Programme Specific outcome:

Subject: Mathematics

- ➤ Real Numbers, Axioms, Continuity, nth derivatives, mean value theorems, Indeterminate forms.

- ➤ Determinants and its properties, Rank of matrix, Demorgan's Law, Fundamental Theorem of Algebra, Trigonometry.

- ➤ Polar co-ordinate system, radius of Curvature, Continuity of functions of two variables, Reduction formulas.

- ➤ Relations and types of relations, Boolean Algebra, Number Theory, Sphere, Cone and Cylinder.

- ➤ Mathematical Logic, Partial differentiation, Maxima and Minima, Sequences and sub- Sequences.

- ➤ Group, Subgroup and its properties, Cyclic Group, Co set groups, Lagrange's theorem, Definite Integrals, Differential equations.

- ➤ Vectors and Scalars, Vector differential operator del, gradient and curl, Infinite Series, Alternating series.

- ➤ Normal Subgroups, Quotient group, Homomorphism and Isomorphism groups, Fourier series, Differential equations.

- ➤ Riemann Integrations, Improper integrals, Beta and Gamma functions, Triple Integrals.

- ➤ Bisection and Iteration method, Newton Raphson Method, Gauss Seidal method, Jacobi Iteration method, Finite Difference , Forward and Back word difference formulas., Difference equations.

- ➤ Radial and Transverse Velocities and accelerations of a particle, Projectile, Central orbits, Impact, Calculus of variations.

- Simultaneous differential equations, Total differential equations, Legender equation, Non- Linear differential equations.
- Analytic function, Complex integration, Cauchy's Integral Theorem, Taylors and Laurent's series, Ring and Sub ring and its Properties.
- Topology, Open sets, closer set, Neighborhood of a point, Limit points, derived sets, T_1 and T_2 space, Base and Sub base, Laplace Transforms.