

Lesson Plan
Mehr Chand Mahajan DAV College for Women, Sector – 36A, Chandigarh
Monthly Teaching Plans-Odd Semester (Semester-V)
Session – 2023-24

Department: Mathematics

Class: BA/BSc-III

Subject: Mathematics

Paper-III: Probability Theory

Name of the Teacher: Dr Navjot Kaur

Month	Date		Topics to be covered	Academic Activity to be Undertaken
	From	To		
July	24.07.23	31.07.23	Review of notion of Probability, conditional Probability and independence, Bayes' Theorem.	Syllabus, Examination pattern discussed, Doubt Session.
Departmental Meeting to Coordinate and Review the Monthly completion of Syllabus as per lesson plans on 01.08.2023				
August	01.08.2023	31.08.2023	Random Variables : Concept, probability density function, cumulative distribution function, discrete and continuous random variables, expectation of random variable, mean, variance, moments of distribution.	Doubt session, Revision of a few topics and class test.
Departmental Meeting to Coordinate and Review the Monthly completion of Syllabus as per lesson plans on 01.09.2023				
September	01.09.2023	30.09.2023	Moment generating function, skewness and kurtosis. Probability generating function. Discrete Random Variables : Bernoulli random variable, binomial random variable.	Doubt session, Assignments. Revision of a few topics.
Departmental Meeting to Coordinate and Review the Monthly completion of Syllabus as per lesson plans on 03.10.2023				
October	03.10.2023	31.10.2023	Continuous Random Variables : Uniform random variable, exponential random variable, Beta random variable, Gamma random variable, Chi-square random variable, normal random variable. Negative binomial random variable, geometric random variable, Poisson random variable.	Doubt session, class test/Assignments.
Departmental Meeting to Coordinate and Review the Monthly completion of Syllabus as per lesson plans on 01.11.2023				
November	01.11.2023	18.11.2023	Bivariate Random Variables : Joint distribution, joint and conditional distributions, Conditional Expectations, Independent random variables, the correlation coefficient, Bivariate normal	Doubt session, Question papers discussed. Revision tests.

			distribution.	
Departmental Meeting to Coordinate and Review the Monthly completion of Syllabus as per lesson plans on 19.11.2023				
End semester Examination 27.11.2023 to 30.12.2023				

Lesson Plan
Mehr Chand Mahajan DAV College for Women, Sector – 36A, Chandigarh
Monthly Teaching Plans-Even Semester (Semester-VI)
Session – 2023-24

Department: Mathematics

Class: BA/BSc-III

Subject: Mathematics

Paper-III: Numerical Analysis

Name of the Teacher: Dr Navjot Kaur

Month	Date		Topics to be covered	Academic Activity to be Undertaken
	From	To		
January	09.01.2024	31.01.2024	Solution of Equations: Bisection, Secant, Regula Falsi, Newton's Method, Roots of Polynomials. Interpolation techniques : Lagrange and Hermite Interpolation, Divided Differences, Difference Schemes.	Syllabus, Examination pattern discussed, Doubt Session.
Departmental Meeting to Coordinate and Review the Monthly completion of Syllabus as per lesson plans on 01.02.2024				
February	01.02.2024	29.02.2024	Interpolation formulas using Difference. Numerical Differentiation. Numerical Quadrature: Newton-Cote's Formulas, Gauss Quadrature Formulas, Chebychev's Formulas. Linear Equations: Direct Methods for Solving Systems of Linear Equations (Gauss Elimination, LU Decomposition, Cholesky Decomposition).	Doubt session, Assignments, Class tests.
Departmental Meeting to Coordinate and Review the Monthly completion of Syllabus as per lesson plans on 01.03.2024				
March	01.03.2024	30.03.2024	Iterative Methods (Jacobi, Gauss-Seidel, Relaxation Methods). The Algebraic Eigenvalue problem: Jacobi's Method, Givens' Method, Householder's Method, Power Method, QR Method, Lanczos' Method.	Doubt session, Assignments. Class tests.
Departmental Meeting to Coordinate and Review the Monthly completion of Syllabus as per lesson plans on 01.04.2024				
April	01.04.2024	22.04.2024	Ordinary Differential Equations: Euler Method, Single-step Methods, Runge-Kutta's Method, Multi-step Methods	Doubt session and tests. Question papers discussed. Revision of the topics important from examination point of view.
Departmental Meeting to Coordinate and Review the Monthly completion of Syllabus as per lesson plans on 23.04.2024				
End semester Examination 02.05.2024 to 05.06.2024				