


## UBTER JEEP Syllabus 2025 - Mathematics

Units	Topics
Algebra	Polynomials; Pair Of Linear Equations In Two Variables; Quadratic Equations; Arithmetic Progressions
Number Systems	Real Numbers
Trigonometry	Introduction To Trigonometry; Trigonometric Identities; Heights And Distance
Coordinate Geometry	Lines In Two-Dimension
Geometry	Introduction Of Euclid's Geometry; Lines And Angles; Quadrilaterals; Area; Triangles; Circles; Construction
Statistics and Probability	Mean, Median And Mode Of Grouped Data; Cumulative Frequency Graph; Classical Definition Of Probability. Simple Problems In Finding The Probability Of An Event.
Mensuration	Areas Related To Circles; Surface Areas And Volumes

## UBTER JEEP Chemistry Syllabus 2025

Units	Topics
Acids, Bases And Salts	Their Definitions In Terms Of Furnishing Of $H^+$ And $OH^-$ Ions, General Properties, Examples And Uses, Concept Of Ph Scale (Definition Relating To Logarithm Not Required), Importance Of Ph In Everyday Life; Preparation And Uses Of Sodium Hydroxide, Bleaching Powder, Baking Soda, Washing Soda And Plaster Of Paris




<p>Matter-Nature And Behaviour</p>	<p>Definition Of Matter; Solid, Liquid And Gas; Characteristics - Shape, Volume, Density; Change Of State (Absorption Of Heat), Freezing, Evaporation (Cooling By Evaporation), Condensation, Sublimation          Nature Of Matter: Elements, Compounds And Mixtures. Heterogeneous And Homogeneous Mixtures, Colloids And Suspensions          Particle Nature And Their Basic Units: Atoms And Molecules, Law Of Constant Proportions, Atomic And Molecular Masses. Mole Concept: Relationship Of Mole To Mass Of The Particles And Numbers          Structure Of Atoms: Electrons, Protons And Neutrons, Valency, Chemical Formula Of Common Compounds. Isotopes And Isobars</p>
<p>Chemical Reactions</p>	<p>Chemical Equation, Balanced Chemical Equation, Implications Of A Balanced Chemical Equation, Types Of Chemical Reactions: Combination, Decomposition, Displacement, Double Displacement, Precipitation, Neutralization, Oxidation And Reduction</p> <div data-bbox="548 863 1365 1157" style="text-align: center;">  </div>
<p>Carbon Compounds</p>	<p>Covalent Bonding In Carbon Compounds. Versatile Nature Of Carbon. Homologous Series; Nomenclature Of Carbon Compounds Containing Functional Groups (Halogens, Alcohol, Ketones, Aldehydes, Alkanes And Alkynes), Difference Between Saturated Hydrocarbons And Unsaturated Hydrocarbons. Chemical Properties Of Carbon Compounds (Combustion, Oxidation, Addition And Substitution Reaction). Ethanol And Ethanoic Acid (Only Properties And Uses), Soaps And Detergents</p>
<p>Metals And Nonmetals</p>	<p>Properties Of Metals And Non-Metals; Reactivity Series; Formation And Properties Of Ionic Compounds; Basic Metallurgical Processes; Corrosion And Its Prevention</p>
<p>Periodic Classification Of Elements</p>	<p>Need For Classification, Early Attempts At Classification Of Elements (Dobereiner's Triads, Newland's; Law Of Octaves, Mendeleev's Periodic</p>

Table), Modern Periodic Table, Gradation In Properties, Valency, Atomic Number, Metallic And Non-Metallic Properties.

## UBTER JEEP Syllabus 2025 - Physics

Units	Topics
Effects Of Current	Electric Current, Potential Difference And Electric Current. Ohm's Law; Resistance, Resistivity, Factors On Which The Resistance Of A Conductor Depends. Series Combination Of Resistors, Parallel Combination Of Resistors And Its Applications In Daily Life. Heating Effect Of Electric Current And Its Applications In Daily Life. Electric Power, Interrelation Between P, V, I And R
Motion, Force And Work	<p>Motion: Distance And Displacement, Velocity; Uniform And Non-Uniform Motion Along A Straight Line; Acceleration, Distance-Time And Velocity-Time Graphs For Uniform Motion And Uniformly Accelerated Motion, Derivation Of Equations Of Motion By Graphical Method; Elementary Idea Of Uniform Circular Motion.</p> <p>Force And Newton's Laws: Force And Motion, Newton's Laws Of Motion, Action And Reaction Forces, Inertia Of A Body, Inertia And Mass, Momentum, Force And Acceleration. Elementary Idea Of Conservation Of Momentum.</p> <p>Gravitation: Gravitation; Universal Law Of Gravitation, Force Of Gravitation Of The Earth (Gravity), Acceleration Due To Gravity; Mass And Weight; Freefall</p> <p>Floatation: Thrust And Pressure. Archimedes' Principle; Buoyancy; Elementary Idea Of Relative Density</p> <p>Work, Energy And Power: Work Done By A Force, Energy, Power; Kinetic And Potential Energy; Law Of Conservation Of Energy</p> <p>Sound: Nature Of Sound And Its Propagation In Various Media, Speed Of Sound, Range Of Hearing In Humans; Ultrasound; Reflection Of Sound; Echo And Sonar. Structure Of The Human Ear (Auditory Aspect Only).</p>
Natural Resources	Sources Of Energy; Different Forms Of Energy, Conventional And Non-Conventional Sources Of Energy: Fossil Fuels, Solar Energy; Biogas; Wind, Water And Tidal Energy; Nuclear Energy. Renewable Versus Non-Renewable Sources Of Energy.
Magnetic Effects Of Current	Magnetic Field, Field Lines, Field Due To A Current-Carrying Conductor, Field Due To Current Carrying Coil Or Solenoid; Force On The Current-Carrying Conductor, Fleming's Left Hand Rule, Electric Motor, Electromagnetic Induction. Induced Potential Difference, Induced Current. Fleming's Right-Hand Rule, Electric Generator, Direct

	Current. Alternating Current: Frequency Of Ac. Advantage Of Ac Over Dc. Domestic Electric Circuits
Management Of Natural Resources	Conservation And Judicious Use Of Natural Resources. Forest And Wild Life; Coal And Petroleum Conservation. Examples Of People's Participation In The Conservation Of Natural Resources. Big Dams: Advantages And Limitations; Alternatives, If Any. Water Harvesting. Sustainability Of Natural Resources
Our Environment	Eco-System, Environmental Problems, Ozone Depletion, Waste Production And Their Solutions. Biodegradable And Non-Biodegradable Substances