

M.E.S. College Marampally

Department of Mathematics and Statistics

Core Course

Sl.No	Name of the Paper	course outcomes
1	Foundation of Mathematics	To explain the foundation of most area of modern mathematics which is applied frequently in successive semesters
2	Analytic Geometry, Trigonometry and Differentail Calculus	To introduce Conic sections, Polar Coordinates, Hyperbolic functions, Factorisation, Summation of infinite series, Successive differentiation and Indeterminate forms
3	Calculus	To introduce Taylor series, Curvature, Evolutes, Partial differentiation , Volumes, Surface Area, Revolution, Doble and Triple integrations .
4	Vector Calculus, Theory of Numbers and laplace transform	To give a detailed study on Vector Differentiation and Integration, to inrouce congruence, Fermats theorem and Wilsons Theroem in thoery of numbers and to give basic concepts of Laplace Transforms
5	Mathematical analysis	To give a detailed study on real numbers, limits, sequences and series
6	Differential Equations	To introduces Ordinary Differential and Partial differntail Equations, Seial functions and their solutions especially using power series
7	Abstract Algebra	To give a detailed study on Groups, Rings and their Homomorphism

8	Human rights and Mathematics for Environmental Studies	To give Environmental education which helps students to research about environments, its issues and their solutions and corresponding decision and effective actions
9	Open Course-Applicable Mathematics	To prepare the students of all streams to approach competitive examinations
10	Real Analysis	To introduce Sequence & Series of functions, Continuous functions and Riemann Integral
11	Graph theory and Metric Spaces	To introduce basic definition of Graph Theory and Metric Spaces
12	Complex analysis	Explanation of analytic functions, complex functions, complex integration, Power series and their properties
13	Linear Algebra	To get a detailed study on Matrix Algebra, Vector spaces, Linear transformations, and Characteristic Equations
14	Choice Based-Numerical Analysis	To introduce Differentiation, integration, Interpolation, Solutions of equations, Fourier series & transform using numerical methods
15	Project	To Promote independent study and research in new areas