

Savitribai Phule Pune University
Department of Technology
BSC Data Science (Entrance Exam Syllabus)

Section: A

Aptitude (Logical Reasoning & Analytics Ability)

Quantitative Aptitude: Percentages, Profit and Loss, Ratio and Proportion, Averages, Time and Work, Time, Speed and Distance, Simple and Compound Interest, Number System, and Data Interpretation. **Logical Reasoning:** Number & Alphabets series, Coding-Decoding, Blood Relations, Direction Sense, Venn diagram, Analytical puzzles.

Section: B

Physics

Units & Measurements, Rotational Motion and Mechanical Properties of fluids, Kinetic theory and Thermodynamics, Electrostatics and electric current, Magnetic Fields due to Electric Current, Modern Physics, Superposition of Waves, Electromagnetic induction, Structure of Atoms and Nuclei, Semiconductor Devices, Dual Nature of Radiation and Matter, Oscillations.

Chemistry

Atomic Structure, Periodic Table, Chemical Bonding, States of Matter, Acids, Bases & Salts, Organic Chemistry, Inorganic chemistry, Solutions, Environmental Chemistry, Motion, Laws of Motion, Work, Energy & Power, Gravitation, Thermodynamics, Waves, Biomolecules, Electricity (Ohm's Law), Applied Chemistry, Introduction to Polymer Chemistry, Green Chemistry and Nano-chemistry, Electrochemistry.

Mathematics

Linear & Quadratic Equations, Functions (basic), Sets & Relations, Probability (basic), Statistics, Permutation & Combination, Graph Interpretation, Matrices, Trigonometric Functions, Pair of straight lines, Vectors, Line and Plane, Linear programming Problem, Definite Integration, Applications of Derivatives, Indefinite Integration, Definite Integration, Application of Definite Integration, Differential Equation, Probability Distribution, Binomial Distribution.

Computer Awareness

Basics of Computer System, Hardware vs Software, Internet Basics, Data vs Information, fundamental internet concepts including the Internet, World Wide Web, browsers, search engines, IP address, URL, and email, as well as the distinction between data (raw facts) and information (processed, meaningful data).