Subject Area: Engineering Mathematics

Topics Covered

- Fundamentals of Calculus
- First-Order Differential Equations
- Higher-Order Differential Equations
- Laplace-Transform
- Fourier-Transform
  - Orthogonal Functions
- Z-Transform
- Series Solutions of Linear Differential Equations
- Numerical Solutions of Linear Differential Equations
- Vectors
- Matrices
- Vector Calculus
- Systems of Linear Differential Equations
- Boundary-Value Problems
- Complex Variables
- Functions of Complex Variables
- Series and Residues
- Eigenvalues and Eigenvectors

References


Basic Scientific Calculator is allowed. 4 pages, total, of notes/formulas are allowed.