Syllabus:

Part I: Physics

Units & Measurement
Waves
Kinematics
Heat and Thermodynamics
Newton's Laws of Motion
Electrostatics
Impulse and Momentum
Current Electricity
Work and Energy
Magnetic Effect of Current
Rotational Motion
Electromagnetic Induction
Gravitation
Optics
Mechanics of Solids and Fluids
Modern Physics
Oscillations
Electronic Devices

Part II: Chemistry

States of Matter
Hydrogen and s-block elements
Atomic Structure
p- d- and f-block elements
Chemical Bonding & Molecular Structure
Principles of Organic Chemistry and Hydrocarbons
Thermodynamics
Stereochemistry
Physical and Chemical Equilibria
Organic Compounds with Functional Groups Containing Oxygen and Nitrogen
Electrochemistry
Biological, Industrial and Environmental chemistry
Chemical Kinetics
Theoretical Principles of Experimental Chemistry
Surface Chemistry

Part III: a) English Proficiency, b) Logical reasoning

A)
Grammar
Vocabulary

Reading Comprehension
Composition

B)
Verbal Reasoning
Nonverbal Reasoning

Part IV:

Mathematics:
Algebra
Ordinary Differential Equations
Trigonometry
Probability
Two-dimensional Coordinate Geometry
Vectors
Three dimensional coordinate geometry
Statistics
Differential calculus
Linear Programming
Integral calculus

Part IV: Biology

Diversity in Living World
Reproduction, Growth and Movement in Plants
Cell: The Unit of Life; Structure and Function
Reproduction and Development in Humans
Genetics and Evolution
Ecology and Environment
Structure and Function - Plants
Biology and Human Welfare
Structure and Function - Animals
Biotechnology and its Applications