

Lesson Plan
MCM DAV College for Women, Sector – 36A, Chandigarh
Monthly Teaching Plans-Odd Semester (Semester-III)
Session – 2023-24

Department: Mathematics

Class: BA/BSc-II

Subject: Mathematics

Paper-II: Differential equations -I

Name of the Teacher: Ms Promila

Month	Date		Topics to be covered	Academic Activity to be Undertaken
	From	To		
July	24.07.2023	31.07.2023	Exact Differential equations	Syllabus, 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	First order and higher degree equations solvable for x, y,p,Caliraut's form, singular solution as an envelope of general solutions geometric meaning of a differential equation.	Syllabus, Examination pattern discussed, Doubt Session.
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	Orthogonal trajectories, Linear differential equations with constant coefficients	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	Linear differential equations with variable coefficients -Cauchy and Legendre Equations, Linear differential equations of second order transformation of the equation by changing the dependent variable/the independent variable	Doubt session, Assignments, Power Point Presentations.
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	Methods of variation of parameters and reduction of order, Simultaneous Differential equations	Doubt session, Assignments, Power Point Presentations, Question papers discussed. Revision of a few topics
Departmental Meeting to Coordinate and Review the Monthly completion of Syllabus as per lesson plans on 30.11.2023				
End semester Examination 27.11.2023 to 30.12.2023				

Lesson Plan
MCM DAV College for Women, Sector – 36A, Chandigarh
Monthly Teaching Plans-Even Semester (Semester-IV)
Session – 2023-24

Department: Mathematics

Class: BA/BSc-II

Subject: Mathematics

Paper-II: Differential equations -II

Name of the Teacher: Ms Promila

Month	Date		Topics to be covered	Academic Activity to be Undertaken
	From	To		
January	09.01.2024	31.01.2024	Series solutions of differential equations - Power series method, Bessel and Legendre Equations, Bessel functions of first and Second kind, Legendre function, Generating function.	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	Recurrence relation and Orthogonality of Bessel and Legendre function. Partial differential equations: origin of first order partial differential equations, Linear equation of first order, Integral surface passing through a given curve, surface orthogonal to a given system of surfaces.	Doubt session, Assignments, revision of a few topics.
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	Inverse Laplace transforms - Linearity property, shifting properties, change of scale property. Inverse Laplace transforms of derivatives and integrals, Convolution theorem, Application of Laplace transforms - solution of differential equations with constant coefficients	Doubt session, Assignments, Power Point Presentations.
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	Solution of differential equations with variable coefficients, solution of simultaneous differential equations, Laplace transforms - Linearity of the Laplace transformation, Existence theorem for Laplace transformations, shifting Theorems, Laplace transforms of derivatives and integrals, Multiplication of t^n , Division by t	Doubt session, Assignments, Power Point Presentations, Discussion of previous year question papers, Revision of a few topics.
Departmental Meeting to Coordinate and Review the Monthly completion of Syllabus as per lesson plans on 22.04.2024				
End semester Examination 02.05.2024 to 05.06.2024				