

### Entrance Exam Class – IV (Syllabus of Class III)

(A) **English (25 Marks)** :1.Essay : Ten sentences about common things.(2) Letters: Simple Letters (3) Grammar: 3.1 The sentence; 3.2 Subject & Predicate; 3.3 Nouns – Kinds of noun (Common, Proper); 3.4 Pronouns – Personal, Possessive;3.5 Gender – Masculine & Feminine; 3.6 Number – Singular & Plural; 3.7Article – Use of a, an, the.

(B) **Mathematics (25 Marks)**: 1. **NUMERALS**: Comparison of numbers, Successor and predecessor of number, Place value of digits, Ascending and descending order, Roman numerals; 2. **ADDITION AND SUBTRACTION**: Two and three digit number with carrying from ones, tens and hundred places: 3. **MULTIPLICATION**: Multiplication of one digit, two digit, three digit number by a 2 digit number. Word problems of multiplication: 4. **DIVISION**: Division of one digit, two digit, three digit number by a 2 digit number . Word problems of division: 5. **FRACTIONAL NUMBER**: Like and unlike fraction, Arrange it in ascending and descending order, Addition and subtraction: 6. **MONEY**: Convert rupees into paise and paise in rupees, Addition and subtraction of money, Multiplication and division of money, Word problems: 7. **TIME MEASUREMENT**: Count the number of hours between two times. Relation of second, minutes, hours, days, months. Addition and subtraction in measure of time. Word problems.

(C) **Environmental Studies: (15 Marks)**: 1.**WHAT IS INSIDE THE BODY**: Nerves, Lenses, Microscope, Muscles, Bones, Skull, Brain, Lungs (Function & Diagram), Sense organ, Blood: 2. **SAFETY**: In the house, Outside the house, While playing: 3. **FOOD**: Why do we need it? Food sources. Good eating habits: 4. **WATER**: Different kinds of uses of water. Different forms of it. Properties of water: 5. **AIR**: Atmosphere, Components. How air gets dirty? How can we keep it clean?; 6. **PARTS OF A PLANT**: Details of the parts of plants. Creepers, Herbs, Shrubs, Trees. Importance of leaves and flower: 7. **MATERIALS FROM PLANTS**: Different useful materials that we get from plants: 8. **MATERIALS FROM ANIMALS**: Silk, Wool, Leather, Occurrence and uses.

**Book – Junior Science Book 3 (Bharati Bhawan)**

(D) **G.K. (10 Marks)**: 1. States & their Capitals; 2. Countries & their Capitals; 3. Languages of the States; 4. Name of the Head of the States; 5. Name of the Central Ministers, President, Vice-President & Other Who's Who.

(E) **Hindi (25 Marks)**: Hindi Grammar & Composition.

### Entrance Exam Class V (Syllabus of Class IV)

(A) **English (25 Marks)** 1. Essay: Ten sentences about common subjects. Or Letters: Simple Letters to be written to Friend, Father, Mother, Brother etc: 2. Grammar : 2.1 The Sentence; 2.2 Subject & Predicate; 2.3 Nouns – Kinds of Noun (Common, Proper, Collective); 2.4 Pronouns – Personal, Possessive; 2.5 Gender – Masculine and Feminine; 2.6 Number – Singular and Plural; 2.7 Adjectives – Kinds (Quality & Quantity); 2.8 Verbs; 2.9 Tense; 2.10 Articles; 2.11 Prepositions.

(B) **Mathematics (25 Marks)** : 1.**NUMBERS UPTO TEN LAKH**: Smallest and greatest number, Writing the number in words and figures, Expanded forms, Place value, Ascending-Descending order, Successor-Predecessor: 2. **ADDITION**: Addition without carrying and with carrying, Word problems: 3. **SUBTRACTION**: Subtraction without borrowing and with borrowing, Word problems: 4. **MULTIPLICATION**: Multiplication up to four digit number, Word problems: 5. **DIVISION**: Division up to four digit number, Word problems: 6.**PROPERTIES OF WHOLE NUMBERS**: Factors, Prime number, Highest Common Factor, Least Common Multiple, Some mixed problems on H.C.F. and L.C.M: 7. **DECIMAL FRACTIONS**: Addition, Subtraction of decimal fractions. Convert decimal fraction into common factors: 8. **GEOMETRY**: Angle – Interior and exterior of an angle, Comparison of angles, Types of angles, Types of triangles, Quadrilaterals.

(C) **EVS (Science + Social Science) (15 Marks)** 1. Function of different parts of a plant; 2. Organs & System of our body; 3. Balanced Diet, Deficiency diseases – cause, symptoms & remedy; 4. Different Means of Transport; 5. Simple Machines; 6. Work, Force & Energy; 7. Our Country – Northern Mountain Wall, Ranges of Himalaya, Glaciers, Northern Plain, Alluvial Soil, Oasis, Plateau, Island; 8. How do we govern ourselves: Constitution of India, Duties of Indian Citizen, President & Prime Minister of India; 9. India and the World: Neighbours, Arabian Sea, Bay of Bengal.

(D) **G.K. (10 Marks)**: 1. Countries / States & their Capitals; 2. Languages of the States & Countries; 3. Currencies of the Countries; 4. Who's Who; 5. Books and their Writers; 6. Invention and Discoveries; 7. Current Affairs.

(E) **Hindi (25 Marks)**: Hindi Grammar & Composition.

### Entrance Exam Class VI (Syllabus of Class V)

(A) **English (25 Marks)** : 1. Essay in 150 words; 2. Letter writing; 3. Parts of speech; 4. Article; 5.Tense; 6. Combining simple sentences using conjunctions/connectors; 7.Auxiliary verbs; 8. Clause/Phrase; 9. Preposition.

(B) **Mathematics (25 Marks)**: 1. Numbers – Place value, Rounding off & Basic operations; 2. Roman Numerals – Hindi – Arabic Numerals & Zero; 3.Framing of word problems; 4.Generating Patterns: 5. HCF & LCM of Numbers; 6.Prime & Composite Numbers; 7.Fractional Numbers, equivalent fractions: 8.Basic operations on fractional numbers: 9.Decimals – Basic operation on decimals: 10.Measurement: 11.Money Transaction; 12. Basic Geometrical Concepts; 13. Classification of Angles: 14. Triangles – Properties of Triangles; 15.Circles. 16. Perimeter, Area & Volume of Rectangle, Square & Circle.

(C) **EVS (15 Marks)**: 1. **SUPER SENSES**: How different animals use their senses; 2. **FROM TASTING TO DIGESTING**: The story of Jhumpa. Identifying food without eating or seeing: 3. **MANGOES ROUND THE YEAR**: How food gets spoilt? Different kinds of food and reasons how those food spoil: 4. **EXPERIMENT WITH WATER**: Various properties of water. How drops form?; 5. **A TREAT FOR MOSQUITOES**: Cause, Symptoms, Precautions and medicine for Malaria and Anaemia. 6. **SUNITA IN SPACE**: Shape of earth. Contribution of Kalpana Chawla and Sunita Williams to Science: 7. **NO PLACE FOR US**: Learning sounds. How can we be calm? Life of village and city: 8.**WHOSE FOREST**: Importance of forest. Problems due to dams, mining etc. 9.**A SEED TELLS A FARMER’S STORY**: How do seeds convert into food? How food is protected from insects? 10. **ACROSS THE WALL**: Which games do you like? Different games played by Boys and Girls. What are the playing space around you?; **BOOK : LOOKING AROUND (NCERT) – Textbook for Class V.**

**(D) G.K. (10 Marks):** 1. Countries / States & their capitals. 2. Current Affairs; 3. Languages of States & Countries; 4. Sports; 5. Currencies of Countries; 6. Entertainment; 7. Who is Who; 8. Books and writers.

**(E) Hindi (25 Marks): Hindi Grammar & Composition.**

### **Entrance Exam Class – VII (Syllabus of Class VI)**

**(A) English (20 Marks):** 1. Essay in 200 words; 2. Application / Letter writing; 3. Tense; 4. Voice; 5. Clauses; 6. Transformation of sentences

**(B) Mathematics (20 Marks)** 1. Natural; & Whole Numbers – Algebraic operations on whole numbers; 2. Integers, Factors & Multiples; 3. Prime and Composite Numbers; 4. Tests for Divisibility; 5. Prime Factorisation; 6. HCF & LCM and their properties; 7. Ratio and Proportion; 8. Unitary Method; 9. Percentage & its applications on algebraic expressions; 10. Word Problem; 11. Basic geometrical concept; 12. Plane properties of Lines and Points; 13. Concurrent Lines, Parallel lines, Angles, Triangles; 14. Perimeter & Area of Rectangle, Square; 15. Linear equations in one variable solving an equation.

**(C) Science (20 Marks) :** 1. **Food :** Plant parts and animal products as sources of food; Herbivores, Carnivores, Omnivores; 2. Carbohydrates, fats, proteins, vitamin, minerals, fibres, their sources and significances for human health; Balanced diet; Diseases and disabilities due to food deficiencies; 3. **How things change / react with one another :** Changes, type of changes i.e. Physical change and Chemical change; Solute, solvent, solution, solubility, saturated solutions; 4. **The world of the Living:** Living / non-living characteristics; Habitat-biotic and abiotic factors; 5. Habitat varies – aquatic, deserts, mountains etc. – plants and animals show adaptation; other plant part modifications like tendrils, thorns, etc. Animals in desert and water; 6. Morphological structure and function of root, stem and leaves. Structure of the flower; 7. **Moving things, people and ideas:** Moving – Need to measure distance (length). Measurement of length. Motion – types. Motion as change in position with time; 8. **How things work:** Electric current and circuits : Electric circuit (current flows only when a cell and other components are connected in an unbroken loop). Electric current, Conductor, Insulator Magnets: Magnet, Poles of a magnet, A freely suspended magnet always aligns in a particular direction. North and South poles. Like poles repel and unlike poles attract each other.; 9. **Natural Phenomena:** Rain, thunder and lightning – Evaporation and condensation of water in different states. Water cycle. Light – Classification of various materials in terms of transparent, translucent and opaque. A shadow is formed when there is a source of light and an opaque material obstructs it. A shadow is black irrespective of the colour of the object; 10. **Natural Resources:** Importance of Water – Importance of water, dependence of the living on water. Droughts and floods: Importance of Air – Some animals and plants live in water, some live on land and some live in upper layers of soil; but all need air to breathe / to respire: Waste – Recycling of wastes; things that rot and things that don't rotting is supported by animals / animals and plants products.

**Books: Text Book of Science for Class VI (NCERT); Science in Everyday Life for Class VI (Oxford University Press)**

**(D) Social Science (20 Marks): History – 1. The Earliest Societies; (a) Hunting and gathering as a way of life, its implications; (b) Introduction to stone tools and their use; (c) Case study: The Deccan; 2. The First Farmers and Herders; (a) Implications of farming and herding; (b) Archaeological evidence for crops, animals, houses, tools, pottery, burials, etc.; (c) Case study: The North-west and North-east; 3. The First Cities – (a) The settlement pattern of the Harappan civilization; (b) Unique architectural features; (c) Craft production; (d) The meaning of urbanism; (e) Case study: The North-west 4. Different Ways of Life – (a) The Vedas and what they tell us; (b) A contemporary chalcolithic settlement; (c) Case studies: The North-west and the Deccan; 5. New Ideas – (a) Upanishads; (b) Jainism; (c) Buddhism; 6. The First Empire.**

**Geography – 1. Planet Earth in the solar system; 2. Globe:** The model of the earth; latitudes and longitudes; motions of the earth – rotation and revolution; 3. **Four realms of the earth:** Lithosphere, hydrosphere, atmosphere and biosphere; continents and oceans; 4. **Major relief features of the earth;** 5. **India in the world:** Physiographic divisions of India – mountains, plateaus and plains; climate; natural vegetation and wildlife; need for their conservation;

**Civics - Social and Political Life:** 1. **Government; Section 1** - The need for government; Decision making and participation; The quest for universal adult franchise through examples of the suffragette movement and the anti-apartheid struggle; Various forms of government and absence of collective Sanction; **Section 2** - Key elements that influence the functioning of democratic government - Participation and accountability; Resolution of conflict; Concerns for equality and justice; 2. **Local Government; Section 1** - Panchayati Raj - Description of panchayat electoral process, decision making, implementation of decisions; Role of a gram sabha; Women and the panchayat; **Section 2** - Urban local government; Municipal Corporation elections, decision making structures; Provision of water and the work of the Municipal Corporation; Citizens' protests to get their grievances addressed; **Section 3** - Rural administration - Focus on a land dispute and show the role of local police and patwari; Land records and role of patwari; The new inheritance law.

**Reference Book - Our Pasts – I, Social and Political Life I. The Earth Our Habitat (NCERT, Text Book). Integrated Social Science – Class VI (Oxford University Press)**

**(C) Hindi (20 Marks): Hindi Grammar & Composition**