO ₂ >Cl ₂ >CO ₂	B	Cl ₂ >SO ₂ >CO ₂ >NH ₃	C	NH ₃ >CO ₂ >SO ₂ >Cl ₂	D	NH ₃ >CO ₂ >Cl ₂ >SO ₂
50	Deviation of a gas from ideal behaviour is maximum at:						
A	-10oC and 5atm	B	-10oC and 2atm	C	400 oC and 2 atm	D	0 oC and 2 atm
51	If the value of a and b in van dar waals's equation are close to zero for a gas, then the gas is:						
A	Ideal	B	Non-ideal	C	Highly polar	D	Liquefied easily
52	Plasmas are found in everything from the sun is:						
A	Atoms	B	Molecules	C	Electrons	D	Quarks
53	Plasma is conductor of electricity:						
A	Bad	B	Poor	C	Good	D	None
54	Pressure remaining constant, at which temperature the volume of gas will become twice of what it is at 0o C:						
A	546 °C	B	200 °C	C	546 K	D	273 K
55	If absolute temperature of a gas is doubled and the pressure is reduced to one half, the volume of gas will:						
A	Remain unchanged	B	Increase four times	C	Reduce 1/4	D	Be doubled
56	The deviation of a gas from ideal behavior is maximum at:						

A	NaNO ₃ , CaCO ₃	B	NaF, MgO	C	K ₂ SO ₄ , K ₂ Cr ₂ O ₇	D	Zn, Cd
77	K ₂ SO ₄ and K ₂ CrO ₄ are isomorphs solids and exist in:						
A	Cubic form	B	Orthorhombic	C	Trigonal form	D	Tetragonal
78	Which impurity makes the shape of sodium chloride crystal needle like:						
A	MgSO ₄	B	Urea	C	Glucose	D	MgCO ₃
79	How many allotropic form are present in carbon?						
A	Two	B	Three	C	Four	D	Five
80	Existence of an element in more than one crystalline forms is called:						
A	Isomorphism	B	Polymorphism	C	Isotropy	D	Allotropy
81	When 10% urea is present in NaCl solution then which crystal becomes:						
A	Rod like	B	Sphere like	C	Needle like	D	Egg like
82	Structure of CrO ₄ ²⁻ is:						
A	Tetrahedral	B	Octahedral	C	Cubic	D	Triclinic
83	Geometry of diamond is:						
A	Tetragonal	B	Cubic	C	Rhombohedral	D	None of these
84	LiF is a crystalline substance and has:						
A	Ionic crystals	B	Metallic crystals	C	Covalent crystals	D	Molecular crystals
85	Coordination number of Na ⁺ ion NaCl is:						
A	One	B	Two	C	Four	D	Six
86	The structure of sodium chloride is:						
A	Body centered cube	B	Face centered cube	C	Simple cube	D	None of these
87	The crystals of diamond is:						
A	Ionic	B	Covalent	C	Molecular	D	Metallic
88	Crystals formed due to London forces of interaction are:						
A	Ionic	B	Covalent	C	Molecular	D	Metallic
89	Acetone and chloroform are soluble in each other due to:						
A	Intermolecular hydrogen bonding	B	Ion-dipole interaction	C	Instantaneous dipole	D	All of above
90	In order to mention the boiling point of water 110°C the external pressure should be:						
A	Between structure of ice	B	Between 200 torr and 760 torr	C	765 torr	D	Any value of bond angles
91	The molecule of CO ₂ in dry ice from the:						
A	Ionic crystals	B	Covalent crystals	C	Molecular crystals	D	Any type of crystals
92	Negative charge on cathode rays was established by:						
A	William Crook	B	J. Perin	C	J.J. Thomson	D	Hittorf
93	Cathode rays strike alumina and produce a colour.						
A	Red	B	Blue	C	Yellow	D	Green
94	Name of the electron is given by:						
A	William Brook	B	Stoney	C	J.J. Thomson	D	Chadwick
95	The nature of positive rays depend on:						
A	The nature of electrons	B	The nature of discharge tube	C	The nature of residual gas	D	The nature of voltage supplied
96	Positive ions are called:						
A	Cations	B	Anions	C	Canal rays	D	Hydrated ions
97	How many times the mass of neutron is greater than that of electron?						
A	1480	B	2000	C	200	D	1840

98	Neutron was discovered by:						
A	Chadwick	B	C.D Anderson	C	Rutherford	D	Goldstein
99	Properties of wave are:						
A	Wavelength	B	Wave number	C	Frequency	D	All
100	Bohr's theory was introduced in:						
A	1900	B	1911	C	1906	D	1913
101	Which one of the following series lie in ultra-violet region?						
A	Lyman	B	Balmer	C	Paschen	D	Brackett
102	Balmar series is found in:						
A	I.R region	B	U.V region	C	Visible region	D	None of these
103	Lyman series is obtained when electron in an atom jumps from higher energy level is:						
A	Ground level	B	2nd level	C	3rd level	D	4th level
104	The wavelength of Lyman series lies in the region:						
A	U.V	B	Visible	C	I.R	D	None of these
105	Spilting of spectral lines of the hydrogen atom under the influence of magnetic field is called:						
A	Stark effect	B	Zeeman effect	C	Compton effect	D	Photoelectrical effect
106	In ground state of an atom, the electron is present:						
A	In the nucleus	B	In the second shell	C	Nearest to nucleus	D	Farthest from the nucleus
107	The shape of p orbitals is:						
A	Double dump-bell	B	Spherical	C	Dumb-bell	D	Complicated
108	Quantum number values for 3d orbitals are:						
A	n=3, l=1	B	n=3, l=2	C	n=3, l=0	D	n=2, l=2
109	An orbital which is shperical and symmetrical is:						
A	S-orbital	B	P-orbital	C	D-orbital	D	F-orbital
110	When 6d orbital is complete, the next entering electron goes into the:						
A	7f orbital	B	7s orbital	C	7p orbital	D	7d orbital
111	The maximum number of unpaired electrons are present in:						
A	Fe=26	B	Ni=28	C	Cr=24	D	Na=11
112	The velocity of photon is:						
A	Independent of its wavelength	B	Dependent of its wavelength	C	Equal to square of ots amplitude	D	dependent on its source
113	Bohr's model of atom is contradicted by:						
A	Planck's quantum theory	B	Dual nature of mater	C	Heisenberg uncertainty principle	D	All of above
114	Splitting of spectral lines when atoms are subjected to stronge electric field is called:						
A	Zeeman effect	B	Stark Effect	C	Photoelectric effect	D	Compton effect
115	In the ground state of an atom, the electron is present:						
A	In the nucleus	B	In the second shell	C	Nearest to the nucleus	D	Farthest from nucleus
116	Which one of the following molecule do not have obey Octet rule?						
A	CH ₄	B	CO ₂	C	PF ₅	D	CS ₂
117	Atoms of element has independent existence:						
A	Fluorine	B	Krypton	C	Oxygen	D	Nitrogen
118	Which element has highest inonization potential?						
A	Li	B	Be	C	B	D	C
119	The amount of energy released by absorbing electon in the valence shell is:						

A	Ionization	B	Electron affinity	C	Electro negativity	D	Atomization
120	 element has highest value of electron affinity:						
A	Fluorine	B	Chlorine	C	Bromine	D	Iodine
121	The highest electronegative element in the periodic table is:						
A	Oxygen	B	Nitrogen	C	Chlorine	D	Fluorine
122	Which of the following is not isoelectronic with rest of the three:						
A	K ⁺	B	Na ⁺	C	Cl ⁻	D	S ⁻²
123	Which of the following species has configuration of neon?						
A	Na ⁺	B	Ca ⁺²	C	Cl ⁻	D	None of these
124	The most stable element are:						
A	Halogens	B	Lithium family	C	Nobel gases	D	None of these
125	Which of the following molecule has a co-ordinate covalent bond?						
A	NH ₃	B	AlCl ₃	C	HCL	D	NH ₄ Cl
126	The hybridization of carbon in CH ₄ is:						
A	Sp	B	Sp ₂	C	Sp ₃	D	Dsp ₃
127	The hybridization in ammonia molecule is:						
A	Dsp ₂	B	SP ₂	C	SP ₃	D	Sp
128	The geometry of ethane is:						
A	Tetrahedral	B	Trigonal planer	C	Linear	D	U.shaped
129	In sp ² hybridization, the orbitals are oriented at an angle of:						
A	109.5°	B	102°	C	180°	D	0°
130	Total number of bonds in C ₂ H ₄ molecule are:						
A	Six	B	Four	C	Five	D	Eight
131	Total number of sigma bonds in ethyne are:						
A	Five	B	Three	C	Two	D	Four
132	In ethyne molecule, the number and nature of bonds are:						
A	One sigma two pi	B	Two sigma one pi	C	Three sigma two pi	D	Two sigma two pi
133	The paramagnetic property of oxygen is well-explained on the basis of:						
A	VSEPR	B	VB theory	C	MO theory	D	None of these
134	Which one of the following molecule is paramagnetic?						
A	H ₂	B	He	C	N ₂	D	O ₂
135	The H-H bond energy in KJ mol ⁻¹ is:						
A	346	B	436	C	463	D	336
136	Dipole moment of CO ₂ :						
A	1.84 D	B	Zero D	C	0.95 D	D	2.2 D
137	The dipole moment of CH ₄ is:						
A	1.85 D	B	0.95 D	C	Zero D	D	1.61 D
138	 moleculaes has zero dipole moment:						
A	CO	B	H ₂ S	C	SO ₂	D	CH ₄
139	Percentage ionic character HF is:						
A	1	B	0.8	C	0.43	D	0.57
140	The number of bonds in nitrogen molecule is:						
A	One sigma and one pi	B	One sigma and two pi	C	Three sigma only	D	Two sigma and one pi
141	which one of the following molecules has zero dipole moment?						
A	NH ₃	B	CHCl ₃	C	H ₂ O	D	BF ₃
142	Which of the hydrogen halides has the highest percentage of inonic character.						

A	Henry's law	B	Hess's law	C	Joule's law	D	Law of conservation of energy
162	Molar concentration is called:						
A	Active mass	B	Weight	C	Mass	D	None of these
163	The law of mass action was given by:						
A	Guldberg and waage	B	Einstein	C	Van't Hoff	D	Berthelot
164	Law of mass action was derived by Guldberg and waage in:						
A	1909	B	1906	C	1846	D	1846
165	 was derived by C.M Guldberg and P. Waage in 1864:						
A	Law of conservation of mass	B	Law of mass action	C	Distribution law	D	Law of conservation of energy
166	When K_c value is small, the equilibrium position is:						
A	Toward left	B	Toward right	C	Remains unchanged	D	None of these
167	When K_c value of a reaction is very small, the equilibrium position lies to:						
A	Left	B	Right	C	May left or right	D	Cannot predicted
168	Catalyst used in preparation of NH_3 from N_2 and H_2 is:						
A	Fe	B	Ni	C	Pt	D	V_2O_5
169	Catalyst used in preparation of SO_3 gas from SO_2 is:						
A	Al_2O_3	B	CaO	C	V_2O_5	D	SiO_2
170	In case when $[OH^-] > [H^+]$ the solution is:						
A	Acidic	B	Neutral	C	Basic	D	None of these
171	The term pH was introduced by:						
A	Henderson	B	Sorenson	C	Goldsmith	D	Thomson
172	The pH of 10^{-2} moles dm^{-3} of an aqueous solution of NaOH is:						
A	2	B	12	C	3	D	10
173	pH of banana is:						
A	2.1	B	4.6	C	9.4	D	9.6
174	pH of milk is:						
A	6.5	B	8.5	C	10.5	D	12.5
175	The nature of milk is:						
A	Acidic	B	Basic	C	Neutral	D	Normal
176	Rain water is:						
A	Slightly acidic	B	Slightly Basic	C	Neutral	D	Highly basic
177	High value of K_a means that acid is:						
A	Very weak	B	Weak	C	Strong	D	Very strong
178	The strongest acid among Halogen acid is:						
A	HCl	B	HBr	C	HI	D	HF
179	Ionization of hydrogen sulphide gas is suppressed:						
A	KCl	B	NaCl	C	HCl	D	NH_4Cl
180	When HCl is passed in saturated solution of NaCl its solubility is:						
A	Increased	B	Decreased	C	Not affected	D	None of all
181	By adding NH_4Cl to a solution of NH_4OH in water, the ionization of NH_4OH :						
A	Increased	B	Decreased	C	Remains same	D	Cannot be predicated
182	The suppression of ionization of weak acid or a weak base by adding one of its own ions is:						

A	Buffer action	B	Common ion effect	C	Buffer capacity	D	Ionization effect
183	An excess of aqueous AgNO_3 is added to aqueous BaCl solution. The precipitate is removed off. The filtrate contains:						
A	Ag^+ and NO_3^- ions	B	Ag^+ , Ba^{+2} and NO_3^-	C	Ba^{+2} and NO_3^- only	D	Ba^{+2} , NO_3^- and Cl ions
184	When ionic product of a solution is greater than the solubility product at a particular temperature then the solution is said to be:						
A	Unsaturated	B	Saturated	C	Very dilute	D	Super saturated
185	Molarity of a solution is expressed in:						
A	Moles/kg	B	$\text{g}\cdot\text{dm}^{-3}$	C	$\text{dm}^3\cdot\text{mol}^{-1}$	D	$\text{mol}\cdot\text{dm}^{-3}$
186	10g NaOH dissolved per 250cm ³ of solution has molarity:						
A	5M	B	1.0M	C	1.5M	D	2.0M
187	0.1 mole of a solute dissolved in 100 g of solvent will be:						
A	0.1 molal	B	1.0 molal	C	0.5 molal	D	0.2 molal
188	Which of the following concentration unit is temperature dependent?						
A	Molality	B	Molarity	C	Mole fraction	D	Percentage w/w
189	The critical solution temperature of phenol-water system is:						
A	33.6°C	B	49.5°C	C	57.8°C	D	65.9°C
190	Benzene- ether can form:						
A	Ideal solution	B	Non-Ideal	C	Buffer-solution	D	None of these
191	The azeotropic mixture of solution showing positive deviation can be distilled at boiling point:						
A	Maximum	B	Minimum	C	No sharp	D	None of these
192	An azeotropic mixture of two liquids boils at a lower temperature than either of them when:						
A	It is saturated	B	It shows positive deviation from Raoult's law	C	It is metastable	D	It shows negative deviation from Raoult's law
193	Which one of the following is an ideal solution:						
A	$\text{C}_2\text{H}_5\text{OH}$ and H_2O	B	C_6H_6 and CCl_4	C	CHCl_3 and CH_3CO	D	H_2O and HCl
194	An aqueous solution of ethanol in water has vapour pressure:						
A	Equal to that of water	B	Equal to that of ethanol	C	More than that of water	D	Less than that of water
195	The concentration of solute in the solution when it is in equilibrium with the solid substance at a particular temperature is called:						
A	Solubility	B	Molarity	C	Molality	D	Mole fraction
196	On cooling a hot saturated solution makes the solution:						
A	Dilute	B	Super saturated	C	Opaque	D	Unsaturated
197	Which of the following solution has the highest boiling point?						
A	5.85 % solution of sodium chloride	B	18.0% solution of glucose	C	6.0 % solution of urea	D	All have the same boiling point
198	Colligative properties are the properties of:						
A	Dilute solutions behave as nearly ideal solution	B	Both a and c	C	Dilute solution which behave as nearly no ideal solutions	D	Neither a and nor c
199	Molal boiling point constant is the ratio of the elevation in boiling point to:						
A	Molarity	B	Mole fraction of solvent	C	Mole fraction of solute	D	Molality
200	 is used as antifreeze in radiator of automobile:						
A	Aspartame	B	Ethylene glycol	C	Serotonin	D	Hydrazine
201	The number of water molecules in $\text{CuSO}_4 \cdot 5\text{H}_2\text{O}$ attached with Cu ion:						
A	One	B	Two	C	Three	D	Four

202	Which salt when dissolved in water from a solution with pH greater than 7:						
A	CuSO ₄	B	NaCl	C	NH ₄ Cl	D	Na ₂ CO ₃
203	Molarity of water is:						
A	1	B	18	C	55.5	D	6
204	18 g glucose is dissolved in 90 g water. The relative lowering of vapour pressure is equal to:						
A	45296	B	5.1	C	18629	D	6
205	A solution of glucose is 10% w/V. The volume in which 1 g mole of it is dissolved will be:						
A	1 dm ³	B	1.8 dm ³	C	200 cm ³	D	900 cm ³
206	An aqueous solution of ethanol in water may have vapour pressure:						
A	Equal to that of water	B	Equal to that of ethanol	C	More than that of water	D	Less than that of water
207	Which of following solution has highest boiling points:						
A	5.85% NaCl	B	18% glucose solutions	C	6% urea solution	D	All have same boiling point
208	The molal boiling point constant is the ratio of elevation in boiling point to:						
A	Molarity	B	Molality	C	Mole fraction	D	None of these
209	Oxidation state of carbon in glucose C ₆ H ₁₂ O ₆ is:						
A	Zero	B	One	C	Two	D	Four
210	The oxidation number of Mn in KMnO ₄ is:						
A	3	B	5	C	7	D	9
211	The oxidation number of Cr in K ₂ Cr ₂ O ₇ is:						
A	14	B	12	C	6	D	13
212	Oxidation state of Mn in MnO ₄ ²⁻ is:						
A	4	B	6	C	5	D	-6
213	Oxidation number of Cl in CaClO ₃ is:						
A	-1	B	5	C	-5	D	1
214	The oxidation number of Fluorine in OF ₂ is:						
A	2	B	-2	C	-1	D	1
215	Which one of the following cells is used for extraction of Na metal?						
A	Nelson's cell	B	Galvanic cell	C	Down's cell	D	All of these
216	Nelson's cell and Down's cell are examples of:						
A	Electrochemical cell	B	Galvanic cell	C	Electrolytic cell	D	None of these
217	Cu metal can be purified in electrolytic cell by making the impure Cu as:						
A	Anode	B	Cathode	C	Anode and cathode	D	Depends upon nature of solution
218	The cathodic reaction in the electrolysis of dil. H ₂ SO ₄ with Fe electrode is:						
A	Reduction	B	Oxidation	C	Both reduction and oxidation	D	Neither oxidation or reduction
219	If the salt bridge is not used between two half cells, then the voltage:						
A	Decreases rapidly	B	Decreases slowly	C	Does not change	D	Drops to zero
220	The reduction potential of Zn is:						
A	+0.76 V	B	-0.3476V	C	+0.3476V	D	-0.76V
221	Standard hydrogen Electrode is made of:						
A	Ag foil	B	Au foil	C	Cu foil	D	Pt foil
222	Stronger the oxidation agent is, greater is the:						
A	Oxidation potential	B	Reduction potential	C	Redox potential	D	emf of cell

223	If a strip of Cu metal is placed in a solution of FeSO ₄ .						
A	Copper will be deposited	B	Cu and Fe both dissolve	C	Fe precipitated out	D	No reaction take place
224	The voltage of Nickel cadmium cell is:						
A	1 V	B	1.2 V	C	1.4 V	D	1.6 V
225	The electrolyte used in fuel cell is:						
A	NaNO ₃	B	KOH	C	Aqueous NaCl	D	Aqueous H ₂ SO ₄
226	Fuel cells convert chemical energy into:						
A	Heat energy	B	Light energy	C	Electrical energy	D	Mechanical energy
227	The cathodic reaction in the electrolysis of dil. H ₂ SO ₄ with Pt electrode is:						
A	Reduction	B	Oxidation	C	Both reduction, oxidation	D	Neither reduction nor oxidation
228	Which of the following statement is not correct about galvanic cell?						
A	Anode is negatively charged	B	Reduction occurs at anode	C	Cathode is positively charged	D	Reduction occurs at cathode
229	Stronger the oxidizing agent, greater is the:						
A	oxidation potential	B	Reduction potential	C	Redox potential	D	e.m.f of cell
230	If the salt bridge is not used between two half cells, than the voltage:						
A	Decrease rapidly	B	Decrease slowly	C	Redox potential	D	Drop to zero
231	If a strip of a Cu metal is placed in a solution of FeSO ₄ :						
A	Cu will be deposited	B	Fe is precipitated out	C	Cu and Fe both dissolve	D	No reaction take place
232	Velocity constant is the rate of reaction when the cone. of reaction are:						
A	Zero	B	Unity	C	Two	D	Three
233	In zero order reaction, the rate is independent of:						
A	Temperature of reaction	B	Cobncentration of reactions	C	Concentration of products	D	None of these
234	The unit of the rate constant for zero order reaction is:						
A	dm ³ s ⁻¹	B	mol dm ³ s ⁻¹	C	dm ³ mol ⁻¹ s ⁻¹	D	mol s ⁻¹
235	All radioactive disintegration nuclear reaction are of:						
A	First	B	Pseudo first	C	Second	D	Third
236	Hydrolysis of Tertiary butyl bromide has order of reaction:						
A	First	B	Psceudo first	C	Second	D	Third
237	The order of the reaction for the reaction NO +O ₃ NO ₂ +O ₂ is:						
A	Two	B	Three	C	One	D	Zero
238	Photosynthesis is:						
A	First order	B	Second order	C	Zero order	D	Third order reaction
239	Half-life of a second order reaction is inversely proportional to:						
A	Initial concentration of reactants	B	Final concentration of reactants	C	Initial concentration of products	D	Final concentration of products
240	When a reactionis proceeds in a sequence of steps, the overall rate is dermined by:						
A	Fastest step	B	Slowest step	C	Molecularity of all steps	D	Order of different steps
241	The optical acitivity is measured by:						
A	Spectrometer	B	Photometer	C	Polarimeter	D	Refractometer
242	The energy of activation using catalyst for a reaction is:						

A	Increased	B	Decreased	C	Not changed	D	Moderate
243	The minimum amount of energy required for an effective collision is called:						
A	Activation energy	B	Internal energy	C	Transitional energy	D	None of these
244	A substance which makes the catalyst effective is called:						
A	Inhibitor	B	Retarder	C	Promoter	D	Auto-Catalyst
245	A substance which retards the rate of reaction is called:						
A	Inhibitor	B	Activator	C	Oxidant	D	Auto-Catalyst
246	Sugar solution hydrolyses to glucose and fructose in the presence of enzyme:						
A	Urease	B	Invertase	C	Zymase	D	None of these
247	Glucose is converted into ethanol by the enzyme:						
A	Invertase	B	Urease	C	Zymase	D	Sucrase
248	The Enzyme used for hydrolysis of urea is:						
A	Invertase	B	Urease	C	Lipase	D	Zymase
249	In a zero order reaction, the rate is independent of:						
A	Temperature of reaction	B	Concentration of reaction	C	Concentration of products	D	None of these
250	The unit of rate constant is the same as that rate of reaction is:						
A	First order reaction	B	Second order reaction	C	Zero order reaction	D	Third order reaction