



MSc-Life Science Curriculum

Semester - I

Sr. No.	Course Name	Credits
1	Genetics	3
2	Physiology & Endocrinology	3
3	Cell Biology and Biochemistry	3
4	Ecology and Environmental Biology	3
5	Biophysics and Biostatistics	3
6	Immunology: Health and Diseases	3
7	Immunology: Plant Defense Mechanisms	3
8	Computer Applications in Life Science	3
9	Life Science laboratory I (Genetics + Cell Biology + Immunology)	2
10	Life Science laboratory II (Biophysics + Biostatistics + Environmental Biology + Ecology)	2

Semester-II

Sr. No.	Course Name	Credits
1	Research Methodology	3
2	Molecular Biology	3
3	Developmental Biology	3
4	Tissue Culture and Stem Cell Biology	3
5	Applications of Management in Life Science	3
6	Herbal Medicine-I	3
7	Photochemistry-I	3
8	Plant Toxicity and Remediation - I	3
9	Horticulture Techniques and Landscape Management I	3
10	Nutritional Biochemistry-I	3

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Semester-II		
Sr. No.	Course Name	Credits
11	Clinical Biochemistry-I	3
12	Neurobiology-I	3
13	Forensic Science-I	3
14	Genomics I	3
15	Reproductive Physiology-I	3
16	Fisheries and Marine Biology-I	3
17	Conservative Biology and Wild Life Management I	3
18	Toxicology-I	3
19	Entomology -I	3
20	Life Science Laboratory III (Plant Molecular Biology + Plant Development + Plant Tissue Culture)	2
21	Life Science Laboratory IV (Animal Molecular Biology + Animal Development Biology + Animal cell Culture)	2
22	Life Sciences Laboratory V (Elective Paper Practical)	3

Plant Sciences

Semester-III		
Sr. No.	Course Name	Credits
1	Pharmacognosy	3
2	Angiosperm taxonomy and Bioprospecting	3
3	Plant pathology	3
4	Plant Tissue Culture	3
5	Herbal Medicine II	3
6	Phytochemistry-II	3
7	Applied Botany-II	3
8	Plant Toxicity and Remediation - II	3
9	Horticulture Techniques and Landscape-II	3
10	Analytical Instrumentation and Data	2
11	Plant Science laboratory-I	2
12	Plant Science laboratory -II	2
13	Elective Laboratory-II	3
14	Seminar Presentation (Summer Internship)	3

Biochemistry

Semester-III		
Sr. No.	Course Name	Credits
1	Microbial Biochemistry	3
2	Enzymology	3
3	Biochemical Basis of Diseases	3
4	Metabolism Regulation and Integration	3
5	Nutritional Biochemistry-II	3
6	Neurobiology-II	3
7	Clinical Biochemistry-II	3
8	Forensic Science II	3
9	Genomics-II	3
10	Analytical Instrumentation and Data	2
11	Biochemistry Laboratory-I	2
12	Biochemistry Laboratory-II	2
13	Elective Laboratory-II	3
14	Seminar Presentation (Summer Internship)	3

Animal Sciences

Semester-III		
Sr. No.	Course Name	Credits
1	Animal Nutrition and Health Management	3
2	Biodiversity, Wildlife Biology and Ethology	3
3	Taxonomy; Systematics and Phylogeny	3
4	Animal Biotechnology	3
5	Conservation Biology and Wildlife Management II	3
6	Toxicology -II	3
7	Reproductive Physiology-II	3
8	Fisheries and Marine Biology -II	3
9	Entomology -II	3
10	Analytical Instrumentation and Data	2
11	Zoology Laboratory-I	2
12	Zoology Laboratory-II	2
13	Elective Laboratory-II	3
14	Seminar Presentation (Summer Internship)	3

Semester-IV

Sr. No.	Course Name	Credits
1	General Seminar	5
2	Proposal Seminar	5
3	Dissertation Seminar	15