



Dayananda Sagar University

Faculty of Basic and Applied Sciences

Ph. D Entrance Test- 2025

Syllabus for Ph. D Entrance Test in Life Sciences

(Biochemistry/Biotechnology/Microbiology)

Note: Candidate will choose one among B-1, B-2, and B-3 depending on his/her area of research

PART B

(B-1) Biochemistry: as per the general syllabus of M.Sc. Biochemistry.

Basic concepts of chemistry, physiology, immunology, molecular biology, enzymology, metabolism, bioenergetics, cell signaling, endocrinology, proteomics, analytical techniques & other subjects taught in M.Sc. biochemistry.

(B-2) Biotechnology: as per the general syllabus of M.Sc. Biotechnology

Recombinant DNA technology, plant and animal biotechnology, techniques in molecular biology, genomics, eco-toxicology, bioprocess technology, genetic engineering, immuno-technology, classical & advanced genetics, basics of zoology & other subjects taught in M.Sc. Biotechnology

(B-3) Microbiology: as per the general syllabus of M.Sc. Microbiology

General, Eukaryotic, environmental, food and dairy microbiology, microbial physiology and growth kinetics, microbial genetics, sterilization, agricultural and medical microbiology & fermentation technology along with other subjects taught under M.Sc. Microbiology.