

Dr. V. S. KRISHNA GOVT. DEGREE COLLEGE (A), VISAKHAPATNAM

DEPARTMENT OF MATHEMATICS

Course outcomes paper wise:

Paper1 : DIFFERENTIAL EQUATIONS

1. Solve linear differential equations.
2. Convert non-exact homogeneous equations to exact differential equations by using integrating factors.
3. Know the methods of finding solutions of differential equations of the first order but not of the first degree.
4. Solve higher-order linear differential equations, both homogeneous and non-homogeneous, with constant coefficients.
5. Understand the concept and apply appropriate methods for solving differential equations.

Paper2: THREE DIMENSIONAL ANALYTICAL SOLID GEOMETRY

1. Get the knowledge of planes.
2. Basic idea of lines, sphere and cones.
3. Understand the properties of planes, lines, spheres and cones.
4. Express the problems geometrically and then to get the solution

Paper3: ABSTRACT ALGEBRA

1. Acquire the basic knowledge and structure of groups, subgroups and cyclic groups.
2. Get the significance of the notation of a normal subgroups.
3. Get the behavior of permutations and operations on them.
4. Study the homomorphisms and isomorphisms with applications.

5. Understand the ring theory concepts with the help of knowledge in group theory and to prove the theorems.
6. Understand the applications of ring theory in various fields.

Paper4: REAL ANALYSIS

1. Get clear idea about the real numbers and real valued functions.
2. Obtain the skills of analyzing the concepts and applying appropriate methods for testing convergence of a sequence/series.
3. Test the continuity and differentiability and Riemann integration of a function.
4. Know the geometrical interpretation of mean value theorems.

Paper5: LINEAR ALGEBRA

1. Understand the concepts of vector spaces, subspaces, bases, dimension and their properties
2. Understand the concepts of linear transformations and their properties
3. Apply Cayley- Hamilton theorem to problems for finding the inverse of a matrix and higher powers of matrices without using routine methods
4. Learn the properties of inner product spaces and determine orthogonality in inner product spaces.