

**L D College of Engineering**

**Circular**

**Date: 16/03/2024**

**Science & Humanities Department**

**Syllabus**

**MID SEM EXAMINATION -2024**

**SEM-II (ALL BRANCH)**

**Sub: Mathematics-02 (3110015)**

**Exam Date: 26/03/2024      Time: 3:30 pm to 5:00 pm**

**Fourier Integral:** Fourier Integral, Fourier Cosine Integral and Sine Integral.

**Laplace Transform:** Definition of the Laplace transform, Linearity, shifting theorem (first shifting), Transforms of derivatives and integrals, Differentiation and integration of Laplace transform equations, Evaluation of integrals.

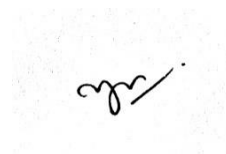
CO2

**Ordinary Differential Equations:** First order differential equations, Exact differential equations, Integrating factor, Linear differential equations, Bernoulli equations.

CO3

**Ordinary differential equations of higher order:** Homogeneous linear ordinary differential equations of higher order, Homogeneous Linear ODEs with constant coefficients, Existence and uniqueness of solutions, Linear dependence and Independence of solutions, Wronskian, Nonhomogeneous ODEs, Method of Undetermined Coefficients, Solution by Variation of Parameters, Euler-Cauchy Equations.

CO4



Subject Coordinator