JIS College of Engineering

(NAAC 'A' Accredited Autonomous Institution)

Syllabus for B. Tech (CIVIL ENGINEERING)
2ND YEAR 3RD SEM

Paper Name: Mathematics-III (NUMERICAL METHODS AND APPLICATIONS)
Paper Code: M (CE) 391
Contact: 3P

1. Assignments on Newton forward /backward, Lagrange's interpolation.

2. Assignments on numerical integration using Trapezoidal rule, Simpson's 1/3 rule, Weddle's rule.

3. Assignments on numerical solution of a system of linear equations using Gauss elimination and Gauss-Seidel iterations.

4. Assignments on numerical solution of Algebraic Equation by Regular-falsi and Newton Raphson methods.

5. Assignments on ordinary differential equation: Euler's and Runga-Kutta methods.

6. Introduction to Software Packages: Matlab / Scilab/ Labview / Mathematica.