



# DR. RAM MANOHAR LOHIA AVADH UNIVERSITY, AYODHYA

## Structure of Syllabus for the Program: M.Sc., Subject: MATHEMATICS (STATISTICS)

Structure of Syllabus Developed by			
Name of BoS Convener/ BoS Member	Designation	Department	College/ University
Prof. Chayan Kumar Mishra	Dean, Science	Department of Mathematics and Statistics	Dr. Rammanohar Lohia Avadh University, Ayodhya
Prof. S. S. Mishra	Head and Convener	Department of Mathematics and Statistics	Dr. Rammanohar Lohia Avadh University, Ayodhya
Prof. S. K. Raizada	Professor	Department of Mathematics and Statistics	Dr. Rammanohar Lohia Avadh University, Ayodhya
Dr. Abhishek Singh	Associate Professor	Department of Mathematics and Statistics	Dr. Rammanohar Lohia Avadh University, Ayodhya
Prof. Shri Ram	External Expert	Department of Mathematical Sciences	IIT BHU, Varanasi
Prof. Arvind Kumar Mishra	External Expert	Department of Mathematics	BHU, Varanasi
Prof. T. B. Singh	External Expert	Institute of Medical Sciences	IMS, BHU, Varanasi
Prof. R. S. Singh	External Expert	Department of Mathematics	Dr. H. S. Gaur University, Sagar, M.P.

Course Code		Course Title	Credits	T/P	Evaluation	
A	B				CIE	ETE
A	B	C	D	E	F	G
<b>SEMESTER I (YEAR I)</b>						
B230701T	CORE	Real Analysis	4	T	25	75
B230702T	CORE	Advance Abstract Algebra	4	T	25	75
B230703T	CORE	Topology-I	4	T	25	75
B230704T	CORE	Differential Geometry of Manifold	4	T	25	75
B230705T	FIRST ELECTIVE (Subject Elective) (Select any one)	Probability and Statistical Methods	4	T	25	75
B230706T		Fuzzy Theory and Its Applications	4	T	25	75
B230707P	SECOND ELECTIVE (Subject Elective) (Select any one)	Computing Lab-I	5	P	50	50
B230708P		Project/Seminar Presentation	5	P	50	50
<b>SEMESTER II (YEAR I)</b>						
B230801T	CORE	Mathematical Methods	4	T	25	75

B230802T	CORE	Linear Algebra	4	T	25	75
B230803T	CORE	Topology-II	4	T	25	75
B230804T	CORE	Numerical Analysis	4	T	25	75
B230805T	THIRD ELECTIVE (Generic Elective) (Select any one)	Applied Statistics	4	T	25	75
B230806T		Computing Fundamentals	4	T	25	75
B230807P	FOURTH ELECTIVE (Subject Elective) (Select any one)	Computing Lab II	5	P	50	50
B230808P		Project/ Seminar Presentation	5	P	50	50
<b>SEMESTER III (YEAR II)</b>						
B230901T	CORE	Complex Analysis	4	T	25	75
B230902T	CORE	Operations Research	4	T	25	75
B230903T	CORE	Functional Analysis	4	T	25	75
B230904T	CORE	Special Functions	4	T	25	75
B230905T	FIFTH ELECTIVE (Subject Elective) (Select any one)	Riemannian Manifold	4	T	25	75
B230906T		General Relativity	4	T	25	75
B230907P	SIXTH ELECTIVE (Subject Elective) (Select any one)	Computing Lab III	5	P	50	50
B230908P		Project/Seminar Presentation	5	P	50	50
<b>SEMESTER IV (YEAR II)</b>						
B231001T	CORE	Ordinary and Partial Differential Equations	4	T	25	75
B231002T	CORE	Advanced Operations Research	4	T	25	75
B231003T	SEVENTH ELECTIVE (Subject Elective) (Select any one)	Graph Theory and Discrete Mathematics	4	T	25	75
B231004T		Demography	4	T	25	75
B231005T	EIGHTH ELECTIVE (Subject Elective) (Select any one)	Advanced Special Functions	4	T	25	75
B231006T		Finsler Geometry	4	T	25	75
B231007T	NINETH ELECTIVE (Subject Elective) (Select any one)	Cosmology	4	T	25	75
B231008T		Advanced Statistical Inference	4	T	25	75
B231009P	RESEARCH PROJECT/ DISSERTATION	Research Project	5	P	50	50