

NUMERICAL METHODS
Code : M(CS) 391
ECE,2ND YEAR

Day-1

1. Print the identity matrix of order $n \times n$.
2. Transpose of a Matrix.
3. Calculate the sum of the Diagonal elements of a Matrix.

Day-2

1. Matrix Addition.
2. Print the Upper Diagonal Matrix of a given Matrix of order $n \times n$.
3. Print the Lower Diagonal Matrix of a given Matrix of order $n \times n$.

Day-3

1. Multiplication of two Matrices.
2. Newton forward Interpolation.

Day-4

1. Newton backward Interpolation.
2. Lagrange's interpolation.

Day-5

Solve Numerical integration using:

1. Trapezoidal Rule.
2. Simpson's 1/3 Rule.

Day-6

Find Numerical Solutions of Algebraic Equations using:

1. Regula-Falsi Method.
2. Newton Raphson Method.

Day-7

Solutions of Ordinary Differential Equations using:

1. Euler's Method.
2. Runge-Kutta Methods.

Day-8

Numerical Solutions of a system of linear equations using:

1. Gauss elimination.
2. Gauss-Seidel iterations.