



COLLEGE OF ENGINEERING & TECHNOLOGY

HUMANITIES & APPLIED SCIENCE DEPARTMENT

B.E. 2nd SEMESTER

SUBJECT: MATHEMATICS-2

SUBJECT CODE:3110015

Sr.No.	Topic	Link	By
1	Laplace Transform	https://youtu.be/ppfQsSsCwhw	MathCom Mentors/YouTube
2	Laplace Transform Definition & Conditions	https://youtu.be/PmMkos1UriA	MathCom Mentors/YouTube
3	Laplace of Elementary Functions	https://youtu.be/_A9R169DxAI	MathCom Mentors/YouTube
4	Laplace of Elementary Functions	https://youtu.be/Xy96_49JJ9s	MathCom Mentors/YouTube
5	Laplace Transform (Linear Property)	https://youtu.be/_0hy9pkC7jQ	MathCom Mentors/YouTube
6	Laplace Transform Trigonometric Functions	https://youtu.be/8JeiMy1I1XY	MathCom Mentors/YouTube
7	Laplace Transform Trigonometric Functions	https://youtu.be/ikgz_eyD_KE	MathCom Mentors/YouTube
8	Laplace Transform Discontinuous	https://youtu.be/Vix1XZtJWDw	MathCom Mentors/YouTube
9	First Shifting Property	https://youtu.be/omr1KYCM0Xs	MathCom Mentors/YouTube
10	Laplace Transform - Multiplication Property	https://youtu.be/1AhdTdNTkLA	Dr.Gajendra Purohit
11	Laplace Transform - Division Property	https://youtu.be/KK-dGfgJYA4	Dr.Gajendra Purohit
12	Laplace Inverse Transform	https://youtu.be/NYvpx9k2uEE	MathCom Mentors/YouTube
13	First Shifting Property in Laplace Inverse Transform	https://youtu.be/VWC5W2Fs3Zg	MathCom Mentors/YouTube
14	Laplace Inverse / Important Numerical Problems	https://youtu.be/bfcTkJb1hNo	MathCom Mentors/YouTube
15	Laplace Inverse Partial Fraction based Important Numerical Problems	https://youtu.be/4F7vLvRNjyA	MathCom Mentors/YouTube

16	Laplace Inverse Partial Fraction based Important Numerical Problems	https://youtu.be/-WA7aWKHzkk	MathCom Mentors/YouTube
17	Laplace Inverse Partial Fraction based Important Numerical Problems	https://youtu.be/-WA7aWKHzkk	MathCom Mentors/YouTube
18	Convolution Theorem	https://youtu.be/WynuBMZBcCQ	MathCom Mentors/YouTube
19	Convolution Theorem	https://youtu.be/7WIbeW17W7Y	MathCom Mentors/YouTube
20	Unit Step & Unit Impulse Function	https://youtu.be/y0XV1g7xb7o	MathCom Mentors/YouTube
21	Applications of Laplace Transform	https://youtu.be/ZimFP0TToU8	MathCom Mentors/YouTube
22	Applications of Laplace Transform	https://youtu.be/woghQ8wWa84	MathCom Mentors/YouTube
23	Fourier Integral Complete Concept	https://youtu.be/ZZfRuPpRX-o	MKS TUTORIALS /YouTube
24	Fourier Integral Problem#1	https://youtu.be/WWG-uuKsXMo	MKS TUTORIALS /YouTube
25	Fourier Integral Problem#2	https://youtu.be/BjkCIq1kRW8	MKS TUTORIALS /YouTube
26	Fourier Integral Problem#3	https://youtu.be/hkfaVgwc_AI	MKS TUTORIALS /YouTube
27	Fourier Integral Problem#4	https://youtu.be/BCrBLg_mC8U	MKS TUTORIALS /YouTube
28	Fourier Integral Problem#5	https://youtu.be/jIwoZW9y-XQ	MKS TUTORIALS /YouTube
29	Ordinary Differential Equation - concept, order and degree	https://youtu.be/OET0qwat15o	Bhagwan Singh Vishwakarma /YouTube
30	Ordinary Differential Equation of First order - Separation of Variable Form	https://youtu.be/BHdXOPD4cvo	Bhagwan Singh Vishwakarma /YouTube
31	First order Linear & Bernoulli's equation	https://youtu.be/f-4tMNFUqyU	Bhagwan Singh Vishwakarma /YouTube
32	Exact differential equation	https://youtu.be/suvzwN2Df7k	Bhagwan Singh Vishwakarma /YouTube
33	Rule's for CF - Linear Differential Equation with constant coefficient	https://youtu.be/ozK-7pvmo2o	Bhagwan Singh Vishwakarma /YouTube
34	Rule's for PI - Linear Differential Equation with constant coefficient	https://youtu.be/WmxynyRK3L8	Bhagwan Singh Vishwakarma /YouTube
35	Linear Ordinary Differential Equation with constant coefficient - CF & PI	https://youtu.be/VyWBA0THDRk	Bhagwan Singh Vishwakarma /YouTube
36	More Problems on CF and PI	https://youtu.be/HpDaKcPZCww	Bhagwan Singh Vishwakarma /YouTube
37	Cauchy's homogeneous linear differential equation	https://youtu.be/H7Ji3m1wTSY	Bhagwan Singh Vishwakarma /YouTube

38	Method of undetermined coefficients	https://youtu.be/uz0MgH4TwYs	Bhagwan Singh Vishwakarma /YouTube
39	2nd Order Linear differential Equation By Variation of Parameters method	https://youtu.be/GULqLKB5F6M	Bhagwan Singh Vishwakarma /YouTube
40	Series Solution of Differential Equation (Part-1)	https://youtu.be/wMq4jCwJq2U	Bhagwan Singh Vishwakarma /YouTube
41	Series Solution of Differential Equation (Part-2)	https://youtu.be/jl8l3ry289g	Bhagwan Singh Vishwakarma /YouTube
42	Series Solution of Differential Equation Frobenius Method	https://youtu.be/19Vt7ds8Lvw	Dr.Gajendra Purohit/YouTube
43	Recurrence Relation of Bessel's Function	https://youtu.be/zVbcglXP1NE	Dr.Gajendra Purohit/YouTube
44	Bessel's Function Recurrence Relation of Bessel's Function Part-II	https://youtu.be/DERYR2M0JSA	Dr.Gajendra Purohit/YouTube
45	Bessel's Function Important Example Problem of Bessel's Function	https://youtu.be/VDD8Et_B_ck	Dr.Gajendra Purohit/YouTube
46	Orthogonal Property of Bessel Function	https://youtu.be/SPdf2n0YJXk	Dr.Gajendra Purohit/YouTube