

[For English/Hindi/Gujarati Medium Students]

PHYSICS

M. No. S. No. Topic Covered

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| P-1 | 1. | Basic Mathematics used in Physics & Vectors |
| P-1 | 2. | Physical World, Units, Dimensions and Errors in Measurement. |
| P-1 | 3. | Kinematics (Motion along a straight line and Motion in a plane) |
| P-1 | 4. | Newton's Laws of Motion and Friction |
| P-4 | 1. | Electrostatics |
| P-4 | 2. | Current Electricity |
| P-4 | 3. | Capacitors |
| P-2 | 1. | Work, Power & Energy |
| P-2 | 2. | Circular Motion |
| P-2 | 3. | Centre of Mass & Collisions |
| P-2 | 4. | Rotational Motion |
| P-2 | 5. | Gravitation |
| P-2 | 6. | Properties of Matter and Fluid Mechanics. |
| P-5 | 1. | Magnetic effect of current and Magnetism |
| P-5 | 2. | Electromagnetic Induction (EMI) |
| P-5 | 3. | Alternating current |
| P-5 | 4. | Electromagnetic Waves |
| P-3 | 1. | Thermal Physics (Thermal Expansion, Calorimetry, Heat Transfer, KTG & Thermodynamics) |
| P-3 | 2. | Oscillations (SHM, damped and forced oscillations & Resonance) |
| P-3 | 3. | Wave Motion and Doppler's Effect. |
| P-6 | 1. | Ray Optics and optical Instruments |
| P-6 | 2. | Wave Optics (Nature of Light , Interference, Diffraction & Polarization) |
| P-6 | 3. | Modern Physics |
| P-6 | 4. | Semiconductor and Digital Electronics |

CHEMISTRY

M. No. S. No. Topic Covered

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| C-1 | 1. | Some Basic Concept of Chemistry |
| C-1 | 2. | Structure of Atom |
| C-1 | 3. | Chemical Equilibrium |
| C-1 | 4. | Ionic Equilibrium |
| C-1 | 5. | Chemical Thermodynamics & Energetics |
| C-1 | 6. | Redox Reactions |
| C-1 | 7. | Behavior of Gases |
| C-2 | 1. | Periodic Table |
| C-2 | 2. | Chemical Bonding |
| C-2 | 3. | s-Block Elements |
| C-2 | 4. | Hydrogen & its compounds |
| C-4 | 1. | Solid State |
| C-4 | 2. | Chemical Kinetics |
| C-4 | 3. | Solutions |
| C-4 | 4. | Electrochemistry |
| C-4 | 5. | Surface Chemistry |
| C-3 | 1. | Classification & Nomenclature |
| C-3 | 2. | Isomerism |
| C-3 | 3. | Reaction Mechanism-I |
| C-3 | 4. | Reaction Mechanism-II |

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| C-3 | 5. | Hydrocarbons |
| C-3 | 6. | Environmental Chemistry |
| C-5 | 1. | p-Block Elements (Group 13 to 18) |
| C-5 | 2. | d and f Block Elements |
| C-5 | 3. | Coordination Compounds |
| C-5 | 4. | Metallurgy |
| C-6 | 1. | Halogen Derivatives |
| C-6 | 2. | Oxygen Containing Organic Compounds |
| C-6 | 3. | Nitrogen Containing Organic Compounds |
| C-6 | 4. | Biomolecules, Polymers, Chemistry in Everyday Life |

BIOLOGY

M. No. S. No. Topic Covered

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| B-1 | 1. | Reproduction in Organisms |
| B-1 | 2. | Human Reproduction |
| B-1 | 3. | Sexual Reproduction in Flowering Plants |
| B-1 | 4. | Human Health & Diseases |
| B-4 | 1. | Diversity In Living World (Plant Diversity) |
| B-4 | 2. | Morphology of Flowering Plants |
| B-4 | 3. | Anatomy of Flowering Plants. |
| B-5 | 1. | Animal Kingdom (Animal Diversity) |
| B-5 | 2. | Animal Tissues
(Structural Organization in Animals) |
| B-5 | 3. | Periplaneta (Cockroach) |
| B-5 | 4. | Plasmodium & Frog |
| B-2 | 1. | Genetics (Principals of inheritance and variations) |
| B-2 | 2. | Genetics (Molecular basis of inheritance) |
| B-2 | 3. | Biotechnology |
| B-2 | 4. | Microbes in human welfare |
| B-2 | 5. | Strategies for enhancement in food production
(Plants Breeding) |
| B-2 | 6. | Biomolecules |
| B-6 | 1. | Plant Physiology |
| B-6 | 2. | Cell Biology
(Cell Structure, Function & Cell Division) |
| B-3 | 1. | Organism & Environment (Ecology)
& Demography |
| B-3 | 2. | Origin & Evolution of life |
| B-3 | 3. | Strategies for enhancement in food production
(Domestication of Animals) |
| B-7 | 1. | Digestion & Absorption |
| B-7 | 2. | Breathing & Exchange of Gases |
| B-7 | 3. | Body Fluids & Circulation |
| B-7 | 4. | Excretory Products & their elimination |
| B-8 | 1. | Neural control & coordination (Nervous System) |
| B-8 | 2. | Chemical coordination & integration
(Endocrine system) |
| B-8 | 3. | Sensory Organs |
| B-8 | 4. | Locomotion and Movement
(Skeletal System, Limbs, Muscles) |