



# DR. RAM MANOHAR LOHIA AVADH UNIVERSITY, AYODHYA

## Structure of Syllabus for the Program: M.Sc., Subject: BIOCHEMISTRY

Syllabus Developed by				
SNo	Name of Expert/BoS Member	Designation	Department	College/ University
1	Prof. R.K. Mishra	External Expert	Department of Biochemistry	University of Lucknow, Lucknow
2	Prof. Farrukh Jamal	Professor	Department of Biochemistry	Dr. Rammanohar Lohia Avadh University, Ayodhya
3	Dr. Vandana Ranjan	Associate Professor	Department of Biochemistry	Dr. Rammanohar Lohia Avadh University, Ayodhya
4	Dr. Sangram Singh	Associate Professor	Department of Biochemistry	Dr. Rammanohar Lohia Avadh University, Ayodhya
5	Dr. Neelam Yadav	Assistant Professor	Department of Biochemistry	Dr. Rammanohar Lohia Avadh University, Ayodhya
6	Dr. Shivi Srivastava	Assistant Professor	Department of Biochemistry	Dr. Rammanohar Lohia Avadh University, Ayodhya
7	Prof. Neelam Pathak	Professor, Head & Convenor	Department of Biochemistry	Dr. Rammanohar Lohia Avadh University, Ayodhya

Course Code		Course Title	Credits	T/P	Evaluation	
					CIE	ETE
A	B	C	D	E	F	G
<b>SEMESTER I (YEAR I)</b>						
B110701T	CORE	Biomolecules: Structure & Function	5	T	25	75
B110702T	CORE	Bioanalytical techniques	5	T	25	75
B110703T	CORE	Essentials of Metabolism	5	T	25	75
B110704T	FIRST ELECTIVE (Subject Elective) (Select any one)	Essentials of Molecular Biology	5	T	25	75
B110705T		Pharmaceutical Biochemistry	5	T	25	75
B110706P	SECOND ELECTIVE (Subject Elective) (Select any one)	Biochemistry Laboratory Course -A	5	P	50	50
B110707P		Biochemistry Laboratory Course -B	5	P	50	50
<b>SEMESTER II (YEAR I)</b>						
B110801T	CORE	Gene Expression & Regulation	5	T	25	75
B110802T	CORE	Cell Biology & Signaling pathways	5	T	25	75

B110803T	CORE	Protein Biochemistry & Enzymology	5	T	25	75
B110804T	THIRD ELECTIVE (Generic Elective) (Select any one)	Fundamentals of Nutrition Science	5	T	25	75
B110805T		Fundamentals of Environmental Sciences	5	T	25	75
B110806P	FOURTH ELECTIVE (Subject Elective) (Select any one)	Biochemistry Laboratory Course -C	5	P	50	50
B110807P		Biochemistry Laboratory Course -D	5	P	50	50
<b>SEMESTER III (YEAR II)</b>						
B110901T	CORE	Essentials of Microbiology	5	T	25	75
B110902T	CORE	Immunology	5	T	25	75
B110903T	CORE	Genetic Engineering	5	T	25	75
B110904T	FIFTH ELECTIVE (Subject Elective) (Select any one)	Clinical Biochemistry and IPR & Biosafety	5	T	25	75
B110905T		Bioinformatics and Biostatistics	5	T	25	75
B110906P	SIXTH ELECTIVE (Subject Elective) (Select any one)	Biochemistry Laboratory Course -E	5	P	50	50
B110907P		Biochemistry Laboratory Course -F	5	P	50	50
<b>SEMESTER IV (YEAR II)</b>						
B111001T	CORE	Applied Biotechnology	5	T	25	75
B111002T	CORE	Research Methodology	5	T	25	75
B111003P	SEVENTH ELECTIVE (Subject Elective) (Select any one)	Seminar & Interactive Course	5	P	50	50
B111004P		Review and Assignment	5	P	50	50
B111005P	RESEARCH PROJECT/ DISSERTATION	Major Research Project/ Dissertation	10	P	50	50