GDC Memorial College
Bahal (Bhiwani) - 127028

NAAC Accredited Grade "B" (Second Cycle) and Recognized under the Sections 2(f) & 12B of the UGC Act, 1956

Affiliated to Ch. Bansi Lal University, Bhiwani

Lesson Plan- January to April 2026

Name - Mr.. Prem singh   Department - Mathematics

Class - M.Sc.   Subject - Operation Research Techniques

Semester-2nd	Subject Code - 25PN-MTH206
Unit-1	
16-Jan-26	Operation research :Origin ,definition and its slope
17-Jan-26	LPP By Graphical Method
20-Jan-26	Do
21-Jan-26	Do
23-Jan-26	LPP By Simplex Method
24-Jan-26	Do
27-Jan-26	Big-M Method
28-Jan-26	Two Phase Method
30-Jan-26	Do
31-Jan-26	Do
3-Feb-26	Degeneracy
4-Feb-26	Duality in Linear Programming
6-Feb-26	Do
7-Feb-26	Do
Unit-2	
10-Feb-26	Basic feasible solution
11-Feb-26	Do
13-Feb-26	Optimum Solution by Stepping Stoneand method
14-Feb-26	Unbalanced and degenerate Problem
17-Feb-26	Transhiped Problem
18-Feb-26	Assignment Problem
20-Feb-26	Solution By Hungarian method
21-Feb-26	Do
24-Feb-26	Unbalance Problem
25-Feb-26	Case of maximation
27-Feb-26	Travelling salesmanand crew assignment problems
28-Feb-26	Test Unit-2
Unit-3	
3-Mar-26	Basic components of a queing system
4-Mar-26	general birth death equation
6-Mar-26	Do
7-Mar-26	steady Stone solution of markovian queing models with single and multiple server

10-Mar-26	Do
11-Mar-26	Do
11-Sep-25	Do
13-Mar-26	Do
14-Mar-26	Do
17-Mar-26	M/M/1 and M/M/C model having limited and infinite capacity
18-Mar-26	Do
20-Mar-26	Do
21-Mar-26	Do
24-Mar-26	Do
25-Mar-26	Machine serving model
27-Mar-26	Do
28-Mar-26	Do
31-Mar-26	Do
1-Apr-26	Do
3-Apr-26	Erlang family distribution with K-Phases
4-Apr-26	Do
7-Apr-26	Do
8-Apr-26	Test Unit-3
Unit-4	
10-Apr-26	Economic order Quantity model with uniform demand and with diffent rate of demand
11-Apr-26	Do
14-Apr-26	EOQ when storage are allowed
15-Apr-26	Do
17-Apr-26	EOQ with uniform replenishment
18-Apr-26	Do
21-Apr-26	Inventory control with price breaks
22-Apr-26	Do
24-Apr-26	Do
25-Apr-26	Revision
28-Apr-26	Revision
29-Apr-26	Revision

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Lesson Plan- January to April 2026

Name - Mr.. Prem singh   Department - Mathematics

Class - M.Sc.   Subject - Partial Diff. eq. & Fourier Analysis

Semester-2nd   Subject Code - 25PN-MTH203

	UNIT 1
15-Jan-26	Contribution of indian mathematican in PDE
16-Jan-26	Secound order PDE
17-Jan-26	Homogeneous, non homogeneous PDE constant Coefficent and variable coefficent
21-Jan-26	do
22-Jan-26	do
23-Jan-26	Complementry and particular integral
24-Jan-26	do
21-Jan-26	Equation reducible to linear equation with constant coefficients
22-Jan-26	do
23-Jan-26	do
	UNIT 2
24-Jan-26	Classification of PDE
28-Jan-26	Hyperbolic, parabolic and elliptic PDE
29-Jan-26	Reduce the secound order pde in Canonical form
30-Jan-26	do
31-Jan-26	do
4-Feb-26	Solution of linear hyperbolic equations
5-Feb-26	do
6-Feb-26	do
7-Feb-26	Monge's method for PDE
11-Feb-26	do
	UNIT 3
12-Feb-26	Cauchy's problem for second order partial differential equations
13-Feb-26	do
14-Feb-26	do
18-Feb-26	Characteristic equations and characteristic curves of second order PDE
19-Feb-26	do
20-Feb-26	do
21-Feb-26	Method of separation of variables
25-Feb-26	do
26-Feb-26	Laplace's equation
27-Feb-26	do
28-Feb-26	Wave equation (one and two dimensions)

4-Mar-26	do
5-Mar-26	do
6-Mar-26	Diffusion equation (one and two dimension) in Cartesian Co-ordinate system
7-Mar-26	do
11-Mar-26	do
12-Mar-26	do
	UNIT 4
13-Mar-26	Fourier Analysis
14-Mar-26	do
18-Mar-26	Fourier Series- arbitrary period
19-Mar-26	do
20-Mar-26	do
21-Mar-26	even and odd function
25-Mar-26	do
26-Mar-26	half-range expansion
27-Mar-26	do
28-Mar-26	Forced oscillations
1-Apr-26	do
2-Apr-26	Fourier integral
3-Apr-26	do
4-Apr-26	do
8-Apr-26	Fourier sine integral, Fourier cosine integral
9-Apr-26	do
10-Apr-26	do
11-Apr-26	Fourier transforms
15-Apr-26	do
16-Apr-26	do
17-Apr-26	solution of PDE using Fourier transforms
18-Apr-26	do
22-Apr-26	Convolution Theorem
23-Apr-26	Inverse function theorem
24-Apr-26	do
25-Apr-26	do
29-Apr-26	Revision
30-Apr-26	Revision

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Lesson Plan- January to April 2026

Name - Dr. Satya Narayan	Department - Mathematics
Class - M.Sc	Subject - Real Analysis-II
Semester - 2nd	Subject Code - 25PN-MTH201

	UNIT-1
Week-1	
27-Jan-26	Contribution of Indian mathematicians in real analysis
28-Jan-26	do
30-Jan-26	do
Week-2	
02-Feb-26	Riemann-Stieltjes integral,
03-Feb-26	do
04-Feb-26	Existence and properties
06-Feb-26	do
Week-3	
09-Feb-26	Integration and differentiation
10-Feb-26	do
11-Feb-26	Condition of integrability
13-Feb-26	do
Week-4	
16-Feb-26	Integration of vector-valued Functions
17-Feb-26	Fundamental theorem of Calculus
18-Feb-26	Relation between Riemann Integral and Riemann Stieltjes integral
20-Feb-26	Rectifiable curves
	UNIT-2
Week-5	
23-Feb-26	Sequence and series of functions,
24-Feb-26	do
25-Feb-26	Point wise and uniform convergence,
27-Feb-26	do
Week-6	
02-Mar-26	Comparison test
03-Mar-26	do
06-Mar-26	Cauchy criterion for uniform convergence,

Week-7	
09-Mar-26	Weisstrass M-test
10-Mar-26	Abel's and Dirichlet's tests for uniform
11-Mar-26	do
13-Mar-26	Uniform convergence and continuity, Uniforin convergence and differentiation
Week-8	
16-Mar-26	Weierstrass approximation theorem.
17-Mar-26	Improper integrals and their convergence
18-Mar-26	Fruflani's integral
20-Mar-26	Abel theorem, Tauber theorem
Week-9	**UNIT-3**
23-Mar-26	Definition and examples of metric spaces
24-Mar-26	Neighbourhoods, limit points
25-Mar-26	Interior points, open and closed sets
27-Mar-26	Closure and interior
Week-10	
30-Mar-26	Subspace of a metric space
31-Mar-26	Cauchy sequences
01-Apr-26	Cantor's intersection theorem,
03-Apr-26	do
Week-11	
06-Apr-26	Baire's category theorem,
07-Apr-26	do
08-Apr-26	contraction Principle
10-Apr-26	do
	UNIT-4
Week-12	
13-Apr-26	Continuous functions,
14-Apr-26	Uniforin continuity,
15-Apr-26	compactness for metric spaces,
17-Apr-26	sequential compactness,
Week-13	
20-Apr-26	Bolzano-Weierstrass property
21-Apr-26	do
22-Apr-26	connectedness,
24-Apr-26	do
Week-14	
27-Apr-26	components,
28-Apr-26	do
29-Apr-26	continuity in relation with connectedness
30-Apr-26	do

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Lesson Plan- Jan to June 2026

Name - Jaiveer	Department - Mathematics
Class - M.Sc.	Subject - Complex Analysis
Semester - 2nd	Subject Code - 25PN-MTH204

Week-1	UNIT-1
27-Jan-26	Contribution of Indian mathematicians in complex analysis
29-Jan-26	Do
31-Jan-26	Continuity and differentiability
Week-2	
2-Feb-26	Analytic functions and their properties
3-Feb-26	Do
5-Feb-26	Cauchy–Riemann equations in cartesian and polar coordinates
7-Feb-26	Power series
Week-3	
9-Feb-26	Radius of convergence
10-Feb-26	Differentiability of sum function of a power series
12-Feb-26	Branches of many valued functions (arg z, log z, z^a)
14-Feb-26	Test
Week-4	UNIT-2
16-Feb-26	Path in a region,contour,complex integration
17-Feb-26	Cauchy theorem
19-Feb-26	Cauchy integral formula
21-Feb-26	Extension for multiple connected domain
Week-5	
23-Feb-26	Poisson integral formula
24-Feb-26	Higher order derivatives
26-Feb-26	Complex integral as a function of upper limit
28-Feb-26	Morera theorem
Week-6	
2-Mar-26	Cauchy inequality
3-Mar-26	Liouville theorem
5-Mar-26	Taylor theorem
7-Mar-26	Test
Week-7	UNIT-3
10-Mar-26	Zeros of an analytic function
12-Mar-26	Laurent series
14-Mar-26	Isolated singularities
Week-8	
16-Mar-26	Casorati–Weierstrass theorem
17-Mar-26	Limit point of zeros and poles
19-Mar-26	Maximum modulus principle
21-Mar-26	Schwarz lemma

Week-9	
23-Mar-26	Meromorphic functions
24-Mar-26	Argument principle
26-Mar-26	Rouche theorem
Week-10	
30-Mar-26	Fundamental theorem of algebra
2-Apr-26	Inverse function theorem
4-Apr-26	Test
Week-11	**UNIT-4**
6-Apr-26	Calculus of residues
7-Apr-26	Do
9-Apr-26	Cauchy residue theorem
11-Apr-26	Evaluation of integrals
Week-12	
13-Apr-26	Integral of f(cos t, sin t)
14-Apr-26	Integral from 0 to 2pi
16-Apr-26	Integral of f(x) sin mx
18-Apr-26	Integral of f(x) cos mx
Week-13	
20-Apr-26	Conformal mappings
21-Apr-26	Space of analytic functions and completeness
23-Apr-26	Hurwitz theorem
25-Apr-26	Montel theorem
Week-14	
27-Apr-26	Riemann mapping theorem
28-Apr-26	Test
30-Apr-26	Revision

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Lesson Plan- Jan to June 2026

Name - Jaiveer	Department - Mathematics
Class - M.Sc.	Subject - Linear Algebra
Semester - 2nd	Subject Code - 25PN-MTH202

Week-1	UNIT-1
27-Jan-26	Contribution of Indian mathematicians in linear algebra,
29-Jan-26	Vector spaces
31-Jan-26	Subspaces
Week-2	
2-Feb-26	Sum and direct sum of subspaces
3-Feb-26	Do
5-Feb-26	Linear span
7-Feb-26	Linearly independent and dependent subsets of a vector space
Week-3	
9-Feb-26	Finitely generated vector space
10-Feb-26	Do
12-Feb-26	Existence theorem for basis of a finitely generated vector space
14-Feb-26	Do
Week-4	
16-Feb-26	Finite dimensional vector spaces.
	UNIT-2
17-Feb-26	Invariance of the number of elements of bases sets, ,
19-Feb-26	Dimension
21-Feb-26	Do
Week-5	
23-Feb-26	Quotient space and its dimension
24-Feb-26	Do
26-Feb-26	Homomorphism and isomorphism of vector spaces,, .
28-Feb-26	Do
Week-6	
2-Mar-26	Linear transformations and linear forms on vector spaces
3-Mar-26	Do
5-Mar-26	Vector space of all the linear transformations
7-Mar-26	Do
Week-7	**UNIT-3**
9-Mar-26	Dual spaces
10-Mar-26	Do
12-Mar-26	Bidual spaces
14-Mar-26	Do
Week-8	
16-Mar-26	Annihilator of subspaces of finite dimensional vector spaces
17-Mar-26	Do
19-Mar-26	Null space
23-Mar-26	Range space of a linear transformation

Week-9	
24-Mar-26	Do
26-Mar-26	Rank and Nullity theorem
28-Mar-26	Do
30-Mar-26	Test
Week-10	**UNIT-4**
31-Mar-26	Algebra of linear transformation, ,
2-Apr-26	Do
4-Apr-26	Minimal polynomial of a linear transformation,
Week-11	
6-Apr-26	Do
7-Apr-26	Do
9-Apr-26	Do
Week-12	
13-Apr-26	Singular and non-singular linear transformations,
14-Apr-26	Do
16-Apr-26	Matrix of a linear transformation,
18-Apr-26	Do
Week-13	
20-Apr-26	Change of basis
21-Apr-26	Do
23-Apr-26	Eigen values and eigen vectors of linear transformations.
25-Apr-26	Do
Week-14	
27-Apr-26	do
28-Apr-26	Test