

## CLASS 1<sup>ST</sup>

### MATHEMATICS

Back and Forth Counting, Ones, Tens and Hundred, Addition, Subtraction, Comparisons, Time and Calendar, Money, Geometrical Shapes and measurements, Applied Mathematics, and Reasoning

### ENGLISH

Comprehensions. Alphabetical Order, Words: Their Meanings and Opposites, Identification of thing and Objects, Numbers and Gender Change, Answering General Question, Nouns (Elementary), Pronouns (Elementary), Verbs, Odd One Out & Spelling Test

### IT/AI

Introduction to Computers, Parts of Computer, Uses of Computer, Keys and Keyboard, Computer Mouse, Starting and Shutting down the Computer, Introduction to MS-Paint, Latest Developments in the field of IT, and Reasoning. Question are based on Window 10.

### GENERAL KNOWLEDGE

Means of Transport, Buildings and monuments, Me and My Surroundings, Plants and Animals, India and the World, Science and Technology, Language and Literature, Earth and Its Environment, Sports, Life Skills, Important days, Current Affairs.

### SCIENCE

Living and Non-living Things, Plants, Animals, Human Body, Good Habits and Safety Rules, Air, Water and its resources, Our Family and Neighbourhood, Food & Clothes, Reasoning.

## CLASS 2<sup>ND</sup>

### MATHEMATICS

Ones, Tens, Hundreds & Thousands, Computation Operations (Add, Subtract, Multiply, Divide) Comparison, Measurement, Time, Calendar, Temperature, Unit, Money, Geometrical figure (Lines, Shapes and Solids) and Reasoning.

### ENGLISH

Comprehension, Identification, Nouns (Elementary), Pronouns (Elementary), Verbs (Elementary) and Preposition, Articles, Antonyms and Synonyms, Spellings Simple tenses & Punctuation, Jumbled word & Word order

### IT/AI

General Information about Computers, Computer-a Smart Machine, Parts of Computer, Uses of Computer in our World, Uses of Keyboard and Mouse, MS-Paint, WordPad, Latest Developments in the Field of IT and Reasoning. Question are based on Window 10.

### GENERAL KNOWLEDGE

Me and My Surroundings, Plants and Animals, India and the World, Science and Technology, Language and Literature, Earth and Its Environment, Books and Authors, Transport and Communication, Sports, Important Dates, Dresses of India, Life Skills, Current Affairs

### SCIENCE

Living and Non-living things, Plants & Animals Kingdom, Human Body, Food, Housing and Clothing, Our Surroundings, Good Habits and Safety Rules, Transport and Communication, Our Environment, Our Universe and Reasoning

## CLASS 3<sup>RD</sup>

### MATHEMATICS

Numerals, Number names and Number Sense, Computation Operations, Fractions, Unitary Methods, Length, Weight, Capacity, Temperature, Time and Calendar, Money, Geometry, Data Handling and Reasoning

### ENGLISH

Comprehension, Grammar, Understanding through definition and Examples, Synonyms and Antonyms, Gender & Number, Idioms & One Word Substitution, General Questions & Spellings Test, Jumbled words, Sentence & Error Finding, Writing Section

### IT/AI

Uses of Computer, Introduction to Hardware and Software, Introduction to window 10 or 11, MS-Paint, Introduction to MSWord, Introduction to Internet, WordPad, Notepad, Latest Developments in the Field of IT, Verbal and Non-Verbal Reasoning. Question are based on Window 10 or 11

### GENERAL KNOWLEDGE

Me and My Surroundings, India and the World, Science and Technology, Language and Literature, Earth and Its Environment, Ocean, Transport and Communication, Sports and associated players, Life Skills, Historical Buildings, Solar System, Flags of different Countries, Current Affairs and Reasoning

### SCIENCE

Plants Kingdoms, Animal Kingdoms, Birds, Housing, Clothing and Occupation, Our Safety and First aid, Human Body, Matter and Motions and Transport, Our Environment, Our Universe, Natural Resources and Reasoning

### SOCIAL STUDIES

Basic Needs, Festivals and Celebrations, People Who Help Us, Solar System and Our Earth, Our Environment, India – Our Motherland, Our Heritage, Our Ancestors, Early Life and Civilization

## CLASS 4<sup>TH</sup>

### MATHEMATICS

Numeral and Number Sense, Computation Operations, Fractions, Decimals, Time, Money, Geometry, Measurements (Perimeter and Area of Various Shapes) Data Handling, Unitary Method and Reasoning

### ENGLISH

Comprehension, Gender, Singular-Plural, Vocabulary (Synonyms, Antonyms, Idioms, One word Substitution,) Error Finding, Tense, General Question and Spelling Test, Grammar, Jumbled words, Type of Sentence, Writing Section

### IT/AI

About Computers (General Information), Evolution of Computers, Input and Output Devices, Memories and Storage device, Hardware and Software, MS-Paint, MS-Word, Using Windows 10 or 11, Internet and Its Uses, Computer Networks, Latest Developments in the Field of IT, Verbal and Non-Verbal Reasoning. Question are based on Window 10 or 11

### GENERAL KNOWLEDGE

Our Body and Health, Profession, religions, Famous site of the world, India and the World, Science and Technology, Environment and its Conservation, Language and Literature, Entertainment, Sports, Life Skills, Countries and their capitals and currencies, Current Affairs and Reasoning

### SCIENCE

Functioning of Human Body, Plants, Animals, Measurement, Work, Force and Energy, Our Environment, Matter and Materials, Earth and Universe and Reasoning

### SOCIAL STUDIES

Our Country – Physical and Political Divisions, Our Resources and Climate, Rich Heritage, People Who Made a Difference, Constitution and Government, Our History, Earth and Environment, Transport and Communication

## CLASS 5<sup>TH</sup>

<b>MATHEMATICS</b>	Numeral and Number Sense, Computation Operations, Factors and Multiples, Fractions and Decimals, Measurement, Geometry, Time and Distance, Percentage, Ratio and Proportion, Data Handling and Reasoning
<b>ENGLISH</b>	Comprehensions, Classification and analogy, Distinguishing between Sentences Spelling Test, Idioms & One word substitution, Synonyms, Antonyms, Conjunction and Elementary idea of Tenses, Parts of Speech, Article, Prepositions & Determiners, Voice and Narration, Jumbled word and Sentence, Writing Section
<b>IT/AI</b>	Basic Knowledge of Computer, MS-Word, MS-Excel, MS-PowerPoint, Introduction to Multimedia, Internet and Email, Latest Developments in the Field of IT, Verbal and Non-Verbal Reasoning. Question are based on Window 10 or 11
<b>GENERAL KNOWLWDGE</b>	Human Body, India and the World, Science and Technology, Environment and its Conservation, Language and Literature, Entertainment, Sports, Life Skills, Mountain Chain, Flags of different countries, their currencies, and capitals. Waterways& Dams, Current Affairs
<b>SCIENCE</b>	Our Environment, Animals, Human Body and Nutrition, Plants, Housing, Natural Resources, Natural Calamities, Earth and Universe, Matter, Work, Force and Energy, Light and Sound Verbal and Non-Verbal Reasoning
<b>SOCIAL STUDIES</b>	Our Environment, Animals, Human Body and Nutrition, Plants, Housing, Natural Resources, Natural Calamities, Earth and Universe, Matter, Work, Force and Energy, Light and Sound Verbal and Non-Verbal Reasoning

## CLASS 6<sup>TH</sup>

<b>MATHEMATICS</b>	Number and Their operations, Factors and Multiple, Fraction and Decimals, Data Handling, Mensuration, Geometry, Algebra, Ratio and Proportion, Verbal and Non-Verbal Reasoning
<b>ENGLISH</b>	Comprehension, Classification and Analogy, Distinguish, Part of Speech, Jumbled Words & Sentences, Article & Preposition, Modals, Tenses, Voices & Narration, Synonyms, Antonyms and Idioms, Spellings, One word Substitution, Writing Section
<b>IT/AI</b>	Basic Knowledge of Computer, Generation of Computers, Types of Computers, MS-Windows 10 or 11, MS-Word, MSPowerPoint, MS- Excel, Internet & E-mail, Latest Developments in the Field of IT, Verbal and Non-Verbal Reasoning, Question are based on Window 10 or 11
<b>GENERAL KNOWLWDGE</b>	Plants and Animals, First in India and the World, History of India and the World, Science and Technology, Earth and Its Environment, Universe, Language and Literature, Entertainment, Awards, Social Studies, Sports, Current Affairs, Life Skills, Highest Honour of the Countries
<b>SCIENCE</b>	Food and its Components, Fibre to Fabric, Sorting and Separation of Materials, Changes Around Us, The World of Livings (Characteristics of Living Beings, Parts of Plants) Body Movements, Motion and Measurement of Distances, Light, Shadows and Reflections, Electricity and Magnets, Our Environment, Verbal and Non-Verbal Reasoning
<b>SOCIAL STUDIES</b>	History – Studying the Past, The Early Humans, The First Cities and Vedic Age, The Post-Mauryan Period, New Empires and Kingdoms, Culture and Science. The Early Kingdoms and Ideas, The Maurya - The First Empire , Life in Towns and Villages. Geography – Planet Earth & Its Major Domains and Landforms, Globes and Maps, Our Country – India (Physical and Political Divisions, Climate, Vegetation and Wildlife) Social and Political Life – Diversity and Discrimination, Government and Key Elements of a Democratic Government, Local Government and Administration, Livelihoods – Rural and Urban

## CLASS 7<sup>TH</sup>

<b>MATHEMATICS</b>	Number system and operations, Exponents and Powers, Algebraic Expressions, Linear Equations, Comparing Quantities (Ratio and Proportion, Percentage, C.I , S.I, Loss Profit, etc) Geometry (Lines and Angles, Triangle, Quadrilaterals, Solid Shapes), Mensuration (Perimeter and Area,) Data Handling, Verbal and Non-Verbal Reasoning
<b>ENGLISH</b>	Comprehension, Distinguish and Identification, Inferring information, Synonyms, Antonyms, homonyms & Idioms, Classification and Analogies, Spellings, One word Substitution, Error Finding & Word order, Parts of Speech (Articles, Prepositions, Conjunctions) Tenses & Modals, Voices and Narration, Jumbled Word & Improvement, Writing Section
<b>IT/AI</b>	Basic Knowledge of Computer, Evolution of Computers, Algorithms & Flowcharts, MS-Word, MS-PowerPoint, MS-Excel, Internet & Viruses, Networking, Html and CSS Basic, Latest Developments in IT, Verbal and Non-Verbal Reasoning, Question are based on Window 10 or 11.
<b>GENERAL KNOWLWDGE</b>	Plants and Animals, History of India and the World, First in different Fields, Science and Technology, Earth and its Environment, Universe, Language and Literature, Entertainment, Social Studies, Economics, Capital & Currencies, Books and Authors, Awards, Organisations of world, Sports, Current Affairs, Life Skills
<b>SCIENCE</b>	Heat, Motion and Time, Electric Current and its Effects, Winds, Storms and Cyclones, Light, Acids, Bases and Salts, Physical and Chemical Changes, Weather, Climate and Adaptations of Animals, Fibre to Fabric, Nutrition in Plants and Animals, Life Process (Respiration in Organisms, Reproduction in Plants), Natural Resources and Their Conservation, Verbal and Non-Verbal Reasoning
<b>SOCIAL STUDIES</b>	History – Sources of Medieval Indian History, Kings and Kingdoms, The Delhi Sultans and The Mughal Empire, Mobile and Settled Communities, Bhakti Movement, Sufism and Regional Cultures, New Political Formations in the Eighteenth Century, Towns, Traders and Crafts persons, Rulers and Buildings Geography – Earth and Our Environment, Air and Water, Natural Vegetation and Wildlife, Human Environment Settlements, Transport and Communication, Life in the Tropical and the Sub-tropical Regions, Deserts Social and Political Life – Democracy and Equality, Understanding Media, Markets Around Us, State Government, Unpacking Gender

## CLASS 8<sup>TH</sup>

MATHEMATICS	Number System and Operations, Squares and Cube Roots, Exponents, Comparing Quantities (Ratio and Proportion, Percentage, C.I , S.I, Loss Profit, etc) Algebraic Expressions and Identities, Linear Equations in One Variable, Geometry (Quadrilaterals, Solid Shapes Lines and Angles) Mensuration, Data Handling, Ration and Proportions, Factorisation, Introduction to Graphs, Playing with Numbers, Verbal and Non-Verbal Reasoning
ENGLISH	Comprehension, Classification and Analogy, Distinguishing between Facts and Opinion, Synonyms, Antonyms, & Homonyms, Idioms & Phrasal Verbs, Jumbled Words & Sentences, Spellings, Grammer (Parts of Speech, Articles, Prepositions, Conjunctions, Determiners) Voices and Narrations, Inferring Information, Judging of Sentence, Spelling Test, One word Substitution, Error Finding and Sentence Improvement, Writing Section
IT/AI	Basic Knowledge of Computer, Algorithms & Flowcharts, Internet & Viruses, HTML & CSS, MS-Access, Networking, MSWord, MS-PowerPoint, MS-Excel, Memory & Storage Devices, Operating Systems, Latest Developments in IT, Verbal and Non-Verbal Reasoning. Question are based on Window 10 or 11
GENERAL KNOWLWDGE	History of India and the World, First in different Fields, Science and Technology, Earth and its Environment, Universe, Language and Literature, Plants and Animals, Entertainment, Social Studies, Economics, Capital & Currencies, Books and Authors, Awards, Organisations of world, Sports, Current Affairs, Life Skills
SCIENCE	Crop Production and Microorganisms, Materials (Synthetic Fibres and Plastics, Metals and Non-metals,) Coal and Petroleum (Combustion and Flame), Conservation of Plants and Animals, Cell, Reproduction and Adolescence, Force, Friction Sound and Pressure, Chemical Effects of Electric Current and Light, Solar System and Some Natural Phenomena, Pollution of Air and Water, Verbal and Non-Verbal Reasoning
SOCIAL STUDIES	History – Modern India-Sources and Significance, Education and British Rule, Women, Caste and Reform, Freedom Struggle in India, India After Independence ,The Establishment of Company Power, Rural Life and Tribal Societies, Crafts and Industries, The Revolt of 1857-58 Geography – Land, Soil, Water, Natural Vegetation and Wildlife Resources, Mineral, Power and Human Resources, Agriculture and Industries Social and Political Life – The Indian Constitution and Secularism, Parliamentary Government and Economic Presence of the Government, The Judiciary, Social Justice and The Marginalised

## CLASS 9<sup>TH</sup>

MATHEMATICS	Number Systems, Algebra & Coordinate Geometry, Linear Equations in Two Variables, Geometry (Lines and Angles, Triangles, Quadrilaterals, Circle), Surface Areas and Volumes, Statistics, Probability, Comparing Quantities (Ratio and Proportion, Percentage, C.I , S.I, Loss Profit, etc.), Verbal and Non-Verbal Reasoning
ENGLISH	Comprehension, Synonyms, Antonyms, Homonyms, Classification and Analogy, Spellings, Nouns, Pronouns, Verbs, Adverbs, Adjectives, Articles, Prepositions, Conjunctions, Jumbled words, Voices, Narrations, Modals, Phrasal verbs, Idioms, One word, Error Finding, Sentence Improvement, Filler, Sequence of Sentence, Judging of Sentence, Writing Section
IT/AI	Basic of Computer, Algorithms and Flowcharts in Programming, Animations, HTML & CSS, MS-Word, Advance MSExcel, MS-PowerPoint, Spreadsheet, Digital Documentation, Communication & Self-Management Skills, Latest Developments in IT. Question are based on Window 10 or 11
GENERAL KNOWLWDGE	History of India and the World, First in different Fields, Science and Technology, Earth and its Environment, Universe, Plants and Animals, Language and Literature, Entertainment, Social Studies, Economics, Capital & Currencies, Books and Authors, Awards, Organisations of world, Sports, Current Affairs, Life Skills
SCIENCE	Force and Laws of Motion, Gravitation, Work, Energy and Sound, Matter and Surrounding, Reproduction in Plants, The Atom and Molecule, Cell and Tissues, Diversity in Living Organisms, Why Do We Fall Ill, Natural Resources, Improvement in Food Resources, Verbal and Non-Verbal Reasoning
SOCIAL STUDIES	History – In Europe, The Russian Revolution, Rise of Hitler, Forest Society and Pastoralists in the Modern World, The French Revolution, Socialism Geography – India – Physical Features and Climate, Drainage, Natural Vegetation and Wildlife, Population Social and Political Life – What & why is Democracy? Constitutional Design and Democratic Rights, Elections and Working of Institutions Economics – The Story of Village Palampur, People as Resource, Poverty and Food Security in India

## CLASS 10<sup>TH</sup>

MATHEMATICS	Real Numbers, Polynomials, Pair of Linear Equations in Two Variables, Algebraic Expression, Sequence and Series, Coordinate Geometry (Distance & Section formula) Introduction & Some Applications of Trigonometry, Geometry (Triangles, Circles, Quadrilaterals) Mensuration (Areas Related to Circles, Surface Areas and Volumes), Statistics, Probability, Verbal and Non-Verbal Reasoning
ENGLISH	Comprehension, Synonyms, Antonyms, Homonyms, Classification and Analogy, Spellings, Grammar (Part of Speech, Articles, Prepositions, Conjunctions, Punctuations) Jumbled words, Voices, Narrations, Modals, Phrasal verbs, Idioms, One word, Error Finding, Sentence Improvement, Filler, Sequence of Sentence, Judging of Sentence, Writing Section
IT/AI	Basic of Computer, Spreadsheet, Digital Documentation, Communication & Self-Management Skills, Database Management System, Web Application and Security, Cyber Safety, HTML & CSS, Latest Developments in IT. Question are based on Window 10 or 11
GENERAL KNOWLWDGE	History of India and the World, First in different Fields, Science and Technology, Earth and its Environment, Universe, Plants and Animals, Language and Literature, Entertainment, Social Studies, Economics, Capital & Currencies, Books and Authors, Awards, Organisations of world, Sports, Current Affairs, Life Skills
SCIENCE	Chemical Reactions and Acids, Bases and Salts, Metals and Non-metals, Carbon and Its Compounds, Periodic Classification of Elements, Life Processes, Reproduction, Control and Coordination, Heredity and Evolution, Light and Human Eye, Electricity and Magnetic Effects of Electric Current, Sources of Energy and Natural Resources, Our Environment, Verbal and Non-Verbal Reasoning
SOCIAL STUDIES	History – Globalization and Industrialisation, Print Culture, The Modern World, Nationalism in Europe and India Geography – Resources and Development, Forest, Wildlife and Water Resources, Agriculture and Industries, Minerals and Energy Resources, Life Lines of National Economy Social and Political Life – Power Sharing and Federalism, Democracy, Gender, Religion and Caste, Popular Struggles and Movements, Political Parties, Outcomes and Challenges of Democracy Economics – Sectors of the Indian Economy and Development, Money and Credit, Globalization and Consumer Rights

## CLASS 11<sup>TH</sup>

### MATHEMATICS

Sets, Relations and Functions, Logarithms, Complex Numbers & Quadratic Equations, Linear Inequalities, Sequences and Series, Trigonometry, Straight Lines, Conic Sections, Permutations and Combinations, Binomial Theorem, Statistics, Limits and Derivatives, Probability, Introduction to 3-D Geometry, Reasoning.

### ENGLISH

Grammar section(Parts of Speech, Articles, Determiners, Models, Subject verb agreement, Tense, Error finding, Gerund & Infinitive. Vocabulary ( Jumbled word, Synonyms, Antonyms, Homonyms, One word Substitution, Spelling Test, Idioms and phrases. Comprehension and Composition( Comprehension, Paragraph & Story writing Letter & Notice Writing, Narration, Voice, Type of sentences and Phrase improvement, Sentence completion, Jumble words, Miscellaneous.

### COMMERCE

**Economics:** Introductory Microeconomics, Statistics for Economics. **Business:** Nature and Purpose of Business, Forms of Business Organisations, Public, Private and Global Enterprises, Business Services, Emerging Modes of Business, Social Responsibility of Business and Business Ethics, Sources of Business Finance, Small Business, Internal Trade, International Business **Accountancy:** Theoretical Framework, Accounting Process, Financial Statements of Sole Proprietorship from Complete and Incomplete Records.

### SCIENCE

**Physics :** Units and Measurements, Mechanics, Properties of Matter, Heat and Thermodynamics, Oscillations, Waves.

**Chemistry :** Some Basic Concepts of Chemistry, Structure of Atom, Classification of Elements and Periodicity in Properties, Chemical Bonding and Molecular Structure, Thermodynamics, Equilibrium, Redox Reactions, Organic Chemistry - Some Basic Principles and Techniques, Hydrocarbons.

**Biology :** Diversity in the Living World, Structural Organisation in Plants and Animals, Cell : Structure and Functions, Plant Physiology, Human Physiology.

## CLASS 12<sup>TH</sup>

### MATHEMATICS

Relations and Functions, Inverse Trigonometric Functions, Matrices and Determinants, Continuity and Differentiability, Application of Derivatives, Integrals, Application of Integrals, Differential Equations, Vector Algebra, ThreeDimensional Geometry, Probability, Linear Programming, Reasoning.

### ENGLISH

Grammar section(Parts of Speech, Articles, Determiners, Models, Subject verb agreement, Tense, Error finding, Gerund & Infinitive. Vocabulary ( Jumbled word, Synonyms, Antonyms, Homonyms, One word Substitution, Spelling Test, Idioms and phrases. Comprehension and Composition( Comprehension, Paragraph & Story writing Letter & Notice Writing, Narration, Voice, Type of sentences and Phrase improvement, Sentence completion, Jumble words, Miscellaneous

### COMMERCE

**Economics:** Introductory Macroeconomics, Indian Economic Development.

**Business:** Nature and Significance of Management, Principles of Management, Business Environment, Planning, Organising, Staffing, Directing, Controlling, Financial Management, Financial Markets, Marketing Management, Consumer Protection. **Accountancy:** Accounting for Partnership Firms, Accounting for Companies, Analysis of Financial Statements, Cash Flow Statement.

### SCIENCE

**Physics :** Electricity and Magnetism, Electromagnetic Induction, Alternating current, Electromagnetic waves, Optics, Modern Physics, Semiconductor Electronics.

**Chemistry :** Solutions, Electrochemistry, Chemical Kinetics, The d- and f-Block Elements, Coordination Compounds, Haloalkanes and Haloarenes, Alcohols, Phenols and Ethers, Aldehydes, Ketones and Carboxylic Acids, Amines, Biomolecules.

**Biology:** Reproduction, Genetics and Evolution, Biology in Human Welfare, Biotechnology, Ecology