

## CBSE (NCERT) GRADE 12 - LIST OF VIDEO CLASSES

### PCMB

Subject	Number of Videos
Mathematics	216
Physics	165
Chemistry	183
Biology	148
English Grammar	82
<b>Total</b>	<b>794</b>

### CBSE GRADE - 12 (MATHAMATICS) TABLE OF VIDEO CLASSES

CHAPTER NAME	VIDEO NAME
Relations and Functions	Equivalence Relation
	Equivalence Relation - Problems
	Types of Functions
	Composite Functions. Exercise. 1.3 [3(ii), 4]
	Invertible Function, How to Find the Value of Inverse, Exercise.1.3 [5]
	Exercise. 1.3 [8, 11,13]
	Exercise. 1.3 [14], Binary Operations; Exercise. 1.4 [1(i, iii), 2, 9(ii)]
	Exercise. 1.4 [9(i, v), 11]; Identity Element
	Exercise 1.1 (2,3,4,5)
	Exercise 1.1 (6,7,9i,9ii)
	Exercise 1.1 [10 ( i,ii,iii,iv,v), 15,16]
Exercise1.4 [6(i,ii,iii,iv,v),7,8,12(i,ii),13]	
Inverse Trigonometric Functions	Introduction, Properties; Exercise. 2.1 [2, 3, 4]
	Exercise. 2.2 [1, 2, 3, 4, 5]
	Exercise. 2.2 [6, 7, 8, 9, 10]
	Exercise. 2.2 [11, 12, 13, 14, 15, 16]
	Exercise. 2.2 [17, 18, 19, 20, 21]
	Miscellaneous Exercise. [3, 4, 5, 8]
	Exercise 2.1 (1,5,6,7,8,9,10,11,12,13)
Matrices	Introduction, Types of Matrices, Operations on Matrices.
	Transpose of a Matrix, Results of Transpose of a Matrix, Exercise. 3.1 [ 1, 2]

	Exercise. 3.1 [ 4, 5]
	Exercise 3.1 [6, 7, 9]
	Exercise 3.2 [1(i, ii, iii, iv, v), 2(i, ii, iii, iv), 3(i, ii, iii)]
	Exercise. 3.2 [3 (iv, v, vi), 4, 5]
	Exercise. 3.2 [6, 7 (i, ii), 8, 9]
	Exercise. 3.2 [10, 11, 12,13]
	Exercise. 3.2 [14(i, ii)]
	Exercise. 3.2 15, 16
	Exercise. 3.2 17, 18
	Exercise. 3.3 [ 1(i, ii, iii), 2(i, ii), 3(i, ii) , 4]
	Exercise 3.3 [5 (i, ii), 6(i, ii)]; Concept of Symmetric and Skew Symmetric Matrix
	Exercise 3.3 [8(i, ii), 9, 12, 10(i)]
	Exercise 3.3 [ 10 (iv)]; ex 3.4 [1]
	Exercise 3.4 [2, 3, 4, 5,6]
	Exercise 3.4 [7, 8, 9, 10, 11]
	Exercise. 3.4 [12, 13, 14, 15]
Determinants	Introduction To Determinants; Exercise 4.1 [1, 2(i, ii), 3, 4]
	Exercise 4.1 [5 (i,ii,iii,iv) , 6, 7 (i,ii), 8]
	Properties of Determinants; Exercise 4.2(1)
	Exercise 4.2(2 TO 5)
	Exercise 4.2[ 6,7,8 (i,ii)]
	Exercise 4.2[9,10(i,ii),11(i)]
	Exercise 4.2[11(ii),12,13,14]
	Area of triangle and Collinearity; Exercise 4.3 [ 1-(i,ii,iii),2,3(i,ii) ] ; Equation of line joining given two points
	Exercise 4.3 [ 4(i,ii),5];Minors and Cofactors; Exercise 4.4 [1(i,ii),2(i),3,4]
	Adjoint of Matrix; Exercise 4.5 (1,2,3,4)
	Exercise 4.5 (5 to 10)
	Exercise 4.5 (11 to 14)
	Exercise 4.5 (15,16)
	Consistency of system of equations; Exercise 4.6 (1,2,3,4,5,6)
	Exercise 4.6 (7,8,9,10,11)
	Exercise 4.6 (12,13,14)
	Exercise 4.6 (15); Miscellaneous Exercise (16)
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	Exercise 5.1 (8 to 13)
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	Exercise 5.1 (21 a,b,c)

	Exercise 5.1 (22,23,24)
	Differentiability; Exercise 5.3 (1 to 10)
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	Exercise 5.5 (1 to 4)
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	Exercise 5.5 (14,15,16,17a)
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	Exercise 5.7 (13 to 17)
	Rolle's theorem; Exercise 5.8 (1 to 4)
	Exercise 5.1 (26 to 30)
	Exercise 5.2 (1 to 9)
Application of Derivatives	Application of Derivatives; Rate of Change of Quantities; Exercise 6.1 (1 to 4)
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	Exercise 6.1 (10 to 18)
	Increasing and Decreasing Functions; Theorem 1; Exercise 6.2 (1 to 5)
	Exercise 6.2 (7,6)
	Exercise 6.2 (9,10 ,13 to 16) (17 to 19)
	Tangents & Normals; Exercise 6.3 (1 to 5)
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	Exercise 6.3 (15 to 17)
	Exercise 6.3 (18 to 21)
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	Exercise 6.4 [1 - (i to v)]
	Exercise 6.4 [1 - (vi to xii)]
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	Exercise 6.4 (9); Exercise 6.5 [1-(a,b,c,d)]
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	Exercise 6.5 [3 - (i to iv)]
	Exercise 6.5 [3 - (v to viii)]
	Exercise 6.5 [4- (a,b,c),5-(a,b,c)]
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	Exercise 6.5 (19 to 20)
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	Exercise 6.5 (23)
	Exercise 6.5 (24,25)
	Exercise 6.5 (27,28,29)
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	Exercise 7.1 (8,9,12,13,14,15)
	Exercise 7.1 (16 to 21)
	Exercise 7.1 (22); Exercise 7.2 (1 to 5)
	Exercise 7.2 (6 to 10)
	Exercise 7.2 (11 to 17)
	Exercise 7.2 (18,21 to 26)
	Exercise 7.2 (27 to 33)
	Exercise 7.2 (34 to 39); Exercise 7.3 (1,2)
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	Exercise 7.3 (7 to 10)
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	Exercise 7.4 (7 to 11)
	Exercise 7.4 (12 to 14)
	Exercise 7.4 (15 to 17)
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	Exercise 7.5 (1 to 3)
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	Exercise 7.5 (13 to 15)
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	Exercise 7.6 (1 to 5)
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	Exercise 7.6 (22 to 24); Exercise 7.7 (1,2)

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	Exercise 8.1(8,9,10)
	Exercise 8.1(11,12,13); Exercise 8.2(1)
	Exercise 8.2(2,3)
	Exercise 8.2(4,6,7)
Differential Equations	Introduction
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	Exercise 9.5(5,6,7)
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	Exercise 9.6(11,12,13,14,15)
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Vector Algebra	Introduction
	Exercise 10.2 (2,3,4,6,7,9,10)
	Exercise 10.2 (12 to 18)
	Exercise 10.3 (1 to 7)

	Exercise 10.3 (8 to 15)
	Exercise 10.3 (18); Exercise 10.4 (1,2,3,5);
	Exercise 10.4 (6,7,9,10,11,12)
Three-Dimensional Geometry	Introduction
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	Exercise 11.1(5); Exercises 11.2(1,2,3,4)
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Linear Programming	Introduction
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	Exercise 13.1[6(iii),8,9]
	Exercise 13.1(10,11)
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	Exercise 13.2(3,5,8,11)
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	Exercise 13.5(1,9,12,13)

**CBSE GRADE - 12 (PHYSICS) TABLE OF VIDEO CLASSES**

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	Force Between Multiple Charges
	Electric Field; Dipole
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Electrostatic Potential and Capacitance	Introduction
	Electrostatics of Conductors
	Dielectric
	Capacitor and Capacitance; Parallel Plate Conductors
	Effect of Dielectric; Combination of Capacitors
	Energy Stored in a Capacitor
	Solved Problems
Current Electricity	Introduction
	Limitations of Ohm's Law; Resistivity of Various Materials
	Temperature and Resistivity; Combination of Resistors
	Electrical Energy; Power; Cells; EMF; Internal Resistance
	Cells in Series; Kirchoff's Rule
	Wheatstone Bridge; Solved Problems
	Potentiometer
Moving Charges and Magnetism	Introduction
	Biot Savart Law - Direction of Magnetic Field
	Magnetic Field in the Axis of Circular Loop
	Ampere Circuital Law
	Cyclotron
	Circular Motion, Solenoid and Toroid
	Magnetic Field Between 2 Wires Carrying Current
	Torque on Current Loop, Magnetic Dipole
	Magnetic Moment, Circular Current Loop as a Magnetic Dipole
	The Moving Coil Galvanometer, Sensitivity
Magnetism and Matter	Magnetism and Matter; Properties of Magnetic Field Lines
	Bar Magnet as a Equivalent Solenoid
	The Dipole in a Uniform Magnetic Field ; Magnetism and Gauss's Law
	The Earth's Magnetic Field , Magnetization, Magnetic Intensity - Part 1
	Magnetization and Magnetic Intensity; Magnetic Properties of Materials - Part 2

	Paramagnetism; Ferromagnetism
	Relationship between B & H in Ferromagnetic Material; Permanent Magnets & Electromagnets
Electromagnetic Induction	Introduction
	Electromagnetic Induction; Experiment 6.3; Magnetic Flux
	Faraday's Law of Electromagnetic Induction; Lenz's Law of Conservation of energy
	Motional Electromotive Force
	Energy Consideration; Eddy Currents - Part 1
	Eddy Currents - Part 2; Magnetic Braking; EM Damping; Induction Furnace; Electric Meter
	Inductance
	Mutual Inductance
	Self Inductance
	Self Inductance Plays Role of Inertia
	AC Generator
Alternating Current	Introduction
	Effective Current and Effective Voltage ;AC Voltage Source Connected across a Resistor
	Representation of AC Current and Voltage by Rotating Vectors
	AC Voltage Applied to an Inductor
	Activity to Understand the AC Voltage is Connected to an Inductor
	AC Voltage Source Connected across a Capacitor
	AC Voltage Source Connected to a Series LCR
	Disadvantages of Phasor Method; Analytical Solution
	Resonance
	Sharpness of Resonance
	Power in an AC Circuit
	LC Oscillations
	Analogies between Mechanical & Electrical Quantities
	Transformers - Part 1
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Electromagnetic Waves	Introduction
	Displacement Current; Electromagnetic Waves
	Properties of Electromagnetic Waves; Electromagnetic Spectrum - Part 1
	Electromagnetic Spectrum - Part 2
	Electromagnetic Spectrum - Part 3
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	Spherical Mirrors



	Focal Length
	Mirror Equation; Linear Magnification
	Refraction
	Lateral Shift
	Atmospheric Refraction; Total Internal Reflection
	Mirage; Diamond Prism; Optical Fibres
	Refraction by a Lens
	The lens Makers Formula; Power of Lens; Combination of Thin Lenses in Contact
	Refraction through a Prism
	Dispersion
	Rainbow formation; Scattering of Light
	Human Eye
	Eye Defects
	Microscope
	Compound Microscope
	Reflection Telescope
Wave Optics	Introduction
	Huygens Principle; Refraction of Plane Wave
	Refraction at a Rarer Medium; Coherent and Incoherent Addition of Waves - Part 1
	Constructive and Destructive Overlap
	Coherent and Incoherent Addition of Waves - Part 2; Doppler's Effect
	Young's Double Slit Experiment
	Path Difference; Fringe Width
	Sustained Interference; Diffraction
	Maxima; Secondary Maxima; Comparison between Diffraction and Interference
	Resolving Power in Optical Instruments ; Diffraction in Resolving Power of Telescope - Part 1
	Diffraction in Resolving Power of Telescope - Part 2; Validity of Wave Optics
	Polarised Wave and Unpolarised Wave ; Polarisation
	Polarisation by Polaroid
Dual Nature of Radiation and Matter	Introduction
	Electron Emission; Types of Electron Emission
	Photoelectric Effect - Part 1
	Photoelectric Effect - Part 2
	Experimental Observation of Photoelectric Effect - Part 1
	Experimental Observation of Photoelectric Effect - Part 2; Photoelectric Effect and Wave Theory of Light

	Einstein's Photoelectric Equation - Part 1
	Einstein's Photoelectric Equation - Part 2
	Photon Picture of Radiation; Wave Nature of Matter - De Broglie's Hypothesis
	Heisenberg's Uncertainty Principle; Davisson - Germer Experiment
Atoms	Introduction
Atoms	Rutherford's Nuclear Model of Atom
Atoms	Drawbacks of Rutherford's Model; Atomic Spectra - Part 1
Atoms	Atomic Spectra - Part 2; Types of Spectrums
Atoms	Spectral Series - Part 1
Atoms	Spectral Series - Part 2; Bohr's Model of Hydrogen Atom; Bohr's Radius
Atoms	Energy of Orbits; Drawbacks of Bohr's Model; De Broglie's Hypothesis
Nuclei	Introduction
Nuclei	Nuclide; Einstein's Mass Energy Equivalence
Nuclei	Nuclear Binding Energy per Nucleon
Nuclei	Nuclear Force; Radioactivity
Nuclei	Experiment of Radioactive ;Radioactive Nuclides; Radioactive Decay
Nuclei	Law of Radioactive Decay ; Generalised Expression for Law of Radioactive Decay
Nuclei	Decay Rate ; Mean Life of Radioactive Sample
Nuclei	Alpha Decay; Beta Decay
Nuclei	Gamma Decay ; Comparison between Alpha , Beta and Gamma Decay
Nuclei	Nuclear Energy ; Types of Nuclear Fission Reactions
Nuclei	Nuclear Reactor - Part 1
Nuclei	Nuclear Reactor - Part 2
Semiconductor Electronics; Materials, Devices and Simple Circuits	Introduction
	Classification of Metals, Conductors and Semiconductors - On the Basis of Conductivity
	Classification of Metals, Conductors and Semiconductors - On the Basis of Energy Bands - Part 1
	Classification of Metals, Conductors and Semiconductors - On the Basis of Energy Bands - Part 2; Intrinsic Semiconductor
	P-n Junction - Part 1
	P-n Junction - Part 2
	Intrinsic and Extrinsic Semiconductors
	n- type Semiconductor ; P- type Semiconductor

	Energy Band Diagram of n- type Semiconductor & P- type Semiconductor ; Semiconductor Diode
	Semiconductor Diode - Forward Bias
	Semiconductor Diode - Reverse Bias
	V-I Characteristics of Diode; Half Wave Rectifier; Full Wave Rectifier
	Filters; Zener Diode - Part 1
	Zener Diode - Part 2
	Zener Diode as a Voltage Regulator
	Opto Electronic Devices - Part 1
	Opto Electronic Devices - Part 2
	Opto Electronic Devices - Part 3; Digital Electronics
	Logic Gates
	Junction Transistor ; Pnp Transistor - Part 1
	Pnp Transistor - Part 2; Common Emitter Transistor Characteristics - Part 1
	Common Emitter Transistor Characteristics - Part 2
	Input Resistance; Output Resistance ; Current Amplification Factor ; Transistor as a Device
	Transistor as a Switch - Part 1
	Transistor as a Switch - Part 2; Transistor as an Amplifier
	Feedback Amplifier and Transistor Oscillator
Communication Systems	Introduction
	Elements in the Communication System ; Modulation
	Bandwidth of Signals ; Bandwidth of Transmission Medium
	Data Representation of Signals
	Attenuation; Amplification ; Range ; Bandwidth
	Propagation of Waves; Different Layers of Atmosphere - Part 1
	Different Layers of Atmosphere - Part 2
	Modulation- Part 1
	Modulation- Part 2 ; Amplitude Modulation - Part 1
	Amplitude Modulation - Part 2; Production of Amplitude Modulated Wave- Part 1
	Production of Amplitude Modulated Wave- Part 2; Transmitting Antenna and Receiving Antenna

**CBSE GRADE - 12 (CHEMISTRY) TABLE OF VIDEO CLASSES**

CHAPTER NAME	VIDEO NAME
Solid State	Introduction
	Classification of Solids
	Types of Crystalline Solids - Part 1
	Types of Crystalline Solids - Part 2
	Crystal Lattices / Unit Cells
	Types of Unit Cells
	Crystal Systems
	Number of Atoms in Unit Cells - Part 1
	Number of Atoms in Unit Cells - Part 2
	Closed Packed Structures
	3-Dimensional Close Packing
	Formula of a Compound and Number of Voids Filled
	Example 1.2
	Locating Tetrahedral Void
	Packing Efficiency in HCP and CCP
	Packing Efficiency in Body Centered Cubic Structures
	Packing Efficiency in Simple Cubic Lattice; Calculations
	Imperfections in Solids - Part 1
	Imperfections in Solids - Part 2
	Electrical Properties
	Conduction of Electricity in Semiconductors
	Applications of n-Type and p-Type Conductors
	Classification of Solids
Solutions	Introduction
	Expressing Concentration of Solutions - Part 1
	Expressing Concentration of Solutions - Part 2
	Examples; Solubility - Part 1
	Solubility - Part 2
	In Text Questions 2.5, 2.6 and 2.7
	Vapour Pressure of Solutions
	In Text Questions
	Vapour Pressure of Solutions of Solids in Liquids; Ideal Solutions
	Non-Ideal Solutions; Azeotropes
	Colligative Properties and Determination of Molar Mass
	Elevation of Boiling Point
	Depression of Freezing Point
	Osmosis, Reverse Osmosis, Abnormal Molar Mass

	Van't Hoff Factor and Solved Problems
Electrochemistry	Introduction
	Voltaic Cell
	Measurement of Electrode Potential
	Equilibrium Constant from Nernst Equation
	Conductance of Electrolytic Solutions
	Law of Independent Migration of Ions; Electrolysis
	Products of Electrolysis
Chemical Kinetics	Rate of Chemical Reactions
	Average and Instantaneous Rate
	Reactions - Different Stoichiometry Coefficients
	Rate Law Expressions - Part 1
	Rate Law Expressions - Part 2
	Unimolecular and Complex Reactions
	Molecularity of a Reaction
	Integrated Rate Equations - Part 1
	Integrated Rate Equations - Part 2
	Integrated Rate Equations - Part 3
	Problem Solving - 1
	Effect of Temperature on the Rate of a Reaction - Part 1
	Effect of Temperature on the Rate of a Reaction - Part 2
	Arrhenius Equation
	Effect of Catalyst, Collision Theory
	Collision Theory - Part 2
Surface Chemistry	Introduction
	Distinction Between Adsorption and Absorption
	Types of Adsorption
	Adsorption Isotherms
	Applications of Adsorption and Catalysts
	Mechanism of Enzyme catalysis, Catalysis in Industry
	Adsorption theory of Heterogeneous catalysis; Features of Solid catalyst - Part 1
	Features of Solid catalyst - Part 2; Shape Selective Catalysis, Enzyme catalysis
	Colloids; Types of Colloids; Classification of Colloids - Part 1
	Classification of Colloids - Part 2
	Preparation of Colloids & Purification of Colloids
	Properties of Colloids - Part 1
	Properties of Colloids - Part 2
	Emulsions; Colloids around us; Application & Uses of Colloids
	Occurrence of Metals; Concentration of Ores

General Principles and Processes of Isolation of Elements	Extraction of Crude metal from Concentrated ore; Thermodynamic Principles of Metallurgy
	Extraction of Iron from its Oxides & Copper from its Oxides
	Extraction of Zinc & Aluminium from its Oxides; Oxidation & Reduction
	Refining - Part 1
	Refining - Part 2
The p-Block Elements	Introduction; Group 15 Elements
	Ionisation Enthalpy; Electronegativity; Physical & Chemical Properties - Group 15
	Ammonia; Oxides of Nitrogen, Phosphorus
	Chemical Properties of Group 15 Elements
	p-Block - Group 16 Elements; Dioxygen
	Simple Oxides; Ozone
	Sulphur - Part 1
	Sulphur - Part 2
	Group 17 Elements
	Chlorine
	Oxoacids of Halogen; Interhalogen Compounds
	Group 18 Elements
	The d- and f- Block Elements
Atomization Enthalpy	
Oxidation States	
Magnetic Properties; Formation of Coloured Ions; Interstitial Compounds; Alloys and Complex Compounds	
Standard Electrode Potential, Trends	
Trends and Stability of Higher Oxidation States; Compounds of d- Block Elements - Part 1	
Compounds of d- block Elements - Part 2	
The Lanthanides - Part 1	
The Lanthanides - Part 2	
The Actinides - Part 1	
The Actinides - Part 2	
Coordination Compounds	Introduction
	Coordination Polyhedron; Oxidation Number; Werner's Theory
	Werner's Theory of Coordination Compounds
	Nomenclature of Coordination Compounds
	Writing Formulas of IUPAC Names; Valence Bond Theory - Part 1
	Isomerism in Coordination Compounds

	Limitations of Valence Bond Theory; Crystal Field Theory (CFT) (Octahedral Complexes)
	Crystal Field Theory (Tetrahedral Complexes); Colour in Coordination Complexes; Bonding in Metal Carbonyls
	Stability of the Coordination Compounds & Applications
Haloalkanes and Haloarenes	Introduction
	Nomenclature - Part 1; Nature of C-X Bond; Methods of Preparation - Part 1
	Methods of Preparation - Part 2; Physical Properties
	Chemical Reactions - Part 1
	Chemical Reactions - Part 2
	Stereochemical Aspects of Nucleophilic Substitution Reaction
	Nomenclature - Part 2
	Halogen Exchange; Reaction of Haloarenes; Polyhalogen Compounds
Alcohols, Phenols and Ethers	Nomenclature; Alcohols
	Nomenclature; Phenols and Ethers; Structure of Functional Groups
	Preparation of Alcohols & Phenols
	Physical Properties of Alcohols, Phenols; Chemical Reactions
	Electrophilic Aromatic Substitution & Important Reactions of Phenols
	Some Commercially Important Alcohols
	Cleavage of - OH Bond
	Esterification & Its Applications
	Preparation of Ethers
	Chemical Reaction of Ethers
	Friedel Crafts Alkylation Reaction & Acylation Reaction; Williamson Ether Synthesis
	Acid Dissociation; Acidity of Alcohols; Cleavage of C-O Bond in Ethers
	Williamson Synthesis of Ethers
Aldehydes, Ketones & Carboxylic Acids	Physical Properties & Chemical Properties of Carboxylic Acids - Part 1
	Chemical Properties of Carboxylic Acids - Part 2
	Carbonyl Group & Its Structure; Oxidation of Alcohol
	Methods of Preparation of Aldehydes & Ketones
	Mechanism of Nucleophilic Attack on the Carbonyl Group
	Chemical Reactions Involving Nucleophilic Attack; Reduction Reaction
	Wolff - Kishner Reduction Oxidation Reaction; Haloform Reaction

	Electrophilic Substitution Reaction; Physical Properties of Aldehydes & Ketones; Hydration of Alkynes
	Reduction of Nitriles & Esters; Preparation of Ketones; Chemical Properties of Carboxylic Acids
	Resonance & Stability of Carboxylate Ion; Acidic Property & Dissociation Constant of Carboxylic Acid
	pKa Values & Effect of Substituent Group on Carboxylic Acids
	Preparation of Carboxylic Acids
	Reaction of Alpha - Hydrogen in Aldehydes & Ketones; Aldol Condensation; Cross Condensation - Part 1
	Cross Condensation - Part 2; Cannizzaro Reaction; Uses of Aldehydes & Ketones
	Nomenclature of Aldehyde, Ketones & Carboxylic Acids
Amines	Introduction
	Preparation of Amines - Part 1
	Preparation of Amines - Part 2
	Classification of Amines
	Physical Properties of Amines
	Boiling Point; Nomenclature of Amines
	Chemical Reactions; Structure - Basicity Relationship of Amines
	Acylation Reactions - Part 1
	Acylation Reactions - Part 2; Carbylamines Test
	Reaction of Aliphatic & Aromatic Amines with Nitrous Acid
	Bromination Reactions of Aromatic Amines
	Diazonium Salts - Preparation & Properties; Displacement Reactions
	Replacement of H group & Coupling Reaction of Diazonium Salts; Displacement Reactions - Part 1
	Displacement Reactions - Part 2
	Reaction of Amines with Salts with Aryl Sulphonyl Chloride
	Nitration & Sulphonation Reactions of Aromatic Amines
	Sandmeyer Reaction
Biomolecules	Introduction
	Classification of Carbohydrates; Preparation & Structure of Glucose - Part 1
	Preparation & Structure of Glucose - Part 2
	Cyclic Structure of Glucose; Structure of Fructose; Disaccharides; Sucrose
	Disaccharides - Maltose, Lactose; Polysaccharides - Starch, Glycogen
	Polysaccharides - Cellulose; Importance of Carbohydrate; Proteins



	Types of Proteins; Structure of Proteins; Denaturation of Proteins; Enzymes
	Vitamins; Nucleic Acids - Part 1
	Nucleic Acids - Part 2; Double Strand Helix of DNA
	Classification of Amino Acids; Zwitterion; Structure of Proteins; Structure of Fructose
Polymers	Introduction
	Preparation of Addition Polymers; Condensation Polymerisation
	Rubber - Types of Rubber; Biodegradable Polymers; Addition Polymers
Chemistry in Everyday Life	Introduction
	Receptors as Drug Targets; Therapeutic Action of Different Classes of Drugs - Part 1
	Therapeutic Action of Different Classes of Drugs - Part 2
	Cleansing Agents: Soaps, Synthetic Detergents

### CBSE GRADE - 12 (BIOLOGY) TABLE OF VIDEO CLASSES

CHAPTER NAME	VIDEO NAME
Reproduction in Organisms	Introduction
	Asexual Reproduction
	Gametogenesis and Sexuality
	Sexual Reproduction in Organisms
	Events Involved in Sexual Reproduction
Sexual Reproduction in Flowering Plants	Introduction
	Internal Structure of Anther
	Formation of Male Gametophyte
	Megasporangium and Development of Female Gametophyte
	Pollination
	Adaptation Based on the Agent of Pollination
	Adaptation Based on the Agencies - Part 1
	Adaptation Based on the Agencies - Part 2
	Fertilization
	Post Fertilization Changes
	Development of Dicot and Monocot Embryo
	Post Fertilization Changes Continued; Artificial Hybridization
Human Reproduction	Introduction
	Hormonal Control of Male and Female Reproductive Organs

	Male Reproductive System - Part 1
	Male Reproductive System - Part 2
	Female Reproductive System - Part 1
	Female Reproductive System - Part 2
	Spermatogenesis
	Structure of Sperm
	Oogenesis
	Structure of Egg; Comparison of Gametes
	Menstrual Cycle
	Fertilization - Part 1
	Fertilization - Part 2
	Fertilization - Part 3
	Cleavage of Zygote
	Implantation
	Parturition and Lactation
Reproductive Health	Introduction
	Methods of Contraception - Part 1
	Methods of Contraception - Part 2
	Amniocentesis and STD's
	Infertility and Assisted Reproductive Techniques
	Question and Answers - Part 1
	Question and Answers - Part 2
Principles of Inheritance and Variation	Introduction
	Mendel's Laws of Inheritance
	Inheritance of One Gene
	Phenotype and Genotype of Trihybrid Cross
	Types of Cross
	Variations From Mendel's Principles
	Pleiotropy; Complementary Genes
	Collaborator Gene; Duplicating Genes
	Polygenic Inheritance
	Epistasis; Supplementary Genes
	Sex Determination
	Mutation - Part 1
	Mutation - Part 2
	Mutation - Part 3
	Genetic Disorders - Part 1
	Genetic Disorders - Part 2
	Genetic Disorders - Part 3
	Linkage and Gene Mapping

	Chromosomal Theory of Inheritance; Pedigree Analysis
	Important Terms
Molecular basis of Inheritance	Introduction
	Nucleotide Structure of DNA
	Types of DNA; Important Terms Related to DNA
	RNA; Types of RNA, mRNA
	tRNA, rRNA; Structure of Nucleosome
	Hershey & Chase Experiment; Properties of Genetic Material (DNA vs RNA)
	DNA Replication & Enzymes Involved- Part 1
	DNA Replication - Part 2
	DNA Replication - Part 3; Semi-Conservative Way of Replication
	Transcription Unit
	Genetic Code & Its Salient Features
	Translation- Part 1
	Translation- Part 2
	Reverse Transcription; Regulation of Gene Expression
	Operon; Inducible Operon
	Human Genome Project
	DNA Fingerprinting
	Griffith's Experiment
	Double Helix DNA Model; Salient Features of DNA Molecule
Evolution	Introduction
	Theories of Origin of Life; Biogenesis and Modern Theory
	Evidences of Evolution - Part 1
	Evidences of Evolution - Part 2
	Evidences of Evolution - Part 3
	Theories of Evolution - Lamarck's Theory of Inheritance & Acquired Characteristics
	Theories of Evolution - Darwin's Theory of Natural Selection; Mutation Theory of Evolution; Neo-Darwinism
	Examples of Natural Selection - Industrial Melanism and DDT Resistance in Mosquitoes
	Types of Natural Selection - Artificial Selection
	Population Genetics; Hardy Weinberg Principle; Evolution of Humans
	Urey-Miller Experiment; Evidences of Evolution
	Evidences of Evolution - Part 4
Human Health and Diseases	Introduction

	Common Diseases in Humans; Life Cycle of Plasmodium; Immunity
	Structure of an Antibody; Principle of Vaccination & Immunisation; Allergy
	Auto Immunity; Immune System of the Body; AIDS
	Replication of Retrovirus; HIV; Prevention of AIDS
	Cancer; Characteristic Features of Cancer Cells; Cancer Detection and Diagnosis
	Drug and Alcohol Abuse - Part 1
	Drug and Alcohol Abuse - Part 2
	Drug and Alcohol Abuse - Part 3
Strategies for Enhancement in Food Production	Introduction
	Animal Husbandry; MOET; Bee Keeping
	Fisheries; Plant Breeding
	Green Revolution; Plant Breeding for Disease Resistance
	Mutational Breeding; Plant Breeding for Developing Insect Resistance
	Single Cell Proteins; Tissue Culture; Somatic Hybridisation
Microbes in Human Welfare	Introduction
	Sewage Treatment; Microbes in Production of Biogas
	Biogas Plant; Microbes as Biocontrol Agents and Biofertilizers
Biotechnology : Principles and Processes	Introduction
	Origin of Replication; Tools for DNA recombinant technology
	Vector DNA; Alien DNA; Separation and Isolation of DNA Fragments
	Cloning Vectors
	Competent Host; Process of Recombinant DNA technology - Part 1
	Process of Recombinant DNA technology - Part 2
Biotechnology and Its Applications	Introduction
	Biotechnology Applications in Agriculture - Part 1
	Biotechnology Applications in Agriculture - Part 2;
	Biotechnology Applications in Medicine - Part 1
	Biotechnology Applications in Medicine - Part 2;
	Transgenic Animals; Ethical Issues
Organisms and Populations	Introduction
	Major Abiotic Factors; Response to Abiotic Factors-Part 1
	Response to Abiotic Factors - Part 2; Adaptations; Populations
	Age Pyramid; Population Growth; Growth Models
	Population Interactions; Predation

	Competitions
	Parasitism; Commensalism; Mutualism
Ecosystems	Introduction
	Productivity; Decomposition - Part 1
	Decomposition - Part 2 ; Energy Flow
	Trophic Levels; Ecological Pyramid; Features of Ecological Pyramid
	Ecological Succession; Succession in Plants
	Nutrient Cycles; Ecosystem Services
Biodiversity and Conservation	Loss of Biodiversity
	Magnitude of Biodiversity; Levels of Biodiversity - Part 1
	Levels of Biodiversity - Part 2; India as a Megadiversity Region
	Patterns of Biodiversity - Part 1; Species Diversity in Ecosystem
	Conservation of Biodiversity
	Patterns of Biodiversity - Part 2
Environmental Issues	Introduction
	Air Pollution
	Water Pollution - Part 1
	Water Pollution - Part 2
	Solid Waste - Part 1
	Solid Waste - Part 2; Agrochemicals and Their Effects; Radioactive Wastes
	Greenhouse Effect; Ozone Depletion in the Stratosphere - Part 1
	Ozone Depletion in the Stratosphere - Part 2; Degradation by Improper Resource Utilization and Maintenance
	Deforestation; Conservation of Forests

### ENGLISH GRAMMAR (COMPLIMENTARY) TABLE OF VIDEO CLASSES

CHAPTER NAME	VIDEO NAME
Alphabet	Vowels and Consonants
Parts of Speech	Parts of Speech
	Nouns
	Pronouns
	Adjectives
	Verbs
	Adverbs - 1
	Adverbs - 2
	Proposition - 1
	Preposition - 2
	Conjunctions
Types of Nouns	Introduction to Nouns and Proper Nouns
	Common Noun and Collective Noun
	Countable and Uncountable Nouns - Part 1
	Countable and Uncountable Nouns - Part 2
	Concrete and Abstract Nouns
Noun Gender	Noun Gender
	Neuter Gender
Noun Cases	Noun Cases
	Objective Case / Accusative Case
	Possessive Case
	Vocative Case
Noun Number	Noun Number - Singular - Plural Rules 1,2,3,4
	Noun Number - Singular - Plural Rules 1,2,3,4
	Noun Number - Singular - Plural Rules 11,12
Compound Nouns	Compound Nouns - Part 1
	Compound Nouns - Part 2
	Compound Nouns - Part 3
Articles	Articles - 1
	Articles - 2
	Definite Article "THE" - Part 1
	Definite Article "THE" - Part 2
Verb	Verb-1
	Verb-2
	Verb-3
	Subject Verb Agreement -1

Subject Verb Agreement	Subject Verb Agreement -2
Pronouns	Pronouns - Personal Pronouns
	Personal Pronouns as Subject and Object
	Relative Pronoun - Demonstrative Pronoun
	Indefinite Pronouns - 1
	Indefinite Pronouns - 2
	Reflexive Pronouns
Tenses	Tenses
	Present Tense - 1
	Present Tense - 2
	Past Tense - 1
	Past Tense - 2
	Future Tense
Figures of Speech	Figures of Speech - 1
	Figures of Speech - 2
	Figures of Speech - 3
	Figures of Speech - 4
Nouns	Proper Noun and Common Noun
	Types of Nouns
Adjectives	Adjectives - 1
	Adjectives - 2
	Adjectives - 3
	Types of Adjectives -1
	Types of Adjectives -2
Articles	Indefinite Articles
	Definite Articles
Auxiliary Verbs	Auxiliary Verbs -1
	Auxiliary Verbs -2
	Auxiliary Verbs - 3
Sentences	The Sentence - Part 1
	The Sentence - Part 2
	Types of Sentences - Part 1
	Types of Sentences - Part 2
Phrases and Clauses	Types of Phrases
	Types of Clauses
Idioms	Idioms - Part 1
	Idioms - Part 2
	Idioms - Part 3
	Idioms - Part 4

	Idioms - Part 5
Question tags	Question tags
Parts of a Sentence	Parts of a Sentence -1
	Parts of a Sentence -2
Pronouns	Interrogative Pronoun
	Possessive Pronoun
Verbs	Main verbs; Auxiliary verbs

\*English Grammar is being offered as Complimentary along with Annual Pack