

Integral Transforms & Numerical Techniques

Discipline: B.Tech. (ECE)

Semester: 3rd

Subject: Integral Transforms & Numerical Techniques

Lesson Plan Duration: 15weeks

****Work(Lecture) per week (In Hours):** Lecture-03,Tutorial-01

WEEK	LECT	TOPIC
1st	1	Laplace Transform: Introduction
	2	Laplace Transform of Elementary functions
	3	Basic properties of Laplace Transform
2nd	4	Laplace Transform of periodic function
	5	Finding inverse Laplace Transform by different methods
	6	Finding inverse Laplace Transform by different methods
3rd	7	Finding inverse Laplace Transform by different methods
	8	Convolution Theorem
	9	Convolution Theorem
4th	10	Solving ordinary differential eq. by L.T.
	11	Solving ordinary differential eq. by L.T.
	12	Solving ordinary differential eq. by L.T.
5th	13	Solution of system of linear eq. using Gauss elimination method
	14	Gauss seidel method
	15	Row echelon form
6th	16	Row echelon form
	17	LU factorization
	18	Cholesky method
7th	Minor Test	
8th	22	Newton raphson method
	23	Newton raphson method
	24	Regula falsi method
9th	25	Regula falsi method
	26	Newton forward difference formula
	27	Newton forward difference formula
10th	28	Newton backward difference formula
	29	Newton backward difference formula
	30	Newton divided difference formula
11th	31	Newton divided difference formula
	32	Lagrange formula
	33	Lagrange formula
12th	34	Trapezoidal rule
	35	Trapezoidal rule
	36	Simpson 1/3 rd rule
13th	37	Simpson 3/8 th rule
	38	Eulers method
	39	Modified Eulers method
14th	Minor Test	
15th	43	Runga kutta method of 4 th order
	44	Runga kutta method of 4 th order
	45	Predictor-corrector method