L. D. College of Engineering

Science & Humanities Department

B.E. Semester- I Mid semester Examination syllabus (All Branch)

Date: 09/09/2024

Subject: Mathematics-1

Exam Date: 25/09/2024

Time: 12:30 - 02:00 P.M.

Module 2: Single-variable Calculus (Differentiation):

Taylor's and Maclaurin's theorem for a function of one variable, Taylor's and Maclaurin's series of a function using statement of the theorems; Extreme values of functions; Indeterminate forms and L' Hospital's rule.

Module 4: Multivariable Calculus (Differentiation):

Limit, Continuity and Differentiation for function of two or more variables, total derivative, gradient, directional derivatives; Tangent plane and Normal line to the surface f(x, y, z) = c; Extreme values for function of two variables (Maxima, minima and saddle points);Method of Lagrange multipliers.

Module 5: Multivariable Calculus (Integration):

Multiple Integration: Double integrals (Cartesian), change of order of integration in double integrals, Application : area

Jstatel Subject Coordinator

Head of Department