

Chemistry (JEE / NEET)

| Sr | Topic | SubTopic |
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| 1 | Some basic concepts of chemistry | Matter nature and classification |
| 2 | | Physical quantity and S I 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 | Chemical bonding and molecular structure | 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 | | 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 |

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| 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 | Equilibrium | Physical equilibrium |
| 50 | | Chemical equilibrium |
| 51 | | Laws of mass action |
| 52 | | Characteristics of equilibrium constant |
| 53 | | Types of chemical equilibrium |
| 54 | | 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 | Redox reaction | Oxidation and reduction |
| 64 | | Redox reaction |
| 65 | | Balancing of redox reaction |
| 66 | | Electrode potential |
| 67 | | Electrochemical series |
| 68 | S block elements | Elements of group 1 |
| 69 | | Physical properties |
| 70 | | Chemical properties |
| 71 | | Diagonal relationship between Lithium and magnesium |
| 72 | | Compounds of sodium |
| 73 | | Elements of group 2 |
| 74 | | Physical property |
| 75 | | Chemical property |
| 76 | | Diagonal relationship between beryllium and Aluminium |
| 77 | P block element group 13 and group 14 | Elements of group 13 |
| 78 | | Physical properties |
| 79 | | Chemical properties |
| 80 | | Compounds of Boron |
| 81 | | Group 14 Elements |
| 82 | | Physical properties |
| 83 | | Chemical properties |
| 84 | | Allotropic forms of carbon |
| 85 | | Compounds of silicon |
| 86 | Haloalkanes and Haloarenes | Alkyl halides |
| 87 | | Method of preparation |
| 88 | | Physical properties of alkyl halides |

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| 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 | Alcohol phenol and ethers | 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 |
| 108 | | Properties of ethers |
| 109 | Aldehyde Ketones and Carboxylic Acids | Nature of carbonyl group |
| 110 | | Method of preparation |
| 111 | | Physical properties |
| 112 | | Chemical properties |
| 113 | | Nomenclature of carboxylic acid |
| 114 | | Properties of carboxylic acids |
| 115 | | Acid chloride |
| 116 | | Acid anhydride |
| 117 | | Esters |
| 118 | | Amides |
| 119 | Amines | Classification of amines |
| 120 | | Structure of amines |
| 121 | | Method of preparation |
| 122 | | Physical properties of amines |
| 123 | | Chemical properties of amines |
| 124 | | Method of preparation of aromatic amines |
| 125 | | Chemical properties of aromatic amines |
| 126 | | Benzene diazonium chloride |
| 127 | | Importance of diazonium salt in synthesis of aromatic compounds |
| 128 | Biomolecule | Carbohydrates |
| 129 | | Monosaccharides |
| 130 | | Disaccharide |
| 131 | | Polysaccharides |
| 132 | | Amino acids |
| 133 | | Proteins |
| 134 | | Enzymes |

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| 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 | Practical chemistry | Detection of N, S and halogen in organic compounds |
| 152 | | Detection of functional groups |
| 153 | | 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 |

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| 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 | | Conductance |
| 179 | Electrochemistry | 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 | Chemical Kinetics | Order of reaction |
| 191 | | 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-stop Block elements | Transition elements |
| 212 | | General electronic configuration |

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| 213 | | General trends in properties of transition elements |
| 214 | | Classification of transition elements |
| 215 | | Compounds of transition metals |
| 216 | | Inner transition elements |
| 217 | Coordination Compound | 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 |