

**SCHOOL OF BIOTECHNOLOGY**  
**Jawaharlal Nehru University**  
**New Delhi – 110067**

List of Courses offered during M.Sc. 1<sup>st</sup> Semester 2024-25

<b>Sl. No.</b>	<b>Course Code</b>	<b>Course Name</b>	<b>Credit</b>	<b>Course Incharge</b>
1.	BT 106	Biophysical Chemistry	3	Prof. Rajiv Bhat, Prof. Rajesh Mishra
2.	BT 118	Biochemistry and Enzymology	3	Prof. Sandeep Saxena, Dr. Ranjana Arya
3.	BT 121	Bioorganic Chemistry	3	Prof. B.S. Balaji , Dr. D. Choudhury
4.	BT 125	Mathematics and Statistics	3	Dr. J. Bhattacharya, Dr. Hemant R. Kushwaha
5.	BT 126	Bioinformatics	2	Dr. Hemant R. Kushwaha
6.	BT 127	Molecular Biology of Prokaryotes	3	Dr. S.M. Rajala, Dr. Swati Tiwari
7.	BT 129	Lab Techniques – I	8	Concerned Faculty Members
<b>Total Credits</b>			<b>25</b>	

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List of Courses offered during M.Sc. 3<sup>rd</sup> Semester Monsoon Semester 2024-25

<b>Sl. No.</b>	<b>Course Code</b>	<b>Course Name</b>	<b>Credit</b>	<b>Course Incharge</b>
1.	BT 245	Downstream Processing	3	Prof. S. S. Maitra, Prof. Kashyap K Dubey
2.	BT 233	Emerging Technologies	3	Prof. Suneel Kateriya, Dr. Jaydeep Bhattacharya, Dr. Virendera Singh
3.	BT 234	Bioentrepreneurship	2	Prof. Suneel Kateriya, Dr. Hemant R Kushwaha
4.	BT 235	Intellectual Property Rights, Biosafety & Bioethics	2	Prof. Sandeep Saxena, Dr. Ranjana Arya
5.	BT 236	Critical Analysis of Classical papers	2	All Faculty Members
6.	BT 237	Animal Biotechnology	2	Dr. Virendra Singh, Dr. Ravi Tandon
7.	BT 238	Seminar	1	All Faculty Members
8.	BT 239	Project Proposal, Preparation and Presentation	1	All Faculty Members
9.	BT 240	Dissertation – I	4	All Faculty Members
10.	*	Elective – I	2	Concerned Faculty Member
11.	*	Elective – II	2	Concerned Faculty Member
<b>Total Credits Semester III</b>			<b>24</b>	

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List of Elective courses for M.Sc. 3<sup>rd</sup> semester: (Select Any Two)

<b>Sl. No.</b>	<b>Code</b>	<b>Course Name</b>	<b>Credits</b>	<b>Faculty Name</b>
E1	BT 223	Chemical Biology	2	Prof. B.S. Balaji & Dr. D. Choudhury
E2	BT 224	Advances in Protein Chemistry	2	Prof. Rajiv Bhat & Prof. Rajesh Mishra
E3	BT 225	Infectious Disease Biology	2	Dr. Ravi Tandon & Prof. Rupesh Chaturvedi
E4	BT 229	Nano Biotechnology	2	Prof. Suneel Kateriya & Dr. Jaydeep Bhattacharya
E5	BT 230	Molecular and Cellular basis of Viral Oncogenesis	2	Dr. S.M. Rajala & Dr. Swati Tiwari
E6	BT 231	Advances in Human Molecular Genomics	2	Prof. D. Bharadwaj
E7	BT 243	Advanced Bioinformatics	2	Dr. Virendra Singh
E8	BT 244	Environmental Biotechnology	2	Dr. Manoj K Sharma & Prof. Sandeep Saxena
E9	BT 201	Molecular and Cellular Biology of Rare Diseases	2	Dr. Ranjana Arya
E10	BT 276	Microbiome Biotechnology	2	Dr. Arvind P. Singh

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**List of Courses offered during M.Sc. 2<sup>nd</sup> Semester Winter Semester 2024**

<b>Sl. No.</b>	<b>Course Code</b>	<b>Course Name</b>	<b>Credit</b>	<b>Course Incharge</b>
1.	BT 161	Immunology	3	Dr. Ravi Tandon, Dr. Virendra Singh & Dr. Ravi Verma
2.	BT 164	Lab Techniques – II	9	Concerned Faculty Member
3.	BT 232	Bioprocess Engineering	3	Dr. Abhinav Grover & Prof. Kashyap K Dubey
4.	BT 267	Plant Biotechnology	2	Dr. Manoj K Sharma & Prof. Suneel Kateriya
5.	BT 268	Microbiology	3	Dr. S.M. Rajala, Dr. Ravi Tandon & Dr. Arvind P Singh
6.	BT 269	Eukaryotic Molecular Biology and Genetics	3	Prof. D. Bharadwaj & Prof. Sandeep Saxena, Prof. Pawan K Dhar
7.	BT 270	Cell Biology	3	Dr. Swati Tiwari & Dr. Ranjana Arya
8.	BT 271	Genetic Engineering and Its Applications	3	Prof. Suneel Kateriya, Dr. Manoj K Sharma & Prof. Sandeep Saxena
<b>Total Credits</b>			<b>29</b>	

**List of Courses offered during M.Sc. 4<sup>th</sup> Semester Winter Semester 2024**

<b>Sl. No.</b>	<b>Course Code</b>	<b>Course Name</b>	<b>Credit</b>	<b>Course Incharge</b>
1.	BT 242	Dissertation – II	15	All Faculty Members
2.	BT 273	Thesis Defence	2	All Faculty Members
3.	BT 274	Thesis Evaluation	1	All Faculty Members
<b>Total Credits</b>			<b>18</b>	