

Chemistry (JEE / NEET)

Sr	Topic	SubTopic
1	Some basic concepts of chemistry	Matter nature and classification
2		Physical quantity and S 1 units
3		Scientific notation, precision and accuracy
4		Laws of chemical combination
5		Mole concept
6		Expression of strength of solution.
7	Structure of atom	Sub atomic particles
8		Atomic number and mass number
9		Isotope, isobar and isotones
10		Atomic model
11		Plank's quantum theory
12		Photoelectric effect
13		Atomic spectrum
14		Dual nature of matter and radiation
15		Orbital and quantum numbers.
16		Filling of orbitals
17		Historic aspect of periodic table.
18		Modern periodic law and modern periodic table.
19		Periodic trends in physical property
20		Chemical bond
21		Octet rule
22	Chemical bonding and molecular structure	Ionic bond
23		Covalent bond
24		Bond parameters
25		Resonance
26		Dipole moment
27		Fajan's rule
28		VSEPR theory
29		Valence bond theory
30		Hybridization
31		Molecular orbital theory
32		Hydrogen bond
33	States of matter	Intermolecular forces
34		Gas laws
35		Ideal gas equation
36		Dalton's law of partial pressure
37		Diffusion and effusion
38		Kinetic theory of gases
39		Molecular velocities of gases
40		Deviation from ideal behaviour of gas
41	Thermodynamics	Some basic terms of thermodynamics
42		Internal energy
43		First law of thermodynamics

44		Work done in expansion and compression
45		Enthalpy
46		Heat capacity of system
47		Types of reaction and enthalpy changes
48		Lattice energy
49		Physical equilibrium
50		Chemical equilibrium
51		Laws of mass action
52		Characteristics of equilibrium constant
53		Types of chemical equilibrium
54	Equilibrium	Relationship between equilibrium constant, reaction quotient and Gibb's energy
55		Application of equilibrium constant
56		Le Chatelier's principle
57		Ionic equilibrium
58		Arrhenius theory of ionization
59		Ostwald dilution law
60		Acids and bases
61		Ionic product of water
62		PH
63		Oxidation and reduction
64		Redox reaction
65	Redox reaction	Balancing of redox reaction
66		Electrode potential
67		Electrochemical series
68		Elements of group 1
69		Physical properties
70		Chemical properties
71		Diagonal relationship between Lithium and magnesium
72	S block elements	Compounds of sodium
73		Elements of group 2
74		Physical property
75		Chemical property
76		Diagonal relationship between beryllium and Aluminium
77		Elements of group 13
78		Physical properties
79		Chemical properties
80	P block element group 13 and group 14	Compounds of Boron
81		Group 14 Elements
82		Physical properties
83		Chemical properties
84		Allotropic forms of carbon
85		Compounds of silicon
86		Alkyl halides
87	Haloalkanes and Haloarenes	Method of preparation
88		Physical properties of alkyl halides

89	Chemical properties of alkyl halide
90	Aryl and aryl substituted halide
91	Method of preparation
92	Physical properties of aryl halide
93	Chemical properties of aryl halide
94	Dihalo alkanes
95	Chloroform
96	Carbon tetrachloride
97	Freons and DDT
98	Classification of alcohols
99	Nomenclature of alcohols
100	Method of preparation of alcohols
101	Distinction between primary secondary and tertiary alcohol
102	Commercial important alcohol
103	Preparation of phenol
104	Method of preparation of phenol
105	Properties of phenol
106	Classification and nomenclature of ethers
107	Method of preparation of ethers
108	Properties of ethers
109	Nature of carbonyl group
110	Method of preparation
111	Physical properties
112	Chemical properties
113	Aldehyde Ketones and Carboxylic Acids
114	Nomenclature of carboxylic acid
115	Properties of carboxylic acids
116	Acid chloride
117	Acid anhydride
118	Esters
119	Amides
120	Classification of amines
121	Structure of amines
122	Method of preparation
123	Physical properties of amines
124	Chemical properties of amines
125	Method of preparation of aromatic amines
126	Importance of diazonium salt in synthesis of aromatic compounds
127	Chemical properties of aromatic amines
128	Benzene diazonium chloride
129	Importance of diazonium salt in synthesis of aromatic compounds
130	Carbohydrates
131	Monosaccharides
132	Disaccharide
133	Polysaccharides
134	Amino acids
	Proteins
	Enzymes

135		Vitamins
136		Hormones
137		Nucleic acids
138		Nucleotides
139	Polymers	Classification of polymers
140		Formation of addition polymers
141		Important condensation polymers
142		Biodegradable polymers
143	Chemistry in everyday life	Classification of drugs
144		Analgesics
145		Anti microbials
146		Antacids
147		Anti fertility drugs
148		Aunty histamine
149		Chemicals in food
150		Cleansing agents
151		Detection of N, S and halogen in organic compounds
152		Detection of functional groups
153	Practical chemistry	Purification of organic compounds
154		Quantitative analysis of organic compounds
155		Determination of molecular weight
156		Chemistry involved in preparation of inorganic compounds
157		Chemistry involved in titrimetric exercise
158		Chemical principles involved in the qualitative analysis
159		Action of heat on some inorganic compounds
160		Chemical principles involved in some experiments
161	Solid state	Classification of solids
162		Unit cell
163		Packing of constituent particles in crystals
164		Coordination number
165	Solution	Expression of the concentration of a solution
166		Types of solution
167		Solutions of solids in liquids
168		Vapour pressure and Raoult's law
169		Ideal and non ideal solutions
170		Abnormal molecular mass and coordinative property mixture or constant boiling mixture
171		Colligative properties
172		Abnormal molecular mass and colligative property

173		Electrochemical cell Galvanic cell or voltaic cell
174		Electrode potential
175		Electrochemical series
176		Nernst equation for electrode potential
177		Relation between electrical energy and free energy
178	Electrochemistry	Conductance
179		Cell constant
180		Molar conductivity
181		Kohlrausch's law
182		Electrolytes and electrolysis
183		Faraday's laws of electrolysis
184		Reversible cell and Irreversible cell
185		Some commercial sales and their types
186		Corrosion
187		Rate of reaction
188		The rate constant
189		Rate law equation
190		Order of reaction
191	Chemical Kinetics	Molecularity of reactions
192		Kinetic equations of different orders
193		Activation energy
194		Collision theory
195		Adsorption
196		Adsorption isotherms
197		Applications of adsorption
198		Catalysis
199	Surface Chemistry	Adsorption theory of heterogeneous catalysis
200		Enzymes catalysis
201		Colloids
202		Classification of colloids
203		Emulsion
204		Properties of emulsion
205		Occurrence of metals
206		Metallurgical processes
207	General Principles and processes of Isolation of elements	Some important terms used in Metallurgy
208		Thermodynamic principles of metallurgy
209		Electrochemical principles of metallurgy
210		Extraction of iron, copper, zinc and Aluminium
211	The d and F-block elements	Transition elements
212		General electronic configuration

213	Coordination Compound	General trends in properties of transition elements	
214		Classification of transition elements	
215		Compounds of transition metals	
216		Inner transition elements	
217		Some important terms	
218		Warner theory	
219		Nomenclature of coordination compounds	
220		Isomerism in coordination compounds	
221	Valence bond theory		
222	Crystal field theory		
223	Stability of coordination compounds in solution		
224	Basic concepts in organic chemistry	Classification of organic compounds	
225		Nomenclature of organic compounds	
226		Isomerism and types of structural isomerism	
227		Hybridization	
228		Bond length and bond angles in selected molecules	
229		Cleavage of covalent bond	
230		Types of reagents	
231		Electronic displacements in a covalent bond	
232		Reaction intermediates	
233		Types of reactions	
234		Hydrocarbons	Saturated hydrocarbons and paraffins or alkanes
235			Unsaturated hydrocarbons and olefins or alkenes
236	Alkynes or Acetylenes		
237	Aromatic Hydrocarbons		