PEU5304 – Introduction to complex Analysis- Unit I

- Path to Complex Numbers

- Definition of a Complex Number

- Algebra of Complex Numbers

- Absence of a Natural Order for Complex Numbers

- Point Representation of a Complex Number

- Complex Conjugate and Absolute Value (Modulus)

- Argument of a Complex Number

- Polar Form of a Complex Number

- Constructions and Loci in the Complex Plane

PEU5304 – Introduction to complex Analysis- Unit II

- Integer Powers of Complex Numbers

- Rational Powers of Complex Number

- Zeros of a Complex Polynomials

- Absence of a Natural Order for Complex Numbers

- Complex Trigonometric Functions

- Complex Hyperbolic Functions

- The Complex Logarithmic Function

- Irrational Power Complex Numbers

- Complex Powers of Complex Numbers

- Inverse Trigonometric and Hyperbolic Functions