VSR GOVERNMENT DEGREE AND PG COLLEGE MOVVA
DEPARTMENT OF MATHEMATICS

	I SEMESTER
	DIFFERENTIAL EQUATIONS
CO1	1. Solve linear differential equations
CO2	2. Convertnonexact homogeneous equations to exact differential equations by using integrating factors
CO3	3.Know the methods of finding solutions ofdifferential equations of the firstorder but not of the firstdegree.
CO4	4.Solvehigher-order linear differential equations, both homogeneous and non homogeneous, with constant coefficients.
CO5	5. Understand the concept and apply appropriate methods for solving differential equations.

	II SEMESTER
	THREE DIMENSIONAL ANALYTICAL SOLID GEOMETRY
CO1	1. get the knowledge of planes.
CO2	2. basic idea of lines, sphere and cones.
CO3	3. understand the properties of planes, lines, spheres and cones
CO4	4. express the problems geometrically and then to get the solution.
CO5	5.Get the Knowledge of cones

	III SEMESTER
	ABSTRACT ALGEBRA
CO1	1.acquire the basic knowledge and structure of groups, subgroups and cyclic groups.
CO2	2. get the significance of the notation of a normal subgroups.
CO3	3. get the behavior of permutations and operations on them
CO4	4. study the homomorphisms and isomorphisms with applications
CO5	6. understand the applications of ring theory in various fields.
	IV SEMESTER PAPER IV
	REAL ANALYSIS
CO1	1. get clear idea about the real numbers and real valued functions
CO2	2. obtain the skills of analyzing the concepts and applying appropriate methods for testing convergence of a sequence/ series.
CO3	3. test the continuity and differentiability
CO4	4.Get clear idea about the Riemann integration of a function.
CO5	5.know the geometrical interpretation of mean value theorems
	IV SEMESTER PAPER V

	LINEAR ALGEBRA
CO1	1. understand the concepts of vector spaces, subspaces, basises, dimension and their properties
CO2	2. understand the concepts of linear transformations and their properties
CO3	3. apply Cayley- Hamilton theorem to problems for finding the inverse of a matrix and higher powers of matrices without using routine methods
CO4	4. Learn about matrix
CO5	5. learn the properties of inner product spaces and determine orthogonality in inner product spaces.
	VI SEMESTER PAPER 7B
	Multiple integrals and applications of vector calculus
CO1	1. Learn multiple integrals as a natural extension of definite integral to a function of two variables in the case of double integral /three variables in case of trible integrals.
CO2	2. Learn applications in terms of finding surface area by double integral and volume by triple integral.
CO3	3. Determine the gradient, divergence and curl of a vector and vector identities.
CO4	4. Evaluate line, surface and volume integrals.
CO5	5. Understand the relation between surface and volume integrals, relation between line integral and volume integral, relation between line and surface integral.
	VI SEMESTER PAPER 6B
	Integral transforms with applications
CO1	1. Evaluate laplace transforms of certain functions and find derivatives and integrals.
CO2	2. Determine properties of laplace transform, may be solved by application of special functions namely dirac delta function, errer function, bessel function and periodic function.
CO3	3. Understand properties of inverse laplace transform, find inverse laplace transform of derivatives and integrals.
CO4	4. Solve ordinary differential equations with constant / variable co effience by using laplace transform method.
CO5	5. Comprehend the properties of four ier transform and solve problems related to finite four year transforms.