

### Teaching Plan For The Academic Year : 2023-2024

Faculty Name	Course Name	Paper Name	Semester	Section	Month(s)	Topics/Units	Total Course (%)	Course Completed (%)	ICT Tools Used	Saved On
Dr. APARNA JAIN	B. Sc. (Hons.) Mathematics V	DISCRETE MATHEMATICS (B.SC. (HONS) MATHS	Odd Semester	Section A	August	unit 1	20	20		30th December, 2023
Dr. APARNA JAIN	B. Sc. (Hons.) Mathematics V	DISCRETE MATHEMATICS (B.SC. (HONS) MATHS	Odd Semester	Section A	September	unit 1 and 2	25	25		30th December, 2023
Dr. APARNA JAIN	B. Sc. (Hons.) Mathematics V	DISCRETE MATHEMATICS (B.SC. (HONS) MATHS	Odd Semester	Section A	October	unit 2 and 3	25	25		30th December, 2023
Dr. APARNA JAIN	B. Sc. (Hons.) Mathematics V	DISCRETE MATHEMATICS (B.SC. (HONS) MATHS	Odd Semester	Section A	November	unit4	20	20		30th December, 2023
Dr. APARNA JAIN	B. Sc. (Hons.) Mathematics V	DISCRETE MATHEMATICS (B.SC. (HONS) MATHS	Odd Semester	Section A	December	unit 4	10	10		30th December, 2023
Dr. APARNA JAIN	B. Sc. (Hons.) Mathematics V	DISCRETE MATHEMATICS (B.SC. (HONS) MATHS	Odd Semester	Section B	August	unit 1	20	20		30th December, 2023
Dr. APARNA JAIN	B. Sc. (Hons.) Mathematics V	DISCRETE MATHEMATICS (B.SC. (HONS) MATHS	Odd Semester	Section B	September	unit 1 and 2	25	25		30th December, 2023

Dr. APARNA JAIN	B. Sc. (Hons.) Mathematics V	DISCRETE MATHEMATICS (B.SC. (HONS) MATHS	Odd Semester	Section B	October	unit 2 and 3	25	25		30th December, 2023
Dr. APARNA JAIN	B. Sc. (Hons.) Mathematics V	DISCRETE MATHEMATICS (B.SC. (HONS) MATHS	Odd Semester	Section B	November	unit 4	20	20		30th December, 2023
Dr. APARNA JAIN	B. Sc. (Hons.) Mathematics V	DISCRETE MATHEMATICS (B.SC. (HONS) MATHS	Odd Semester	Section B	December	unit 4	10	10		30th December, 2023
Dr. BABITA GUPTA	B. Sc. (Hons.) Mathematics III	RIEMANN INTEGRATION	Odd Semester	Section A	August	Unit1. Riemann Integration	10	10	Laptop projector	6th December, 2023
Dr. BABITA GUPTA	B. Sc. (Hons.) Mathematics III	RIEMANN INTEGRATION	Odd Semester	Section A	September	Unit1, Unit2: Riemann Integration, Properties of Riemann Integration	30	30	Laptop, projector	6th December, 2023
Dr. BABITA GUPTA	B. Sc. (Hons.) Mathematics III	RIEMANN INTEGRATION	Odd Semester	Section A	October	Unit2: properties of Riemann integration, Volume by slicing and cylindrical shells, length of plane curve	30	30	Laptop projector	6th December, 2023
Dr. BABITA GUPTA	B. Sc. (Hons.) Mathematics III	RIEMANN INTEGRATION	Odd Semester	Section A	November	Unit3: surface area, Improper integral	25	25	Laptop projector	6th December, 2023
Dr. BABITA GUPTA	B. Sc. (Hons.) Mathematics III	RIEMANN INTEGRATION	Odd Semester	Section A	December	Unit3: Beta Gamma functions	5	5	Laptop projector	6th December, 2023

Dr. JEETENDRA AGGARWAL	B. Sc. (Hons.) Mathematics V	METRIC SPACES	Odd Semester	Section B	August	Definition of metric space, Illustration using the usual metric on $\mathbb{R}$ , Euclidean and max metric on $\mathbb{R}^C$ , Euclidean and max metric on $\mathbb{R}$ , Discrete metric, Sup metric on $B(S)$ and $C[a, b]$ , Integral metric on $C[a, b]$ , Sequences in metric space, Definition of limit of a sequence, Illustration through examples, Cauchy sequences.	10	10	24th December, 2023
Dr. JEETENDRA AGGARWAL	B. Sc. (Hons.) Mathematics V	METRIC SPACES	Odd Semester	Section B	September	Definition of complete metric spaces, Illustration through examples, Open and closed balls, Neighborhood, Open sets, Examples and basic results. Interior point, Interior of a set, Limit point, Derived set, Examples and basic results.	25	25	24th December, 2023

Dr. JEETENDRA AGGARWAL	B. Sc. (Hons.) Mathematics V	METRIC SPACES	Odd Semester	Section B	October	Closed set, Closure of a set, Examples and basic results. Bounded set, Diameter of a set, Cantor's theorem, Relativisation and subspaces, Dense sets. Continuous mappings, Sequential and other characterizations of continuity	30	30		24th December, 2023
Dr. JEETENDRA AGGARWAL	B. Sc. (Hons.) Mathematics V	METRIC SPACES	Odd Semester	Section B	November	Uniform continuity, Homeomorphism, Contraction mappings, Banach fixed point theorem, Connectedness and its Properties	25	25		24th December, 2023
Dr. JEETENDRA AGGARWAL	B. Sc. (Hons.) Mathematics V	METRIC SPACES	Odd Semester	Section B	December	Compactness and its properties	10	10		24th December, 2023
Dr. KUMARI PRIYANKA	B. Sc. (Hons.) Mathematics I	PROBABILITY AND STATISTICS	Odd Semester	Section B	August	Descriptive statistics: Populations, Samples, Stem-and-leaf displays, Dotplots, Histograms, Qualitative data, Measures of location, Measures of variability, Boxplots; Sample spaces and events	15	15	Projector, Excel, Computer, Board	2nd January, 2024

Dr. KUMARI PRIYANKA	B. Sc. (Hons.) Mathematics I	PROBABILITY AND STATISTICS	Odd Semester	Section B	September	Probability axioms and properties, Conditional probability, Bayes' theorem and independent events; Discrete random variables and probability distributions, Expected values; Probability distributions: Binomial, geometric, hypergeometric, negative binomial, Poisson, and Poisson distribution as a limit, Continuous random variables	25	25	Projector,Excel, Computer, Board	2nd January, 2024
Dr. KUMARI PRIYANKA	B. Sc. (Hons.) Mathematics I	PROBABILITY AND STATISTICS	Odd Semester	Section B	October	Probability density functions, Uniform distribution, Cumulative distribution functions and expected values, The normal, exponential and lognormal distributions.	20	20	Projector,Excel, Computer, Board	2nd January, 2024
Dr. KUMARI PRIYANKA	B. Sc. (Hons.) Mathematics I	PROBABILITY AND STATISTICS	Odd Semester	Section B	November	Sampling distribution and standard error of the sample mean, Central Limit Theorem and applications; Scatterplot of bivariate data, Regression line using principle of least squares,	30	30	Projector,Excel, Computer, Board	2nd January, 2024

Dr. KUMARI PRIYANKA	B. Sc. (Hons.) Mathematics I	PROBABILITY AND STATISTICS	Odd Semester	Section B	December	Estimation using the regression lines; Sample correlation coefficient and properties	10	10	Projector, Excel, Computer, Board	2nd January, 2024
Dr. MRIDULA BUDHRAJA	B. Sc. (Hons.) Mathematics V	MATHEMATICAL MODELING AND GRAPH THEORY	Odd Semester	None	September	Graph Theory- Introduction, Definitions, Applications, Games	25	25		4th January, 2024
Dr. MRIDULA BUDHRAJA	B. Sc. (Hons.) Mathematics V	MATHEMATICAL MODELING AND GRAPH THEORY	Odd Semester	None	October	Monte Carlo modelling, Generating random numbers, Linear Programming	35	60		4th January, 2024
Dr. MRIDULA BUDHRAJA	B. Sc. (Hons.) Mathematics V	MATHEMATICAL MODELING AND GRAPH THEORY	Odd Semester	None	November	Queuing models, Power series Solutions,	25	85		4th January, 2024
Dr. MRIDULA BUDHRAJA	B. Sc. (Hons.) Mathematics V	MATHEMATICAL MODELING AND GRAPH THEORY	Odd Semester	None	December	Laplace Transforms	15	100		4th January, 2024
Dr. NEETU RANI	B. Sc. (Hons.) Mathematics V	NUMERICAL ANALYSIS (B.SC. (HONS) MATHEMATICS	Odd Semester	Section A	August	Unit 1 started	10	10	Mathematica	29th December, 2023
Dr. NEETU RANI	B. Sc. (Hons.) Mathematics V	NUMERICAL ANALYSIS (B.SC. (HONS) MATHEMATICS	Odd Semester	Section A	September	Unit 1 completed and Unit 2 started	30	30	Mathematica	29th December, 2023
Dr. NEETU RANI	B. Sc. (Hons.) Mathematics V	NUMERICAL ANALYSIS (B.SC. (HONS) MATHEMATICS	Odd Semester	Section A	October	Units 2 & 3 completed, and Unit 4 started	40	40	Mathematica	29th December, 2023
Dr. NEETU RANI	B. Sc. (Hons.) Mathematics V	NUMERICAL ANALYSIS (B.SC. (HONS) MATHEMATICS	Odd Semester	Section A	November	Unit 4 continued	18	18	Mathematica	29th December, 2023

Dr. NEETU RANI	B. Sc. (Hons.) Mathematics V	NUMERICAL ANALYSIS (B.SC. (HONS) MATHEMATICS	Odd Semester	Section A	December	Unit 4 completed	2	2	Mathematica	29th December, 2023
Dr. NEETU RANI	B. Sc. (Hons.) Mathematics V	NUMERICAL ANALYSIS (B.SC. (HONS) MATHEMATICS	Odd Semester	Section B	August	Unit 1 started	10	10	Mathematica	29th December, 2023
Dr. NEETU RANI	B. Sc. (Hons.) Mathematics V	NUMERICAL ANALYSIS (B.SC. (HONS) MATHEMATICS	Odd Semester	Section B	September	Unit 1 completed and Unit 2 started	30	30	Mathematica	29th December, 2023
Dr. NEETU RANI	B. Sc. (Hons.) Mathematics V	NUMERICAL ANALYSIS (B.SC. (HONS) MATHEMATICS	Odd Semester	Section B	October	Units 2 & 3 completed, and Unit 4 started	40	40	Mathematica	29th December, 2023
Dr. NEETU RANI	B. Sc. (Hons.) Mathematics V	NUMERICAL ANALYSIS (B.SC. (HONS) MATHEMATICS	Odd Semester	Section B	November	Unit 4 continued	18	18	Mathematica	29th December, 2023
Dr. NEETU RANI	B. Sc. (Hons.) Mathematics V	NUMERICAL ANALYSIS (B.SC. (HONS) MATHEMATICS	Odd Semester	Section B	December	Unit 4 completed	2	2	Mathematica	29th December, 2023
Dr. SURBHI MADAN	B. Sc. (Hons.) Mathematics V	METRIC SPACES	Odd Semester	Section A	August	Definition of Metric Space and examples	10	10	Mathematica	29th December, 2023
Dr. SURBHI MADAN	B. Sc. (Hons.) Mathematics V	METRIC SPACES	Odd Semester	Section A	September	Examples, Sequences, Open and closed sets	20	20	Mathematica	29th December, 2023

Dr. SURBHI MADAN	B. Sc. (Hons.) Mathematics V	METRIC SPACES	Odd Semester	Section A	October	Continuous mappings, sequential criterion and other characterizations of continuity, Uniform continuity, Homeomorphism, Contraction mappings, Banach Fixed point Theorem.	20	20	Mathematica	29th December, 2023
Dr. SURBHI MADAN	B. Sc. (Hons.) Mathematics V	METRIC SPACES	Odd Semester	Section A	November	Connectedness, connected subsets of $\mathbb{R}$ , connectedness and continuous mappings.	20	20		29th December, 2023
Dr. SURBHI MADAN	B. Sc. (Hons.) Mathematics V	METRIC SPACES	Odd Semester	Section A	December	Compactness, compactness and boundedness, continuous functions on compact spaces.	20	20		29th December, 2023
Mr. ANKUSH KUMAR	B. Sc. (Hons.) Mathematics I	ALGEBRA	Odd Semester	Section A	July	Unit-1	5	5		23rd December, 2023
Mr. ANKUSH KUMAR	B. Sc. (Hons.) Mathematics I	ALGEBRA	Odd Semester	Section A	August	Unit-1	25	30		23rd December, 2023
Mr. ANKUSH KUMAR	B. Sc. (Hons.) Mathematics I	ALGEBRA	Odd Semester	Section A	September	unit-2	25	55		23rd December, 2023
Mr. ANKUSH KUMAR	B. Sc. (Hons.) Mathematics I	ALGEBRA	Odd Semester	Section A	October	unit-2	15	70		23rd December, 2023
Mr. ANKUSH KUMAR	B. Sc. (Hons.) Mathematics I	ALGEBRA	Odd Semester	Section A	November	unit-3	25	95		23rd December, 2023
Mr. ANKUSH KUMAR	B. Sc. (Hons.) Mathematics I	ALGEBRA	Odd Semester	Section A	December	unit-3	5	100		23rd December, 2023



Mr. ANKUSH KUMAR	B. Sc. (Hons.) Mathematics I	ALGEBRA	Odd Semester	Section B	July	unit-1	5	5		23rd December, 2023
Mr. ANKUSH KUMAR	B. Sc. (Hons.) Mathematics I	ALGEBRA	Odd Semester	Section B	August	unit-1	25	30		23rd December, 2023
Mr. ANKUSH KUMAR	B. Sc. (Hons.) Mathematics I	ALGEBRA	Odd Semester	Section B	September	unit-2	25	55		23rd December, 2023
Mr. ANKUSH KUMAR	B. Sc. (Hons.) Mathematics I	ALGEBRA	Odd Semester	Section B	October	unit-2 & 3	25	80		23rd December, 2023
Mr. ANKUSH KUMAR	B. Sc. (Hons.) Mathematics I	ALGEBRA	Odd Semester	Section B	November	unit-3	15	95		23rd December, 2023
Mr. ANKUSH KUMAR	B. Sc. (Hons.) Mathematics I	ALGEBRA	Odd Semester	Section B	December	unit-3	5	100		23rd December, 2023
Mr. MANISH KUMAR MEENA	B. Sc. (Hons.) Mathematics I	PROBABILITY AND STATISTICS	Odd Semester	Section A	August	Descriptive statistics: Populations, Samples, Stem-and-leaf displays	10	10		10th December, 2023
Mr. MANISH KUMAR MEENA	B. Sc. (Hons.) Mathematics I	PROBABILITY AND STATISTICS	Odd Semester	Section A	September	Dotplots, Histograms, Qualitative data, Measures of location, Measures of variability, Boxplots; Sample spaces and events, Probability axioms and properties, Conditional probability, Bayes' theorem and independent events; Discrete random variables and probability	25	35		10th December, 2023

						distributions, Expected values				
Mr. MANISH KUMAR MEENA	B. Sc. (Hons.) Mathematics I	PROBABILITY AND STATISTICS	Odd Semester	Section A	October	Probability distributions: Binomial, geometric, hypergeometric, negative binomial, Poisson, and Poisson distribution as a limit, Continuous random variables, Probability density functions, Uniform distribution	30	65		10th December, 2023
Mr. MANISH KUMAR MEENA	B. Sc. (Hons.) Mathematics I	PROBABILITY AND STATISTICS	Odd Semester	Section A	November	Cumulative distribution functions and expected values, The normal, exponential and lognormal distributions, Sampling distribution and standard error of the sample mean, Central Limit Theorem and applications;	25	90		10th December, 2023

						Scatterplot of bivariate data				
Mr. MANISH KUMAR MEENA	B. Sc. (Hons.) Mathematics I	PROBABILITY AND STATISTICS	Odd Semester	Section A	December	Regression line using principle of least squares, Estimation using the regression lines; Sample correlation coefficient and properties.	10	100		10th December, 2023
Mr. MANISH KUMAR MEENA	B. Sc. (Hons.) Mathematics III	GROUP THEORY	Odd Semester	Section A	August	mutation groups and group of symmetries, Cycle notation for permutations and properties, Even and odd permutations, Alternating groups.	15	15		10th December, 2023

Mr. MANISH KUMAR MEENA	B. Sc. (Hons.) Mathematics III	GROUP THEORY	Odd Semester	Section A	September	Cosets and its properties, Lagrange's theorem and consequences including Fermat's Little theorem, Number of elements in product of two finite subgroups; Normal subgroups, Factor groups, Cauchy's theorem for finite Abelian groups, Group homomorphisms, isomorphisms and properties	30	45		10th December, 2023
Mr. MANISH KUMAR MEENA	B. Sc. (Hons.) Mathematics III	GROUP THEORY	Odd Semester	Section A	October	, Cayley's theorem; First, Second and Third isomorphism theorems for groups; Automorphism, Inner automorphism, Automorphism groups, Automorphism groups of cyclic groups, Applications of factor groups to automorphism groups.	25	70		10th December, 2023

Mr. MANISH KUMAR MEENA	B. Sc. (Hons.) Mathematics III	GROUP THEORY	Odd Semester	Section A	November	External direct products of groups and its properties, The group of units modulo $nn$ as an external direct product, Applications to data security and electric circuits; Internal direct products	20	90		10th December, 2023
Mr. MANISH KUMAR MEENA	B. Sc. (Hons.) Mathematics III	GROUP THEORY	Odd Semester	Section A	December	Fundamental theorem of finite abelian groups and its isomorphism classes.	10	100		10th December, 2023
Mr. NITESH KUMAR	B. Sc. (Hons.) Mathematics I	ELEMENTARY REAL ANALYSIS - NEP	Odd Semester	Section A	August	Unit-1	5	0		3rd October, 2023
Mr. NITESH KUMAR	B. Sc. (Hons.) Mathematics I	ELEMENTARY REAL ANALYSIS - NEP	Odd Semester	Section A	September	Unit-1	20	0		3rd October, 2023
Mr. NITESH KUMAR	B. Sc. (Hons.) Mathematics I	ELEMENTARY REAL ANALYSIS - NEP	Odd Semester	Section A	October	Unit-2	35	0		3rd October, 2023
Mr. NITESH KUMAR	B. Sc. (Hons.) Mathematics I	ELEMENTARY REAL ANALYSIS - NEP	Odd Semester	Section A	November	Unit-3	40	0		3rd October, 2023
Mr. NITESH KUMAR	B. Sc. (Hons.) Mathematics I	ELEMENTARY REAL ANALYSIS - NEP	Odd Semester	Section B	August	Unit-1	5	0		3rd October, 2023
Mr. NITESH KUMAR	B. Sc. (Hons.) Mathematics I	ELEMENTARY REAL ANALYSIS - NEP	Odd Semester	Section B	September	Unit-1	20	0		3rd October, 2023
Mr. NITESH KUMAR	B. Sc. (Hons.) Mathematics I	ELEMENTARY REAL ANALYSIS - NEP	Odd Semester	Section B	October	Unit-2	35	0		3rd October, 2023
Mr. NITESH KUMAR	B. Sc. (Hons.) Mathematics I	ELEMENTARY REAL ANALYSIS - NEP	Odd Semester	Section B	November	Unit-3	40	0		3rd October, 2023

Mr. UTTAM KUMAR SINHA	B. Sc. (Hons.) Mathematics V	GROUP THEORY II	Odd Semester	Section A	August	Unit-1	15	15		31st December, 2023
Mr. UTTAM KUMAR SINHA	B. Sc. (Hons.) Mathematics V	GROUP THEORY II	Odd Semester	Section A	September	Units- 1 & 2	25	25		31st December, 2023
Mr. UTTAM KUMAR SINHA	B. Sc. (Hons.) Mathematics V	GROUP THEORY II	Odd Semester	Section A	October	Units 2 & 3	25	25		31st December, 2023
Mr. UTTAM KUMAR SINHA	B. Sc. (Hons.) Mathematics V	GROUP THEORY II	Odd Semester	Section A	November	Units- 3 & 4	25	25		31st December, 2023
Mr. UTTAM KUMAR SINHA	B. Sc. (Hons.) Mathematics V	GROUP THEORY II	Odd Semester	Section A	December	Unit- 4	10	10		31st December, 2023
Mr. UTTAM KUMAR SINHA	B. Sc. (Hons.) Mathematics V	GROUP THEORY II	Odd Semester	Section B	August	Unit-1	15	15		31st December, 2023
Mr. UTTAM KUMAR SINHA	B. Sc. (Hons.) Mathematics V	GROUP THEORY II	Odd Semester	Section B	September	Units- 1 & 2	25	25		31st December, 2023
Mr. UTTAM KUMAR SINHA	B. Sc. (Hons.) Mathematics V	GROUP THEORY II	Odd Semester	Section B	October	Units- 2 & 3	25	25		31st December, 2023
Mr. UTTAM KUMAR SINHA	B. Sc. (Hons.) Mathematics V	GROUP THEORY II	Odd Semester	Section B	November	Units- 3 & 4	25	25		31st December, 2023
Mr. UTTAM KUMAR SINHA	B. Sc. (Hons.) Mathematics V	GROUP THEORY II	Odd Semester	Section B	December	Unit- 4	10	10		31st December, 2023

Ms. DEEPTI	B. Sc. (Hons.) Mathematics V	Probability Theory and Statistics	Odd Semester	None	August	Sample space, Probability set function, Real random variables - Discrete and continuous, Cumulative distribution function, Probability mass/density functions, Transformations, Mathematical expectation	20	20		16th October, 2023
Ms. DEEPTI	B. Sc. (Hons.) Mathematics V	Probability Theory and Statistics	Odd Semester	None	September	Moments, Moment generating function, Characteristic function, Discrete distributions: Uniform, Bernoulli, Binomial,, Poisson	25	25		16th October, 2023
Ms. DEEPTI	B. Sc. (Hons.) Mathematics V	Probability Theory and Statistics	Odd Semester	None	October	Continuous distributions: Uniform, Gamma, Exponential, Chi-square, Beta and normal; Normal approximation to the binomial distribution., Joint cumulative distribution function and its properties, Joint probability density function, Marginal distributions, Expectation of function of two random variables, Joint moment generating function, Conditional	30	30		16th October, 2023

						distributions and expectations				
Ms. DEEPTI	B. Sc. (Hons.) Mathematics V	Probability Theory and Statistics	Odd Semester	None	November	The Correlation coefficient, Covariance, Calculation of covariance from joint moment generating function, Independent random variables, Linear regression for two variables, Method of least squares, Bivariate normal distribution, Chebyshev's theorem, Strong law of large numbers, Central limit theorem and weak law of large numbers.	25	25		16th October, 2023
Ms. SONI	B. Sc. (Hons.) Mathematics I	NEP - VEDIC MATHEMATICS- 1	Even Semester	None	February	UNIT-4	20	0		22nd July, 2023



Ms. SONI	B. Sc. (Hons.) Mathematics I	NEP - VEDIC MATHEMATICS- 1	Even Semester	None	November	UNIT-2	30	0		22nd July, 2023
Ms. SONI	B. Sc. (Hons.) Mathematics I	NEP - VEDIC MATHEMATICS- 1	Even Semester	None	December	UNIT-1	20	0		22nd July, 2023

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