

OUAT Entrance Exam Syllabus

OUAT - Mathematics

- Mathematical Induction
- Binomial Theorem and its Simple Applications
- Sequences and Series
- Limit Continuity and Differentiability
- Sets Relations and Functions
- Complex Numbers and Quadratic Equations
- Statistics and Probability
- Trigonometry
- Mathematical Reasoning
- Matrices and Determinants
- Permutations and Combinations
- Integral Calculus
- Differential Equations
- Coordinate Geometry
- Three-Dimensional Geometry
- Vector Algebra

OUAT - Biology

- Biology and Human Welfare
- Genetics and Evolution
- Ecology and Environment
- Biotechnology and its Applications
- Sexual Reproduction

OUAT - Physics

- Rotational Energy
- Thermodynamics
- Laws of Motion
- Kinematics
- Gravitation
- Electrostatics
- Current Electricity
- Properties of Solids and Liquids
- Physics and Measurement
- Work Energy and Power
- Kinetic Theory of Gases
- Oscillations and Waves

- Magnetic Effects of Current and Magnetism
- Electromagnetic Induction and Alternating Currents
- Electromagnetic Waves
- Optics
- Dual Nature of Matter and Radiation
- Atoms and Nuclei
- Electronic Devices
- Communication Systems
- Experimental Skills

OUAT - Chemistry

- Solutions
- Equilibrium
- Redox Reactions and Electrochemistry
- Chemical Kinetics
- States of Matter
- Atomic Structure
- Chemical Bonding and Molecular Structure
- Chemical Thermodynamics
- Surface Chemistry
- Classification of Elements and Periodicity of Properties
- General Principles and Processes of Isolation of Metals
- Hydrogen
- S-Block Elements
- Chemistry in Everyday Life
- Principles Related to Practical Chemistry
- P-Block Elements
- Hydrocarbons
- Organic Compounds containing Hydrogen
- Organic Compounds containing Oxygen
- D and F-block Elements
- Coordination Compounds
- Environmental Chemistry
- Purification and Characterization of Organic Compounds
- Basic Principles of Organic Chemistry
- Organic Compounds containing Nitrogen
- Polymers
- Biomolecules

OUAT - Mental Aptitude

- Area

- Compound Interest
- Average
- Problem on Ages
- Alligation or Mixture
- Percentage
- Banker's Discount
- HCF and LCM
- Boats and Streams
- Simple Interest
- Surds and Indices
- Problems on Trains
- Ratio and Proportion
- Profit and Loss
- Pipes and Cisterns
- Square Root and Cube Root
- Partnership
- Time and Distance
- Volume and Surface Area
- Time and Work