DEPARTMENT OF MATHEMATICS

SEMESTER-1 PAPER-1 : DIFFERENTIAL EQUATIONS

CO1: Solutions of Differential Equations have applications in Engineering sciences and many other fields.
CO2: learn the techniques of finding Tangent and normal.
CO3: Become familiar with the techniques of finding orthogonal trajectories.
CO4: Studies various techniques of solving higher order deferential equations.
CO5: Knowledge of differential equations is useful in Electronics for finding the proportions of current in the circuit as a function of time.

SEMESTER -II PAPER-2 : SOLID GEOMETRY

CO1: Solid geometry is one of the best tools used to calculate Volume, Surface area etc.
CO2: Students can easily understand the computer graphics and Animation pictures.
CO3: Students gain the knowledge of Robot control Mechanisms and construction & design of some musical instruments.
CO4: Geometry has applications in Engineering, Space Physics, Marine physics Research areas.

SEMESTER-III PAPER-3 : ABSTRACT ALGEBRA

CO1: Understand the concepts of Groups, Rings and Homomorphism techniques.
CO2: Describe the concepts of Symmetry operations in physics.
CO3: Understand the applications Boolean algebra in the field of computer science and Engineering.
CO4: Understand the applications in Molecular biology and Bio chemistry in Translation of DNA into RNA and then into Proteins.

SEMESTER-IV PAPER-4 : REAL ANALYSIS

CO1: Have sufficient understanding of the basic concepts of Natural numbers and Integers which describes the structure of Real numbers.

CO2: Gains proficiency in Discrete Mathematics and Elementary Mathematics.

CO3: To study the concept of the nature of functions such as increasing, decreasing and stationary using derivability.

CO4: Understand the concepts of supremum , infimum and integrability

CO5: It is also useful to the students in the fields of Bio-Mathematics, Marine Biology and Physics.

SEMESTER -V PAPER-5 : RING THEORY AND MATRICES

CO1: The student can understand the application of matrices in solving linear equations.

CO2: Study the concepts of rank of a matrix, consistent and inconsistent system of equations.

CO3: Study the concepts of ring homomorphism and integral domain.

CO4: Applications find in the areas of Graph theory, Coding theory in Research studies.

SEMESTER-V PAPER-6 : LINEAR ALGEBRA

CO1: Understand the fundamental concepts of Groups , Rings and their role in modern Mathematics and applied contexts.

CO2: Understand the concepts of vector spaces, linear independence and dependents of vectors.

CO3: Students are benefited l in research areas like coding theory to draw animated graphs and in physics to find the solutions of Temperature and Velocity etc.

CO4: Understand the diverse situations in Physics, Engineering and other fields.