

SCIENCE

- **01.** Physical World and Measurement, Kinematics, Laws of Motion, Work, Energy and Power, Motion of System of Particles and Rigid Body/Gravitation.
- **02.** Mechanics of Solids and Fluids, Heat Thermodynamics, Oscillations, Waves, Electrostatics, Current Electricity.
- **03.** Magnetic Effect of Current and Magnetism, Electromagnetic Induction and Alternating Current, Electromagnetic Waves.
- **04.** Optics, Dual Nature of Matter and Radiations, Atomic Nucleus / Solid and Semi-Conductor Devices, Principles of Communication.
- **05.** Metals and Non Metals, Organic Chemistry, Food Nutrition and Health, Physiology and Human Dise Computer Science.

MATHS

- **01.** Relations and Functions, Logarithms, Complex Numbers, Quadratic Equations, Sequences and Series, Trigonometry.
- **02.** Cartesian System of Rectangular Coordinates, Straight Lines Family of Straight Lines, Circles.
- **03.** Conic Sections, Permutations and Combinations, Vectors, Exponential and Logarithmic Series, Sets and Set Theory, Statistics.
- **04.** Introduction to Three Dimensional Geometry, Probability Function, Limits and Continuity, Differentiation, Applications of Derivatives.
- **05.** Indefinite Integrals Binomial Theorem, Matrices, Determinants, Definite Integrals.

ENGLISH

- **01.** Passage, Preposition, Correction of sentences, Change active to passive/passive to active voice.
- **02.** Change direct to indirect/indirect to direct, Verbs/Tense/Non Finites, Punctuation.
- **03.** Substituting phrasal verbs for expression, Synonyms and Antonyms, Meanings of difficult words.
- **04.** Use of adjective, Compound preposition, Determiners (use of a, the, any etc), Use of pronouns.



GENERAL AWARENESS

- **01.** Culture and Religion, Geography: Soil, Rivers, Mountains, Ports, Inland Harbours, Freedom Movement.
- **02.** Sports: championships/Winners/Terms/No. of Players, Defence, Wars and Neighbours, Current Affairs.
- **03.** Important National Facts about India, Heritage and Arts, Dance, History, Languages, Capitals and Currencies.
- **04.** National: Bird/ Animal/ Sport/ Flower/ Anthem/ Song/ Flag/ Monuments, Eminent Personalities.
- **05.** Common Names, Full forms and Abbreviations, Discoveries, Diseases and Nutrition, Award and Authors.
- **06.** Spatial, Numerical, Reasoning & Associative Ability, Sequences, Spellings Unscrambling, Coding and Decoding

SCIENCE AND MATHEMATICS (MR)

- **01.** Nature of Matter, Universe (Planets/ Earth/ Satellites/ Sun), Electricity and its applications.
- **02.** Force and Gravitation, Newton's Laws Of Motion, Work, Energy and Power.
- **03.** Heat, Temperature, metals and Non- Metals, Carbon and its Compounds, Measurements in Science, Sound & Wave Motion, Atomic Structure.
- **04.** Mathematical Simplification, Ratio and Proportion, Algebraic Identities, Linear Equations and Polynomials, Simultaneous Equations, Basic Trigonometry.
- **05.** Simple Mensuration, Geometry, Measures of Central Tendency (Average, Median and Mode).

GENERAL KNOWLEDGE (MR)

- **01.** Geography: Soil, Rivers, Mountains, Ports, Inland, Harbours.
- **02.** Culture and Religion, Freedom Movement, Important National Facts about India, Heritage, Arts and Dance.
- **03.** History, Defence, Wars and neighbours, Awards and Authors, Discoveries, Diseases and Nutrition.
- **04.** Current Affairs, Languages, Capitals and Currencies, Common Names, Full Forms and Abbreviations.
- **05.** Eminent Personalities, National : Bird/Animal/Sport/Flower/Anthem/ Song/Flag/Monuments.
- O6. Sports: Championships / Winners/ Terms/ Number of Players.