

Syllabus for the entrance examination for the two M.Sc. courses (Biotechnology/Virology and Immunology) at the Institute of Health Sciences, Presidency University

Section A (80 marks): Syllabus of B.Sc. in Biotechnology (Major courses; up to the sixth semester) offered by Institute of Health Sciences, Presidency University or its equivalent syllabus of any recognized Indian University. The major topics will be as follows-

Biochemistry, Animal physiology, Plant physiology, Cell biology, Microbiology, Molecular biology, Genetics, Developmental biology, Immunology, Recombinant DNA Technology, Analytical and Biophysical Techniques, Molecular Virology, Industrial microbiology and Downstream processing, Nanobiotechnology, and Plant biotechnology, Food and Environmental Biotechnology, Bioinformatics and Biostatistics

Section B (20 marks): Syllabus of Chemistry as the Minor course offered by Institute of Health Sciences, Presidency University or its equivalent graduation level Chemistry (as pass course/minor course/core course). The major topics will be as follows-

Physical chemistry (Thermodynamics and Equilibrium, Chemical kinetics, Surface tension and Viscosity), Inorganic chemistry (Atomic structure, Chemical bonding), Organic chemistry (Reaction mechanisms and important reactions, Aromaticity, Functional groups), Stereochemistry