CAREERS 360

PREPARATION Series

MHT CET 2025

Most Scoring Concepts

PHYSICS

Measurements

Concept Name	Study Link
Physical quantity	Click Here
System of unit	Click Here
Practical units	Click Here
Dimension	Click Here
Frequency, angular frequency, angular velocity, velocity gradient	Click Here
Work, Potential Energy, Kinetic Energy, Torque	Click Here
Momentum, Impulse , Angular momentum, Angular impulse	Click Here
Dimensionless Quantities	Click Here
Heat, Latent heat , Specific heat capacity and Temperature	Click Here
Permittivity of free space and dielectric constant (k)	Click Here
Magnetic Field ,Permeability of free space, Magnetic flux and self inductance	Click Here
Application of Dimensional analysis (I)- To find dimension of physical constant	Click Here
Application of Dimensional analysis (II)- To convert a physical quantity from one system to other	Click Here
Application of Dimensional analysis (V)- As a research tool to derive new relations	Click Here
Significant figures	Click Here
Errors of measurements	Click Here
Error in sum and Error in difference of two physical quantities	Click Here
Error in product and Error in division of two physical quantities	Click Here
Error in quantity raised to some power	Click Here

Scalars and Vectors

Concept Name	Study Link
Vector addition and Vector Subtraction	Click Here
Uniform circular motion	Click Here
Speed and velocity	Click Here
Kinematics graphs	Click Here
Equation of motions	Click Here
Projectile Motion	Click Here
Relative Velocity	Click Here

Force

Concept Name	Study Link
Common forces in mechanics	Click Here
Equilibrium of concurrent forces	Click Here
Newton’s First law of motion	Click Here
Newton’s Second and Third Law of motion	Click Here
Acceleration of Block on Smooth Inclined Plane	Click Here

Motion of Block in Contact	Click Here
Motion of blocks when connected with string	Click Here
Motion of connected blocks over pulley	Click Here
Apparent weight of body in a lift (II)	Click Here
Rocket Propulsion	Click Here
Spring Force	Click Here
Nature of Work Done	Click Here
Work done by variable force	Click Here
Kinetic energy	Click Here
Potential energy	Click Here
Potential energy curve	Click Here
Law of Conservation of Energy	Click Here
Power	Click Here
Types of collision	Click Here
Perfectly Elastic Head on Collision	Click Here
Perfectly elastic oblique collision	Click Here
Head on inelastic collision	Click Here
Perfectly inelastic collision	Click Here
Collision Between Bullet and Vertically Suspended Block	Click Here

Friction in solids and liquids

Concept Name	Study Link
Kinetic Friction	Click Here
Static Friction	Click Here
Acceleration of block against friction	Click Here
Stokes' law & Terminal Velocity	Click Here
Viscosity	Click Here

Refraction of Light

Concept Name	Study Link
Refraction Through A Glass Slab	Click Here
Refraction Through A Prism 1	Click Here
Refraction	Click Here
Real depth and Apparent depth	Click Here
Dispersion Of Light 1	Click Here
Total Internal Reflection	Click Here
Lens Maker's formula	Click Here
Power of lens and mirror	Click Here
Magnification in Lenses	Click Here
Combination of thin lens in contact	Click Here
Lenses at a distance	Click Here
Astronomical Telescope	Click Here
Compound Microscope	Click Here

Ray Optics

Concept Name	Study Link
Spherical mirrors	Click Here
Mirror formula	Click Here

Magnetic Effects of Electric Current

Concept Name	Study Link
Magnetic Field due to current in straight wire	Click Here
Magnetic Field due to circular current loop	Click Here
Magnetic field on the axis of circular current loop	Click Here
Apllication of Ampere's law (I)	Click Here
Application of Ampere's law (II)	Click Here
Force on a moving charge in magnetic field	Click Here
Solenoid	Click Here
Motion of a charged particle in uniform magnnetic field(I)	Click Here
Magnetic field lines	Click Here
Bar magnet as an equivalent solenoid	Click Here
Magnetic force on a current carrying conductor	Click Here
Lorentz force	Click Here
Force between two parallel current carrying infinite wires	Click Here
Dipole in a uniform magnetic field	Click Here
Torque on a rectangular current loop in a uniform magnetic field	Click Here
Circular current loop as magnetic dipole	Click Here
Moving coil galvanometer	Click Here

Magnetism

Concept Name	Study Link
Magnetisation and magnetic intensity	Click Here
Hysteresis curve	Click Here
Circular motion	
Concept Name	Study Link
Centripetal Force and Centrifugal Force	Click Here
Skidding of Vehicle on a Level Road	Click Here
Banking of Road	Click Here

Gravitation

Concept Name	Study Link
Newton's law of Gravitation	Click Here
Acceleration due to gravity (g)	Click Here
Variation in 'g' due to height	Click Here
Variation in 'g' due to Rotation of earth	Click Here
Gravitational field Intensity	Click Here
Gravitational field due to Point mass	Click Here

Gravitational Potential due to Uniform solid sphere	Click Here
Gravitational Potential Energy (U)	Click Here
Work Done Against Gravity	Click Here
Kepler’s Laws of Planetary Motion	Click Here
Escape Velocity	Click Here
Orbital Velocity of Satellite	Click Here
Time period and energy of a satellite	Click Here

Rotational Motion

Concept Name	Study Link
Center of mass	Click Here
Position of centre of mass for solid cone	Click Here
Motion of the centre of mass	Click Here
Equations of Linear Motion and Rotational Motion.	Click Here
Torque	Click Here
Moment of Inertia of Two Point Masses About Their Centre of Mass	Click Here
Moment of inertia of a Rod	Click Here
Moment of inertia for uniform rectangular lamina	Click Here
Parallel and Perpendicular Axis theorem	Click Here
Moment of inertia of a RING	Click Here
Moment of inertia of a DISC	Click Here
Moment of inertia of a SOLID SPHERE	Click Here
Angular Momentum	Click Here
Conservation Of angular momentum	Click Here

Oscillations

Concept Name	Study Link
Spring System	Click Here
Oscillations in combination of springs	Click Here
Simple pendulum	Click Here
Composition of two SHM- part 2	Click Here
Damped Harmonic motion	Click Here
Energy in SHM	Click Here
Simple harmonic as projection of circular motion	Click Here
Simple harmonic motion	Click Here
Equations of motions of SHM	Click Here
Terms associated with SHM	Click Here

Elasticity

Concept Name	Study Link
Stress and it's types	Click Here
Hooke’s law	Click Here
Work done in stretching a wire	Click Here
Surface tension	

Concept Name	Study Link
Surface energy	Click Here
Excess pressure inside a liquid drop & soap bubble	Click Here
Rise of liquid in a capillary tube	Click Here
Variation of pressure	Click Here
Flow of fluids	Click Here
Equation of Continuity	Click Here
Applications of Bernoulli's Theorem(I)	Click Here

Wave motion

Concept Name	Study Link
General equation of travelling	Click Here
Sine wave travelling on string	Click Here
Speed of transverse wave on a string	Click Here

Stationary waves

Concept Name	Study Link
Propagation of sound wave	Click Here
Factors affecting speed of sound in gas	Click Here
Standing longitudinal wave	Click Here
Beats	Click Here
Doppler Effect	Click Here
Standing waves	Click Here
Standing wave in a string fixed at both ends	Click Here

Kinetic theory of gases and Radiation

Concept Name	Study Link
Thermal stress and thermal strain	Click Here
Heat	Click Here
Basics of conduction	Click Here
States of matter	Click Here
Gas laws(I)	Click Here
Ideal gas equation	Click Here
Various types of speeds of ideal gases	Click Here
Kinetic energy of ideal gas	Click Here
Specific heat of a gas	Click Here
Mayer's formula	Click Here
Adiabatic process	Click Here
Second Law of Thermodynamics	Click Here
Entropy	Click Here
Carnot Engine	Click Here
Cyclic and Non cyclic process	Click Here
Isobaric process	Click Here

Refrigerator or Heat Pump	Click Here
Introduction to Thermodynamics	Click Here
Thermodynamic variables and equation of state	Click Here
Heat, Internal energy and Work in Thermodynamics	Click Here
First law of Thermodynamics	Click Here

Wave theory of light

Concept Name	Study Link
Displacement current	Click Here
Nature of Electromagnetic Waves	Click Here
Energy Density and Intensity of EM waves	Click Here
Electromagnetic spectrum	Click Here

Interference and diffraction

Concept Name	Study Link
Polarization of light	Click Here
Malus' Law	Click Here
Interference of light waves- 1	Click Here
Interference of light waves- 2	Click Here
Fraunhofer diffraction by a single slit	Click Here
Young's double slit experiment -1	Click Here
Young's double slit experiment- 2	Click Here
YDSE with thin slab	Click Here
Thin film interference	Click Here

Electrostatics

Concept Name	Study Link
Coulomb's Law	Click Here
Electric field	Click Here
Electric field lines	Click Here
Electric field due to uniformly charged disc	Click Here
Dipole in Uniform electric field	Click Here
Gauss law	Click Here
Electric flux(I)	Click Here
Electric flux(II)	Click Here
Applications of Gauss Law(I)	Click Here
Applications of Gauss Law(II)	Click Here
Electric potential	Click Here
Relation between electric field and potential	Click Here
Capacitor	Click Here
Electric potential due to continuous charge distribution(I)	Click Here
Electric flux through cone or disc	Click Here
Applications of Gauss Law(IV)	Click Here
Electric potential due to continuous charge distribution(II)	Click Here

Applications of Gauss Law(V)	Click Here
Equipotential surface	Click Here
Parallel plate capacitor	Click Here
Electrostatic Potential energy	Click Here
Combination of capacitors	Click Here
Energy stored in capacitor	Click Here
Dielectrics	Click Here

Current Electricity

Concept Name	Study Link
Current Density	Click Here
Drift Velocity	Click Here
Ohms Law	Click Here
Resistance and Resistivity	Click Here
Series grouping of Resistance	Click Here
Parallel Grouping of Resistance	Click Here
Cell and Emf of a cell	Click Here
Current Given by a Cell	Click Here
Series and Parallel Grouping of cell	Click Here
Mixed Grouping of Cell	Click Here
Emf of a cell when the cell is charging and discharging and Open circuit and Short circuit	Click Here
Kirchhoff first law	Click Here
Kirchhoff's second law	Click Here
KCL, KVL, Conservation of charge and Energy and introduction to Galvanometer	Click Here
Ammeter	Click Here
Voltmeter	Click Here
Wheatstone's bridge	Click Here
Meter Bridge	Click Here
Potential gradient & calliberation	Click Here
Determine the internal resistance of a cell	Click Here
Faraday's laws of electrolysis	Click Here

Electromagnetic Induction

Concept Name	Study Link
Magnetic flux	Click Here
Faraday's law of induction	Click Here
Motional Electromotive force(I)	Click Here
AC voltage applied to an inductor	Click Here
Motional Electromotive force(II)	Click Here
AC voltage applied to a capacitor	Click Here
Energy consideration in Motional Emf	Click Here
Motional Electromotive force(III)	Click Here
Motional Electromotive force(IV)	Click Here
Induced Electric field	Click Here

Series LR circuit	Click Here
Time Varying Magnetic field	Click Here
Series RC circuit	Click Here
Self inductance	Click Here
Series LCR circuit	Click Here
Resonance in Series LCR circuit	Click Here
Mutual Inductance	Click Here
Quality factor	Click Here
Mutual Inductance for two coaxial long solenoids	Click Here
Mutual Inductance for a pair of concentric coils	Click Here
Power in an AC circuit	Click Here
Energy stored in an inductor	Click Here
Transformers	Click Here

Electrons and photons

Concept Name	Study Link
Electron Emission	Click Here
Photon theory of light	Click Here
Wave nature of matter	Click Here
De-broglie wavelength of an electron	Click Here
Davisson-Germer Experiment	Click Here
Photoelectric effect	Click Here
Photons emitted by a source per second	Click Here
Intensity of radiation	Click Here
Photon Flux	Click Here
Graphs in Photoelectric effect	Click Here

Atoms, Molecules and Nuclei

Concept Name	Study Link
Bohr's Model of hydrogen atom	Click Here
Radius of orbit and velocity of electron	Click Here
Energy of electron in nth orbit	Click Here
Energy level for Hydrogen	Click Here
Line spectra of hydrogen atom	Click Here
Mass-energy equivalence and Nuclear binding energy	Click Here
De-broglie's explanation of Bohr's second postulate	Click Here
Effect of Nucleus motion on Energy	Click Here
Law of radioactivity decay	Click Here
Atomic Collision	Click Here
Characteristic X-Rays	Click Here
Continuous X-ray	Click Here
Radioactivity - (I)	Click Here
Radioactivity - (II)	Click Here
Nuclear fission	Click Here

Binding Energy Per Nucleon	Click Here
Nuclear Force and Stability	Click Here

Semiconductors

Concept Name	Study Link
Electric Conductivity	Click Here
Extrinsic Semiconductor(II)	Click Here
Zener diode	Click Here
Optoelectronic junction devices (II)	Click Here
Characteristics of a P-N junction	Click Here
Semiconductor Diode(II)	Click Here
Junction Transistor	Click Here
Transistor as a device	Click Here
Classification of solids on the basis of Band theory	Click Here
P-N Junction as a rectifier (II)	Click Here
Zener diode as a voltage regulator	Click Here
Optoelectronic junction devices (I)	Click Here
Optoelectronic junction devices (III)	Click Here
n-p-n transistor	Click Here
p-n-p Transistor	Click Here
Transistor as a device (II)	Click Here

Communication Systems

Concept Name	Study Link
Propagation of Electromagnetic Waves	Click Here
Amplitude Modulation	Click Here

CHEMISTRY

Some basic concepts in chemistry

Concept Name	Study Link
Empirical Formula And Molecular Formula	Click Here
MOLE CONCEPT AND MOLAR MASS	Click Here
Stoichiometry, Stoichiometric Calculations And Limiting Reagent	Click Here
Reactions in Solutions	Click Here

States of Matter : Gases and liquids

Concept Name	Study Link
The Gas Laws- Boyle's Law (Pressure - Volume Relationship)	Click Here
Intermolecular Forces	Click Here
Ideal Gas Equation	Click Here
Dalton's Law of Partial Pressure	Click Here

Kinetic Molecular Theory of Gases	Click Here
Behaviour of Real Gases: Deviation from Ideal Gas Behaviour	Click Here

Redox Reactions

Concept Name	Study Link
Oxidation Number and Oxidation State	Click Here
Types of Redox Reactions	Click Here
Balancing of Redox Reaction: Ion Electrode Method	Click Here
Balancing of Disproportionation Redox Reaction: Ion Electrode Method	Click Here
Balancing of Redox Reaction: Oxidation Number Method	Click Here
Quantitative Aspect of Electrolytic Cell: Faraday's First Law	Click Here
Faraday's Second Law	Click Here
Galvanic Cells	Click Here

Surface Chemistry

Concept Name	Study Link
Thermodynamics of Adsorption	Click Here
Physical Adsorption	Click Here
Freundlich Isotherm	Click Here
Colloids	Click Here
Coagulation/Floculation	Click Here
Charge on Colloids	Click Here
Properties of Colloidal Solution	Click Here

Nature of chemical bond

Concept Name	Study Link
Lewis Representation of Simple Molecules (Lewis Structure)	Click Here
Limitations of The Octet Rule	Click Here
Bond Parameters: length, angle, energy, strength	Click Here
Fajan's Rule and Covalent Character in Ionic Bond	Click Here
Pi (p-p) and Pi (p-d) bonding	Click Here
How to Find Hybridisation	Click Here
VSPER (Valence Shell Electron Pair Repulsion) Theory	Click Here
Shapes of Molecules	Click Here
Dipole Moment	Click Here
Hydrogen Bonding	Click Here

Hydrogen

Concept Name	Study Link
Preparation of Dihydrogen	Click Here
Uses of Hydrogen	Click Here
Water: Structure of Water and Ice	Click Here
Hard and Soft Water	Click Here

Chemical Properties of H2O2	Click Here

S - Block Elements (Alkali and Alkaline Earth Metals)

Concept Name	Study Link
Chemical Properties of Alkali Metals - 1	Click Here
Chemical Properties of Alkali Metals - 2	Click Here
Anomalous Behaviour of Lithium	Click Here
Halides of Alkali Metals	Click Here
Sodium Chloride and Sodium Hydroxide	Click Here
Alkaline Earth Metals(Physical Properties) - 1	Click Here
Alkaline Earth Metals(Chemical Properties) - 1	Click Here
Alkaline Earth Metals(Chemical Properties) - 2	Click Here
Anomalous Behaviour of Beryllium	Click Here

Basic principles and techniques in organic chemistry

Concept Name	Study Link
Functional Group	Click Here
IUPAC Nomenclature - 1	Click Here
Carbocations	Click Here
Carbanions	Click Here
Alkyl Free Radicals	Click Here
Nucleophiles and Electrophiles	Click Here
Inductive Effect	Click Here
Mesomeric or Resonance Effect	Click Here

Solid state

Concept Name	Study Link
Classification of Crystalline Solids	Click Here
Number of Atoms in a Unit Cell	Click Here
Interstitial Voids	Click Here
Packing Efficiency	Click Here

Solutions and colligative properties

Concept Name	Study Link
Concentration Terms	Click Here
Ideal Solution	Click Here
Elevation in Boiling Point	Click Here
Depression in Freezing Point	Click Here
Osmosis and Osmotic Pressure	Click Here
Isotonic, Hypertonic, Hypotonic Solution	Click Here
van't Hoff factor(i) or Abnormal Colligative Property	Click Here
Calculation of Extent of Dissociation in an Electrolytic Solution	Click Here

Chemical thermodynamics and energetic

Concept Name	Study Link
Path, State Function, Types Of Process	Click Here
Reversible, Irreversible, Polytropic Process	Click Here
First Law Or Law Of Conservation Of Energy	Click Here
Isothermal Reversible And Isothermal Irreversible	Click Here
Adiabatic Reversible And Irreversible Expansion	Click Here
Heat Capacity	Click Here
Thermochemistry And Enthalpy For Chemical Reaction	Click Here
Enthalpy Of Combustion	Click Here
Enthalpy Of Dissociation, Atomisation And Phase Change	Click Here
Lattice Enthalpy, Hydration Enthalpy And Enthalpy Of Solution	Click Here
Hess's Law	Click Here
Calculation Of Changes In S For Different Process	Click Here
Gibbs Energy And Change In Gibbs Energy	Click Here
Spontaneity Criteria With Gibbs Energy (G)	Click Here

Electrochemistry

Concept Name	Study Link
Electrode Potential and EMF of Cells	Click Here
Nernst Equation	Click Here
Nernst Equation for Full Cell	Click Here
Equilibrium Constant Through Nernst Equation	Click Here
Molar and Equivalent Conductance	Click Here
Molar Conductance at Infinite Dilution	Click Here
Kohlrausch's Law	Click Here

Chemical kinetics

Concept Name	Study Link
Instantaneous Rate of Reaction	Click Here
Factors Affecting Rate of Reaction	Click Here
Factors Affecting Rate of Reaction(2)	Click Here
Rate Law	Click Here
Important Points About Order of Reaction	Click Here
Zero Order Kinetics - Zero Order Reaction	Click Here
Integrated Rate Law - Zero Order Reaction	Click Here
Half Life and Life Time of Reaction	Click Here
Graphs for Zero-Order Reaction	Click Here
First Order Reaction	Click Here
Half Life of First Order Reaction	Click Here
Graphs of First Order Kinetics	Click Here
nth Order Kinetics	Click Here
Molecularity of Reaction	Click Here

Exception(Arrhenius Theory)	Click Here
Effective Activation Energy	Click Here

General principles and processes of isolation of elements

Concept Name	Study Link
Froth Floatation Process	Click Here
Leaching: Chemical Method	Click Here
Conversion of ore into oxide - Calcination and Roasting	Click Here
Electrolytic Refining	Click Here
Vapour Phase Refining	Click Here

P-block elements

Concept Name	Study Link
Physical Properties of Group 13	Click Here
Physical Properties of Group 13 - 1	Click Here
Physical Properties of Group 13 - 2	Click Here
Chemical Properties of Group 13	Click Here
Borax	Click Here
Group 14 (Carbon Family): Physical Properties - 2	Click Here
Allotropic Form of Carbon(Diamond)	Click Here
Allotropic Form of Carbon(Graphite)	Click Here
Silicates - 1	Click Here
Silicates - 2	Click Here
SiO2	Click Here
Silicones	Click Here
Group 15 - Physical and Chemical Properties	Click Here
Ammonia(NH3)	Click Here
Phosphine and Phosphorus Chloride	Click Here
Group 16: Oxyen Family - Physical Properties	Click Here
Chemical Properties - 1	Click Here
Chemical Properties - 2	Click Here
Oxides	Click Here
Interhalogen Compounds	Click Here
General properties of Hydrides of Group 17	Click Here
Chlorine(Cl2)	Click Here
Important Compounds of Xenon	Click Here

d - and f - BLOCK ELEMENTS

Concept Name	Study Link
Screening Effect and Lanthanoid Contraction	Click Here
Atomic Size/Radii	Click Here
Ionisation Energy	Click Here
Oxidation State	Click Here
Magnetic Properties and Character	Click Here

Formation of Coloured Ions	Click Here
Physical Properties of f-block	Click Here
Properties of Actinoids	Click Here

Co-ordination Compounds

Concept Name	Study Link
Addition Compounds or Molecular Compounds	Click Here
Terminologies Related to Coordination Compounds	Click Here
Types of Ligands - 1	Click Here
Oxidation Number	Click Here
Coordination Number	Click Here
IUPAC Nomenclature of Coordination or Complex Compound	Click Here
Magnetic Moment(On the Basis of VBT)	Click Here
Applications of CFT	Click Here
Stereoisomerism	Click Here
Structural Isomerism - 1	Click Here
Structural Isomerism - 2	Click Here

Halogen derivatives of alkanes (and arenes)

Concept Name	Study Link
Nature of C-X bond and Physical Properties	Click Here
Reaction with PCl5, PCl3, SOCl2 and HX	Click Here
Strong and Weak bases	Click Here
SN2 Reaction	Click Here
SN1 Reaction	Click Here
Nucleophilic Substitution	Click Here

Alcohols, Phenols and Ethers

Concept Name	Study Link
Grignard Reagent - 1	Click Here
Reduction by LiAlH4 and NaBH4	Click Here
Acylation and Oxidation of Alcohols	Click Here
Reaction of Phenols with dil. HNO3	Click Here

Aldehydes, Ketones and Carboxylic Acids

Concept Name	Study Link
Preparation of Aldehydes	Click Here
Nucelophilic Addition Reaction	Click Here
Reimer-Tiemann and Kolbe's Schmidt Reactions	Click Here
Intermolecular Cannizaro Reaction	Click Here
Methods of Preparation of Carboxylic Acids	Click Here
Acidity in Carboxylic Acids	Click Here

Organic Compounds Containing Nitrogen

Concept Name	Study Link
Test for Amines	Click Here
Carbylamine Test	Click Here
Reaction with $NaNO_2$ + HCl	Click Here
Basicity of Aliphatic Amines	Click Here
Azo-Coupling Reaction	Click Here

Biomolecules

Concept Name	Study Link
Carbohydrates	Click Here
Anomers, Epimers, Mutarotation	Click Here
Amino Acids - 1	Click Here
Proteins	Click Here
Enzymes	Click Here

Polymers

Concept Name	Study Link
Polymers 3	Click Here
Synthetic Rubbers	Click Here
Polyamide	Click Here
Polyester	Click Here

Chemistry in Everyday Life

Concept Name	Study Link
Analgesics	Click Here
Antibiotics	Click Here
Preservatives	Click Here

MATHEMATICS

Trigonometric Functions

Concept Name	Study Link
Measurement of Angle	Click Here
Trigonometric Functions of Acute Angles	Click Here
Trigonometric Identities	Click Here

Trigonometric Functions of Compound Angles

Concept Name	Study Link
Trigonometric Ratio for Compound Angles (Part 1)	Click Here
Trigonometric Ratio for Compound Angles (Some more Result)	Click Here

Double Angle Formula and Reduction Formula	Click Here
Half Angle Formula	Click Here

Factorization Formulae

Concept Name	Study Link
Trigonometric Equations	Click Here
General Solution of some Standard Equations (Part 1)	Click Here
Cosine Rule	Click Here
Height and Distance	Click Here
Inverse Trigonometric Function	Click Here
Domain and range of Inverse Trigonometric Function (Part 1)	Click Here
Complementary Angles	Click Here
Multiple angles in terms of arctan and arccos	Click Here

Straight Line

Concept Name	Study Link
Coordinate Axes	Click Here
Distance between two points	Click Here
Section Formula	Click Here
Centroid	Click Here
Incentre	Click Here
Circumcentre and Orthocentre	Click Here
Area of Triangle	Click Here
Locus and its Equation	Click Here
Straight Line	Click Here
Equation of Straight Line (Part 1)	Click Here
Equation of Straight Line (Part 2)	Click Here
Normal and Parametric form of a line	Click Here
Angle between two straight line	Click Here
Line parallel and perpendicular to a given line	Click Here
Distance of a Point From a Line	Click Here
Point of intersection of two lines	Click Here
Family of Lines	Click Here
Equation of the Bisectors	Click Here

Sets, Relations and Functions

Concept Name	Study Link
Subsets, Proper Subset, Improper Subset, Intervals	Click Here
Union of sets, Properties of union	Click Here
Intersection of Set, Properties of Intersection	Click Here
Cardinal number of some sets	Click Here
Domain, Range of Relation	Click Here
Reflexive, Symmetric and Transitive relation	Click Here
Equivalence relation	Click Here

Functions, Image and Pre-image	Click Here
Piecewise function	Click Here
One - One Function(injective)	Click Here
Onto Function or Surjective	Click Here
Into Function, Bijective function, Equality of function	Click Here
Composition of function, Condition for Composite Function, Property of Composite Function	Click Here
Even and Odd Function	Click Here

Sequence and Series

Concept Name	Study Link
Sequences, Series and Progression	Click Here
Arithmetic Progression	Click Here
Important Properties of an AP -Part 1	Click Here
Important Properties of an AP -Part 2	Click Here
Sum of n terms of an AP	Click Here
Arithmetic Mean	Click Here
Geometric Progression	Click Here
Geometric Mean	Click Here
Sum of n-term of a GP	Click Here
Harmonic Progression	Click Here
Harmonic Mean	Click Here
Sum of an infinite AGP	Click Here
Summation by Sigma Operator	Click Here
Sum of Common Series - (Part 1)	Click Here
Sum of Common Series (Part-2)	Click Here
Sum of Common Series (Part 3)	Click Here

Mathematical Logic

Concept Name	Study Link
Truth Table	Click Here
Relation Between Set Notation and Truth Table	Click Here
Converse, Inverse, and Contrapositive	Click Here
Tautology And Contradiction	Click Here
Algebra of Statements	Click Here

Circle

Concept Name	Study Link
Circle(Definition)	Click Here
Diametric Form of a Circle	Click Here
Different Form of the Equation of the Circle	Click Here
Position of a Point With Respect to Circle	Click Here
Line and Circle	Click Here
Equation of the Tangent in Point Form	Click Here

Intersection of Two Circle	Click Here
Family of Circles	Click Here
Angle of Intersection of Two Circle	Click Here
Introduction to Conic Section	Click Here

Conics

Concept Name	Study Link
Parabola	Click Here
Length of the Latus rectum and parametric form	Click Here
Other Form of Parabola	Click Here
General equation of Parabola	Click Here
Tangents of Parabola in Point Form	Click Here
Tangents of Parabola in Slope Form	Click Here
What is Ellipse?	Click Here
Length of Latusrectum	Click Here
Parametric equation of Ellipse	Click Here
Horizontal and Vertical Ellipse	Click Here
Length of Latusrectum and Parametric Equation of Hyperbola	Click Here
Conjugate Hyperbola	Click Here
Position of a point with respect to Hyperbola	Click Here
Equation of Tangent of Hyperbola in Point Form	Click Here
Equation of Tangent of Hyperbola in Parametric Form and Slope Form	Click Here
Rectangular Hyperbola	Click Here

Vectors

Concept Name	Study Link
Types of Vectors	Click Here
Direction Cosines and Direction Ratio	Click Here
Component of vector and Vector Joining Two Points	Click Here
Multiplication of a Vector by a Scalar	Click Here
Section Formula	Click Here
Dot (Scalar) Product of Two Vectors	Click Here
Dot (Scalar) Product in Terms of Components	Click Here
Finding Components of a vector Along and Perpendicular to another Vector	Click Here
Vector (or Cross) Product of Two Vectors	Click Here
Vector Product in Terms of Components	Click Here
Geometrical Interpretation of Vector product	Click Here
Scalar Triple Product	Click Here
Vector Triple Product	Click Here

Three Dimensional Geometry

Concept Name	Study Link
Introduction to 3D Coordinate System	Click Here
Section Formula, Direction Cosines and Direction Ratio	Click Here

Equations for a Line in Space	Click Here
Angle Between Two Lines	Click Here
Shortest Distance between Two Lines	Click Here

Plane

Concept Name	Study Link
Equation of a plane in normal form	Click Here
Equation of a plane perpendicular to a given vector and passing through a given point	Click Here
Equation of a Plane Passing Through a Given Point and Parallel to Two Given Vectors	Click Here
Family of Plane	Click Here
Distance of a Point From a Plane	Click Here
Image of a Point in the Plane	Click Here
Equation of The Plane Bisecting the Angle Between Two Planes	Click Here
Line of Intersection of Two Plane and Angle Between a Line and a Plane	Click Here
Intersection of Line and Plane	Click Here
Coplanarity of Two Lines	Click Here

Continuity

Concept Name	Study Link
Continuity	Click Here
Directional Continuity and Continuity over an Interval	Click Here
Differentiability and Existence of Derivative	Click Here
Examining differentiability Using Graph of Function	Click Here

Differentiation

Concept Name	Study Link
DIFFERENTIATION	Click Here
Derivative of the Trigonometric Function (csc/sec/cot)	Click Here
Rules of Differentiation (Chain Rule)	Click Here
Differentiation of Function in Parametric Form	Click Here
Differentiation of a Function wrt Another Function and Higher Order derivative of a Function	Click Here

Applications of Derivative

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Angle of Intersection of Two Curves	Click Here
Length of Tangent, Normal, Subtangent and subnormal	Click Here
Rolle's Theorem	Click Here
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Monotonicity (Increasing and Decreasing Function)	Click Here
Maxima and Minima of a Function	Click Here

Integration

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Some Special Integration	Click Here
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Integration by Parts	Click Here
Integration Using Partial Fraction	Click Here
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Applications of Definite Integral

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Piecewise Definite integration	Click Here
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Differential Equation

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Formation of Differential Equation and Solutions of a Differential Equation	Click Here
Homogeneous Differential Equation	Click Here
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Bernoulli’s Equation	Click Here

Statistics

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Dispersion (Variance and Standard Deviation)	Click Here
Central Values	Click Here

Probability Distributions

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