



Office of the Controller of Examinations & Admissions
University of Science & Technology, Meghalaya

Syllabus for B.Tech. Entrance Examination - 2025
(10+2 standard of CBSE/Indian State Boards)

Type of Exam: MCQ
Duration: 2 Hrs
Maximum Marks: 100

Physics :Units and Measurement, Motion in a Straight line, Law of motion, Work, Power and Energy, Gravitation, Oscillation, Fluid Mechanics, Heat and Thermodynamics, Wave Motion, Optics, Magnetism, Electrostatics and Current Electricity, Chemical Effect of Electric Current and its Applications, Atomic Structure, Modern Physics.

Mathematics: Sets, Relation and Function, Trigonometric Functions, Principle of Mathematical Induction, Complex Number and Quadratic Equation, Linear Inequalities, Straight Lines, Linear Inequality, Binomial Theorem, Sequence and Series, Vectors, Determinants, Differential Equations, Integrals, Application of Integrals, Three - dimensional Geometry, Probability

Chemistry: Some Basic Concepts of Chemistry, Structure of Atom, Classification of Elements and Periodicity in Properties, Chemical Bonding and Molecular Structure, States of Matter: Gases and Liquids, General Principles and Processes of Isolation of Elements Thermodynamics, Solutions, Electrochemistry, Chemical Kinetics, Surface Chemistry, Equilibrium, Redox Reactions, Aldehydes, Ketones and Carboxylic Acids, Environmental Chemistry