#### XANDY ENTRANCE CUM SCHOLARSHIP TEST (XET) - SYLLABUS

## **CLASS 09 STUDYING (FOUNDATION: CLASS 10)**

**PHYSICS:** Motion, Friction, Equation of Motion, Force and Laws of Motion, Pressure, Reflection of Light, Refraction of Light

CHEMISTRY: Matter in our Surroundings, Properties of Matter, Basic Constituents of Matter, Structure of Atom, Atoms and Molecules, Chemical Bonding, Redox reactions and rate of chemical reaction, Acids Bases and Salts BOLOGY: The fundamental Unit of Life, Cell structure and functions, Tissue, Micro-organisms: Friend and Foe, Crop Production and Management, Digestion and Transport of Nutrients, Excretion, Breathing for energy MATHEMATICS: Number System, Rational Numbers, New Numbers, Polynomials, Equations, Squares and Square Roots, Cube and Cube Roots, Exponents and Powers, Linear Equations in one Variable and two variables, Lines and Angles, Triangles, Equal triangles, Introduction to Coordinate Geometry, Areas of Parallelograms and Triangles, Time & Work, Time & Distance, Direct and Inverse proportions, Mensuration, Comparing Quantities, Data Handling MENTAL ABILITY: Verbal Classifications & Analogy, Coding – Decoding, Arithmetic reasoning, Mathematical Operations, Alphabet Tests, Blood Relations, Logical Venn Diagram, Problems on clock, Non-verbal Classification, Analytical reasoning, Logical sequence of words, Direction Sense, Non-verbal Analogy & series, Paper folding and cutting, Incomplete figures, water and mirror images, Problems on dice and cubes

## **CLASS 08 STUDYING (FOUNDATION: CLASS 09)**

**PHYSICS:** Units and Measurements, Motion and Time, Force and Pressure, Friction, Electricity, Electric Current and its Effects, Light, Heat

**CHEMISTRY:** Physical and Chemical Changes, Properties of Matter, Basic Constituents of Matter, Acid and Bases, Water, Coal and Petroleum, Combustion and Flame, Fibre to Fabrics, Waster Water Story

**BOLOGY:** Cell structure and functions, Cell clusters, Seeds, Grafting, Respiration in Organisms, Nutrients in Plants and Animals, Transportation in Plants and Animals, Reproduction in Plants, Crop Production and Management, Microorganisms: Friend and Foe

MATHEMATICS: Number systems, Fractions, Integers, Decimals, Rational Numbers, Lines and Angles, Parallel Lines, The Triangles and Its Properties, Equal Triangles, Perimeter and Areas, Volumes, Equations, Linear Equations In One Variable, Squares and Square Roots, Exponents and powers, Speed Math, Comparing Quantities, Mensuration MENTAL ABILITY: Verbal Classifications & Analogy, Coding – Decoding, Arithmetic reasoning, Mathematical Operations, Alphabet Tests, Blood Relations, Logical Venn Diagram, Problems on clock, Non-verbal Classification, Analytical reasoning, Logical sequence of words, Direction Sense, Non-verbal Analogy & series, Paper folding and cutting, Incomplete figures, water and mirror images, Problems on dice and cubes

#### XANDY ENTRANCE CUM SCHOLARSHIP TEST (XET) - SYLLABUS

## **CLASS 07 STUDYING (FOUNDATION: CLASS 08)**

**PHYSICS:** Measurement and Motion, Motion and Time, Force and Motion, Magnets, Light Shadow and Reflection, Electricity, Heat, Weather climate wind storms and cyclones,

**CHEMISTRY:** Molecules, Sorting Materials into Groups, Physical and Chemical Changes, Acid and Bases, Fiber to Fabric, Waste Water Story, Water

**BIOLOGY:** Cell, Energy, Food: where does it come from, Components of food, Seeds, Grafting, Nutrition in Plants, Nutrition in Animals, Soil, Respiration in Organisms, Transportation in animals & plants, Reproduction in plants, Forest

MATHEMATICS: Knowing our Number, Whole Number, Average, Angles, Parallel lines, Decimals, Integers, Fractions, Ration and Properties, The Triangles and its Properties, Data Handling, Simple Equations, Basic Geometrical Ideas, Percentage.

**MENTAL ABILITY:** Verbal Classifications & Analogy, Coding – Decoding, Alphabet Tests, Blood Relations, Problems on clock, Non-verbal Classification, Analytical reasoning, Logical sequence of words, Direction Sense, Non-verbal Analogy & Series, Incomplete figures, Water and Mirror images, Problems on Dice and Cubes

## **CLASS 06 STUDYING (FOUNDATION: CLASS 07)**

**SCIENCE:** Motion and Measurements, Force and Motion, Magnets, Molecules, Measurement and Motion, Light, Shadows and Reflection, Fiber to Fabric, Sorting Materials into Groups, Food chain, Food and habitat, Food production in plants, Diseases, Immunity, Vaccination, Water in plants, Seeds, Seed germination, Leaves, Power of wind, Root system, Cell, Energy, Getting to Know Plants, Body Movements.

**MATHEMATICS:** Lines and Circles, Number world, Multiplication methods, Division methods, Parts, Time System, Data collection, Four digit Number, Calendar, Shapes and Angles, More or Less, Angles, Average, Knowing Our Numbers, Whole Numbers.

**MENTAL ABILITY:** Verbal Classifications & Analogy, Coding – Decoding, Alphabet Tests, Problems on clock, Nonverbal Classification, Analytical reasoning, Logical sequence of words, Direction Sense, Non-verbal Analogy & Series, Incomplete figures, Mirror images, Problems on Dice and Cubes

# CLASS 05 STUDYING (FOUNDATION: CLASS 06)

**SCIENCE:** Force, Work & Energy, Matter & its three states, Food chain, food and habitat, Food production in plants, Diversity in colour, Diseases, Immunity, Vaccination, Importance of water, Water in plants, Seeds, Seed germination, Leaves, Power of wind, Root system, Super sense.

**MATHEMATICS:** Lines and Circles, Number world, Multiplication methods, Division methods, Parts, Time System, Data collection, Four-digit Number, Calendar, More or Less.

**MENTAL ABILITY:** Verbal Classifications & Analogy, Coding – Decoding, Alphabet Tests, Problems on clock, Nonverbal Classification, Analytical reasoning, Logical sequence of words, Non-verbal Analogy & Series, Incomplete figures, Mirror images, Problems on Dice and Cubes