

**Syllabus of BITSAT Online Test Series  
for Class XII/XIII  
Academic Session 2011-12**

Test Type	Chemistry	Maths	Physics
PT-1	States of Matter, Gaseous state, Liquid state, Periodic Table & Periodicity, Chemical Bonding, Electronic displacement in a covalent bond	<p><b>Class-XI :</b> Sets &amp; Relations, Quadratic Equation, Logarithm, Trigonometric Ratios &amp; Identities, Trigonometric Equations.</p> <p><b>Class-XII :</b> Inverse Trigonometric Function (ITF), Modulus, G.I.F., Fractional Part Function, Signum Function, Graphical Transformation, Functions</p>	<p><b>Class-XI :</b> Simple Harmonic Motion.</p> <p><b>Class-XII:</b> Electrostatics</p>
PT-2	Redox Reactions, Ionic Equilibria, Chemical Bonding, Coordination Compounds, Reaction Mechanism	<p><b>Class-XI :</b> Sequence &amp; Series, Permutation &amp; Combination (P&amp;C), Binomial Theorem, Mathematical Induction, Determinants, Straight Lines</p>	<p><b>Class-XI :</b> Heat &amp; Thermodynamics, Thermal Expansion &amp; Calorimetry, Kinetic Theory of gases (KTG), 1<sup>st</sup> law of Thermodynamics, Specific Heat of gases, Heat Transfer</p> <p><b>Class-XII:</b> Current Electricity</p>
CT-1	States of Matter, Gaseous state, Liquid state, Periodic Table & Periodicity, Chemical Bonding, Electronic displacement in a covalent bond, Redox Reactions, Ionic Equilibria, Chemical Bonding, Coordination Compounds, Reaction Mechanism	<p><b>Class-XI :</b> Sets &amp; Relations, Quadratic Equation, Logarithm, Trigonometric Ratios &amp; Identities, Trigonometric Equations, Sequence &amp; Series, Permutation &amp; Combination (P&amp;C), Binomial Theorem, Mathematical Induction, Determinants, Straight Lines.</p> <p><b>Class-XII :</b> Inverse Trigonometric Function (ITF), Modulus, G.I.F., Fractional Part Function, Signum Function, Graphical Transformation, Functions</p>	<p><b>Class-XI :</b> Simple Harmonic Motion, Heat &amp; Thermodynamics, Thermal Expansion &amp; Calorimetry, Kinetic Theory of gases (KTG), 1<sup>st</sup> law of Thermodynamics, Specific Heat of gases, Heat Transfer</p> <p><b>Class-XII:</b> Electrostatics, Current Electricity</p>
PT-3	Atomic Structure, Solutions, s-block Elements, Qualitative analysis of Inorganic Salts, Alkenes and alkynes, Alkanes and cycloalkanes	<p><b>Class-XI :</b> Circle, Parabola, Ellipse</p> <p><b>Class-XII :</b> Limits, continuity &amp; Derivability, Methods of differentiation</p>	<p><b>Class-XI :</b> Waves, String waves, Sound waves</p> <p><b>Class-XII:</b> Capacitors, Magnetic Field</p>
CT-2	States of Matter, Gaseous state, Liquid state, Periodic Table & Periodicity, Chemical Bonding, Electronic displacement in a covalent bond, Redox Reactions, Ionic Equilibria, Chemical Bonding, Coordination Compounds, Reaction Mechanism, Atomic Structure, Solutions, s-block Elements, Qualitative analysis of Inorganic Salts, Alkenes and alkynes, Alkanes and cycloalkanes	<p><b>Class-XI :</b> Sets &amp; Relations, Quadratic Equation, Logarithm, Trigonometric Ratios &amp; Identities, Trigonometric Equations, Sequence &amp; Series, Permutation &amp; Combination (P&amp;C), Binomial Theorem, Mathematical Induction, Determinants, Straight Lines, Circle, Parabola, Ellipse</p> <p><b>Class-XII :</b> Inverse Trigonometric Function (ITF), Modulus, G.I.F., Fractional Part Function, Signum Function, Graphical Transformation, Functions, Limits, continuity &amp; Derivability, Methods of differentiation</p>	<p><b>Class-XI :</b> Simple Harmonic Motion, Heat &amp; Thermodynamics, Thermal Expansion &amp; Calorimetry, Kinetic Theory of gases (KTG), 1<sup>st</sup> law of Thermodynamics, Specific Heat of gases, Heat Transfer, Waves, String waves, Sound waves</p> <p><b>Class-XII:</b> Electrostatics, Current Electricity, Capacitors, Magnetic Field</p>
PT-4	Physical Equilibrium, Chemical Equilibria, Electrochemistry, d-Block elements, Extraction of Metals, Aromatic hydrocarbons	<p><b>Class-XI :</b> Hyperbola, Heights &amp; Distance, Properties of Triangle, Complex Number</p> <p><b>Class-XII :</b> Application of derivatives</p>	<p><b>Class-XI :</b> Unit &amp; Dimensions, Kinematics, Newton's Laws of Motion, Friction</p> <p><b>Class-XII:</b> Electro Magnetic Induction, Alternating Current</p>

CT-3	States of Matter, Gaseous state, Liquid state, Periodic Table & Periodicity, Chemical Bonding, Electronic displacement in a covalent bond, Redox Reactions, Ionic Equilibria, Chemical Bonding, Coordination Compounds, Reaction Mechanism, Atomic Structure, Solutions, s-block Elements, Qualitative analysis of Inorganic Salts, Alkenes and alkynes, Alkanes and cycloalkanes, Physical Equilibrium, Chemical Equilibria, Electrochemistry, d-Block elements, Extraction of Metals, Aromatic hydrocarbons	<p><b>Class-XI :</b> Sets &amp; Relations, Quadratic Equation, Logarithm, Trigonometric Ratios &amp; Identities, Trigonometric Equations, Sequence &amp; Series, Permutation &amp; Combination (P&amp;C), Binomial Theorem, Mathematical Induction, Determinants, Straight Lines, Circle, Parabola, Ellipse, Hyperbola, Heights &amp; Distance, Properties of Triangle, Complex Number</p> <p><b>Class-XII :</b> Inverse Trigonometric Function (ITF), Modulus, G.I.F., Fractional Part Function, Signum Function, Graphical transform, Limits, continuity &amp; Derivability, Methods of differentiation, Application of derivatives</p>	<p><b>Class-XI :</b> Simple Harmonic Motion, Heat &amp; Thermodynamics, Thermal Expansion &amp; Calorimetry, Kinetic Theory of gases (KTG), 1st law of Thermodynamics, Specific Heat of gases, Heat Transfer, Waves, String waves, Sound waves, Unit &amp; Dimensions, Kinematics, Newton's Laws of Motion, Friction</p> <p><b>Class-XII:</b> Electrostatics, Current Electricity, Capacitors, Magnetic Field, Electro Magnetic Induction, Alternating Current</p>
PT-5	Chemical Kinetics, p-block Elements, Group 13 elements, Group 14 elements, Group 15 elements, Group 16 elements, Group 17 and group 18 elements	<p><b>Class-XII:</b> Indefinite Integration, Definite Integration, Area Under Curves, Differential Equation, Matrices.</p>	<p><b>Class-XI :</b> Work Power &amp; Energy, Circular Motion, Centre of mass</p> <p><b>Class-XII:</b> Geometrical Optics</p>
CT-4	States of Matter, Gaseous state, Liquid state, Periodic Table & Periodicity, Chemical Bonding, Electronic displacement in a covalent bond, Redox Reactions, Ionic Equilibria, Chemical Bonding, Coordination Compounds, Reaction Mechanism, Atomic Structure, Solutions, s-block Elements, Qualitative analysis of Inorganic Salts, Alkenes and alkynes, Alkanes and cycloalkanes, Physical Equilibrium, Chemical Equilibria, Electrochemistry, d-Block elements, Extraction of Metals, Aromatic hydrocarbons, Chemical Kinetics, p-block Elements, Group 13 elements, Group 14 elements, Group 15 elements, Group 16 elements, Group 17 and group 18 elements	<p><b>Class-XI :</b> Sets &amp; Relations, Quadratic Equation, Logarithm, Trigonometric Ratios &amp; Identities, Trigonometric Equations, Sequence &amp; Series, Permutation &amp; Combination (P&amp;C), Binomial Theorem, Mathematical Induction, Determinants, Straight Lines, Circle, Parabola, Ellipse, Hyperbola, Heights &amp; Distance, Properties of Triangle, Complex Number</p> <p><b>Class-XII :</b> Inverse Trigonometric Function (ITF), Modulus, G.I.F., Fractional Part Function, Signum Function, Graphical transform, Limits, continuity &amp; Derivability, Methods of differentiation, Application of derivatives, Indefinite Integration, Definite Integration, Area Under Curves, Differential Equation, Matrices.</p>	<p><b>Class-XI :</b> Simple Harmonic Motion, Heat &amp; Thermodynamics, Thermal Expansion &amp; Calorimetry, Kinetic Theory of gases (KTG), 1st law of Thermodynamics, Specific Heat of gases, Heat Transfer, Waves, String waves, Sound waves, Unit &amp; Dimensions, Kinematics, Newton's Laws of Motion, Friction, Work Power &amp; Energy, Circular Motion, Centre of mass</p> <p><b>Class-XII:</b> Electrostatics, Current Electricity, Capacitors, Magnetic Field, Electro Magnetic Induction, Alternating Current, Geometrical Optics</p>
PT-6	Thermodynamics, First Law of Thermodynamics, Solid state, Surface chemistry, Hydrogen, f-Block elements, The Cell, Carbohydrates, Polymers, Pollution, Qualitative Analysis of Organic Compounds, Principles of Organic Chemistry Experiments	<p><b>Class-XII</b> Vector Algebra, 3-D Geometry, Probability, Probability Distribution, Statistics, Linear Programming</p>	<p><b>Class-XI :</b> Rotation (Rigid Body Dynamics) Viscosity, Fluid Mechanics, Properties of Matter, Elasticity, Surface Tension</p> <p><b>Class-XII:</b> Wave Optics, Modern Physics-1 &amp; 2</p>

CT-5	<p>States of Matter, Gaseous state, Liquid state, Periodic Table &amp; Periodicity, Chemical Bonding, Electronic displacement in a covalent bond, Redox Reactions, Ionic Equilibria, Chemical Bonding, Coordination Compounds, Reaction Mechanism, Atomic Structure, Solutions, s-block Elements, Qualitative analysis of Inorganic Salts, Alkenes and alkynes, Alkanes and cycloalkanes, Physical Equilibrium, Chemical Equilibria, Electrochemistry, d-Block elements, Extraction of Metals, Aromatic hydrocarbons, Chemical Kinetics, p-block Elements, Group 13 elements, Group 14 elements, Group 15 elements, Group 16 elements, Group 17 and group 18 elements, Physical Equilibrium, Chemical Equilibria, Electrochemistry, d-Block elements, Extraction of Metals, Aromatic hydrocarbons</p>	<p><b>Class-XI :</b>  Sets &amp; Relations, Quadratic Equation, Logarithm, Trigonometric Ratios &amp; Identities, Trigonometric Equations, Sequence &amp; Series, Permutation &amp; Combination (P&amp;C), Binomial Theorem, Mathematical Induction, Determinants, Straight Lines, Circle, Parabola, Ellipse, Hyperbola, Heights &amp; Distance, Properties of Triangle, Complex Number</p> <p><b>Class-XII :</b>  Inverse Trigonometric Function (ITF), Modulus, G.I.F., Fractional Part Function, Signum Function, Graphical Transformation, Functions, Limits, continuity &amp; Derivability, Methods of differentiation, Application of derivatives, Indefinite Integration, Definite Integration, Area Under Curves, Differential Equation, Matrices, Vector Algebra, 3-D Geometry, Probability, Probability Distribution, Statistics, Linear Programming</p>	<p><b>Class-XI :</b>  Simple Harmonic Motion, Heat &amp; Thermodynamics, Thermal Expansion &amp; Calorimetry, Kinetic Theory of gases (KTG), 1st law of Thermodynamics, Specific Heat of gases, Heat Transfer, Waves, String waves, Sound waves, Unit &amp; Dimensions, Kinematics, Newton's Laws of Motion, Friction, Work Power &amp; Energy, Circular Motion, Centre of mass, Rotation (Rigid Body Dynamics) Viscosity, Fluid Mechanics, Properties of Matter, Elasticity, Surface Tension</p> <p><b>Class-XII:</b>  Electrostatics, Current Electricity, Capacitors, Magnetic Field, Electro Magnetic Induction, Alternating Current, Geometrical Optics, Wave Optics, Modern Physics-1 &amp; 2</p>
FT-1	Full Syllabus	Full Syllabus	Full Syllabus
FT-2	Full Syllabus	Full Syllabus	Full Syllabus
FT-3	Full Syllabus	Full Syllabus	Full Syllabus
FT-4	Full Syllabus	Full Syllabus	Full Syllabus
FT-5	Full Syllabus	Full Syllabus	Full Syllabus