

L D College of Engineering

Circular

Date: 05/03/2025

Science & Humanities Department

Syllabus

MID SEM EXAMINATION -2025

SEM-II (ALL BRANCH)

Sub: Mathematics-02 (BE02000011)

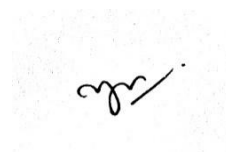
Exam Date: 17/03/2025 Time: 11:00 am to 12:30 pm

Matrices: Linear Independence; Row Echelon form (REF) and Reduced Row Echelon form (RREF) of a Matrix, Rank of a Matrix using REF/RREF, Inverse of a matrix using Gauss-Jordan method; Solution of System of linear equations by elementary row operations, Symmetric, skew-symmetric and orthogonal matrices; Eigen values and eigenvectors, Diagonalization of matrices, Inverse of a Matrix by Cayley-Hamilton Theorem. CO1

Ordinary Differential Equations: First order differential equations, Exact differential equations, Integrating factor, Linear differential equations, Bernoulli's equations. CO2

Ordinary differential equations of higher order: Homogeneous linear ordinary differential equations of higher order, Homogeneous Linear ODEs with constant coefficients. CO3

Complex Variables : Limit, Continuity, Differentiability. CO4



Subject Coordinator

