

B. Tech Aviation
Syllabus for Entrance Examination

Part – A

General Aptitude

- Test of Reasoning
- Verbal Analogies
- Numerical Ability
- English Grammar
- Verbal Deductions
- Word Groups
- Structural Orientation

Part – B


Mathematics:

- Mathematical Inductions
- Sequence and Series
- Set Relations Functions
- Matrices and Determinants
- Complex Numbers and Quadratic Equations
- Limits, Continuity and Differentiability
- Differential Calculus
- Integral Calculus
- Vector Algebra
- Probability and Statistics
- Trigonometry

Physics:

- Laws of Motion, Work Energy and Power
- Flow of Fluids
- Gravitation
- Thermodynamics, Kinetic Theory of Gases
- Oscillation and Waves
- Electrostatics
- Current Electricity
- Magnetism, AC Currents, Electromagnetic Waves
- Optics, Dual nature of Matter and Radiation
- Atoms and Nuclei
- Electronic Device and Communication Systems



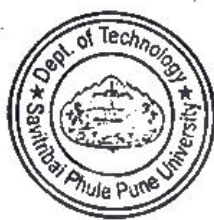

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Chemistry

- States of Matter
- Atomic Structure
- Chemical Bonding and Molecular Structure
- Chemical Thermodynamics, Solutions, Equilibrium
- Redox Reactions and Electrochemistry
- Chemical Kinetics, Surface Chemistry
- Periodic Table and Periodicity
- Isolation of Metals
- Hydrogen
- s-Block Elements
- p-Block Elements
- d- and f- Block Elements
- Co-ordination Chemistry
- Basic Principles of Organic Chemistry, IUPAC Nomenclature
- Hydrocarbons
- Halogens
- Alcohols, Phenols, Ethers
- Aldehydes, Ketones, Acids and Esters
- Polymers
- Biomolecules

General Knowledge on Aviation

- Air Safety
- Accidents and Incidents
- Air Traffic Control (ATC)
- Aeromedical Perspective of Human Performance
- Aeronautical Decision Making
- Aeronautical chart



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