



Aggarwal College Ballabgarh

LESSON PLAN

17 WEEKS (JAN-APRIL)-2025

Name of Faculty: DR K.L. Kaushik

Designation/ Department: Associate Professor in Mathematics

CLASS: B.A./BSC. (Pass)		SEMESTER: Fourth	SECTION:
SUBJECT: Special Function and Integral Transforms			
Week			
1	7-1-2025	Power Series: Definition, radius of convergence	
	8-1-2025	Shifting of Summation index	
	9-1-2025	Analytic function, ordinary and singular points	
	10-1-2025	Power series solution	
	11-1-2025	Continued	
	12-1-2025	S. U. N. D. A. Y.	
2	13-1-2025	Continued	
	14-1-2025	Continued	
	15-1-2025	Frobenius Method	
	16-1-2025	Continued	
	17-1-2025	Continued	
	18-1-2025	Continued	
	19-1-2025	S. U. N. D. A. Y.	
3	20-1-2025	Other method of power series solution	
	21-1-2025	Continued	
	22-1-2025	Continued	
	23-1-2025	Continued	

	24-1-2025	Bessel's equation
	25-1-2025	Bessel's Function
	26-1-2025	REPUBLIC DAY /S. U. N. D. A. Y.
4	27-1-2025	Recurrence relations for Bessel's functions
	28-1-2025	Continued
	29-1-2025	Continued
	30-1-2025	Generating function
	31-1-2025	Related examples
	1-2-2025	Continued
	2-2-2025	S. U. N. D. A. Y/BASANT PANCHAMI
5	3-2-2025	Orthogonality relation of Bessel's function
	4-2-2025	Doubts related to the topic
	5-2-2025	Legendre's equation
	6-2-2025	Rodrigue's formula
	7-2-2025	Generating function
	8-2-2025	Related examples
	9-2-2025	S. U. N. D. A. Y
6	10-2-2025	Continued
	11-2-2025	Recurrence relations for Legendre's equation
	12-2-2025	HOLIDAY: GURU RAVIDAS JAYANTI
	13-2-2025	Orthogonality relation of Legendre's polynomial
	14-2-2025	Continued
	15-2-2025	Doubts related to the topic
	16-2-2025	S. U. N. D. A. Y.

7	17-2-2025	Hermite's equation
	18-2-2025	Generating function, Rodrigue's formula
	19-2-2025	Generating function
	20-2-2025	Recurrence relations and related examples
	21-2-2025	Orthogonal property of Hermite's polynomial
	22-2-2025	Doubts related to the topic
	23-2-2025	S. U. N. D. A. Y.
8	24-2-2025	Laplace Transforms: Definition and properties
	25-2-2025	Related examples
	26-2-2025	HOLIDAY: MAHA SHIVRATRI
	27-2-2025	First shifting property, change of scale property
	28-2-2025	Related examples
	1-3-2025	Second shifting property and related examples
	2-3-2025	S. U. N. D. A. Y.
9	3-3-2025	Laplace Transforms of derivatives
	4-3-2025	Laplace Transforms of periodic function
	5-3-2025	Laplace transforms of integrals
	6-3-2025	Continued
	7-3-2025	Laplace transforms of other functions
	8-3-2025	Doubts related to the topic
	9-3-2025	S. U. N. D. A. Y.
10	10-3-2025	H.O.L.I.B.R.E.A.K
	11-3-2025	H.O.L.I.B.R.E.A.K
	12-3-2025	H.O.L.I.B.R.E.A.K

	13-3-2025	H.O.L.I.B.R.E.A.K
	14-3-2025	H.O.L.I.B.R.E.A.K
	15-3-2025	H.O.L.I.B.R.E.A.K
	16-03-2025	S. U. N. D. A. Y.
11	17-3-2025	Inverse Laplace transforms
	18-3-2025	Other methods to find Inverse Transforms
	19-3-2025	Continued
	20-3-2025	Convolution Theorem
	21-3-2025	Examples related to the topic
	22-3-2025	Revision test
	23-3-2025	S. U. N. D. A. Y.
12	24-3-2025	Solution of differential equations by Laplace Transformation
	25-3-2025	Continued
	26-3-2025	Continued
	27-3-2025	Continued
	28-3-2025	Continued
	29-3-2025	Doubts related to the topic
	30-3-2025	S. U. N. D. A. Y.
13	31-3-2025	HOLIDAY: ID-UL-FITR
	1-4-2025	Fourier Transforms
	2-4-2025	Sine and cosine transforms
	3-4-2025	Related examples
	4-4-2025	Examples based on Fourier Sine and cosine transforms
	5-4-2025	Continued

	6-4-2025	S. U. N. D. A. Y.
14	7-4-2025	Fourier inverse transformation
	8-4-2025	Continued
	9-4-2025	Convolution theorem, Parseval's Identity
	10-4-2025	HOLIDAY: MAHAVIR JAYANTI
	11-4-2025	Finite sine and cosine transforms
	12-4-2025	Continued
	13-4-2025	S. U. N. D. A. Y.
15	14-4-2025	HOLIDAY: AMBEDKAR JAYANTI
	15-4-2025	Doubts related to the topic
	16-4-2025	Revision test
	17-4-2025	Solution of differential equations by Fourier Transforms
	18-4-2025	Continued
	19-4-2025	Continued
	20-4-2025	S. U. N. D. A. Y.
16	21-4-2025	Continued
	22-4-2025	Continued
	23-4-2025	Continued
	24-4-2025	Continued
	25-4-2025	Doubts related to the topic
	26-4-2025	Revision test
	27-4-2025	S. U. N. D. A. Y.
	28-4-2025	Discussion of Previous year questions
	29-4-2025	Discussion of Previous year questions

17	30-4-2025	HOLIDAY: AKSHAY TRITYA
	01-05-2025	Discussion of Previous year questions
	02-05-2025	Discussion of Previous year questions
	03-05-2025	Discussion of Previous year questions
	04-05-2025	S. U. N. D. A. Y.



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LESSON PLAN 17 WEEKS (JAN-MAY)-2025

Name of Faculty: Dr. K.L. Kaushik

Designation/ Department: Associate Prof. , Department of Mathematics

CLASS: B.SC. (Physical Science)		SEMESTER: IInd	SECTION:
SUBJECT: CALCULUS			
Week			
1	1-2-2025	-----	
	2-2-2025	S. U. N. D. A. Y/BASANT PANCHAMI	
2	3-2-2025	Limit & Continuity: Definition & examples	
	4-2-2025	Continue the topic	
	5-2-2025	-----	
	6-2-2025	-----	
	7-2-2025	Discontinuity & its types	
	8-2-2025	-----	
	9-2-2025	S. U. N. D. A. Y	
3	10-2-2025	Continue the same topic	
	11-2-2025	Differentiability of the functions	
	12-2-2025	HOLIDAY: GURU RAVIDAS JAYANTI	
	13-2-2025	-----	
	14-2-2025	Successive differentiation	
	15-2-2025	-----	
	16-2-2025	S. U. N. D. A. Y.	
4	17-2-2025	Continue the same topic	

	18-2-2025	Continue the same topic
	19-2-2025	-----
	20-2-2025	-----
	21-2-2025	Continue the same topic
	22-2-2025	-----
	23-2-2025	S. U. N. D. A. Y.
5	24-2-2025	Leibnitz rule and its applications
	25-2-2025	Continue the same topic
	26-2-2025	HOLIDAY: MAHA SHIVRATRI
	27-2-2025	-----
	28-2-2025	Continue the same topic
	1-3-2025	-----
	2-3-2025	S. U. N. D. A. Y.
6	3-3-2025	L'Hospital's Rule
	4-3-2025	Continue the same topic
	5-3-2025	-----
	6-3-2025	-----
	7-3-2025	Continue the topic
	8-3-2025	-----
	9-3-2025	S. U. N. D. A. Y.
7	10-3-2025	Taylor's Theorem with Lagrange's and Cauchy's form of remainder
	11-3-2025	Continue the same topic
	12-3-2025	-----
	13-3-2025	-----

	14-3-2025	Maclaurin's and Taylor's series expansion
	15-3-2025	-----
	16-03-2025	S. U. N. D. A. Y.
8	17-3-2025	Doubts related to the topic
	18-3-2025	Tangent and normal
	19-3-2025	-----
	20-3-2025	-----
	21-3-2025	Asymptotes of curves In Cartesian co-ordinates
	22-3-2025	-----
	23-3-2025	S. U. N. D. A. Y.
9	24-3-2025	Asymptotes of curves In polar co-ordinates
	25-3-2025	Continue the topic
	26-3-2025	-----
	27-3-2025	-----
	28-3-2025	Curvature: Definition and examples
	29-3-2025	-----
	30-3-2025	S. U. N. D. A. Y.
10	31-3-2025	HOLIDAY: ID-UL-FITR
	1-4-2025	Radius of curvature for Cartesian curves
	2-4-2025	-----
	3-4-2025	-----
	4-4-2025	Parametric, polar and pedal forms of curves
	5-4-2025	-----
	6-4-2025	S. U. N. D. A. Y.

11	7-4-2025	Circle of curvature, Chord of curvature
	8-4-2025	Concavity, convexity and Inflexion points
	9-4-2025	-----
	10-4-2025	HOLIDAY: MAHAVIR JAYANTI
	11-4-2025	Revision test
	12-4-2025	-----
	13-4-2025	S. U. N. D. A. Y.
12	14-4-2025	HOLIDAY: AMBEDKAR JAYANTI
	15-4-2025	Tracing of curves in Cartesian and parametric curves
	16-4-2025	-----
	17-4-2025	-----
	18-4-2025	Tracing of curves in polar curves
	19-4-2025	-----
	20-4-2025	S. U. N. D. A. Y.
13	21-4-2025	Continue the topic
	22-4-2025	Continue the topic
	23-4-2025	-----
	24-4-2025	-----
	25-4-2025	Doubts related the topic
	26-4-2025	-----
	27-4-2025	S. U. N. D. A. Y.
	28-4-2025	Function of several variables
	29-4-2025	Limit and continuity
	30-4-2025	-----

14	01-05-2025	-----
	02-05-2025	Partial differentiation
	03-05-2025	-----
	04-05-2025	S. U. N. D. A. Y.
15	05-05-2025	Euler's theorem on homogeneous functions
	06-05-2025	Chain rule
	07-05-2025	-----
	08-05-2025	-----
	09-05-2025	Directional derivatives
	10-05-2025	-----
	11-05-2025	S. U. N. D. A. Y.
16	12-05-2025	Gradient vectors and tangent planes
	13-05-2025	Discussion of previous year question papers
	14-05-2025	-----
	15-05-2025	-----
	16-05-2025	Discussion of previous year question papers
	17-05-2025	-----
	18-05-2025	S. U. N. D. A. Y.

Signature