

**KUMARI VIDYAVATI ANAND D.A.V. COLLEGE FOR WOMEN,
KARNAL**

**Lesson Plan for the Odd Semester
(July to November, 2025)**

**Name of the Teacher– Deepika
Class – M.Sc. (Mathematics), Sem- I
Subject– Real Analysis
Paper–M24-MAT-101**

4thWeek 18Aug -23Aug	Definition and existence of the Riemann-Stieltjes integral, Properties of the integral, Integration and differentiation..
24Aug,2025	Sunday
5thWeek 25Aug -30Aug	The fundamental theorem of calculus, Integration of vector-valued functions, Rectifiable curves,
31Aug, 2025	Sunday

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Name of the Teacher– Deepika
Class – M.Sc. (Mathematics), Sem- I
Subject– Real Analysis
Paper–M24-MAT-101

September,2025 1 st Week 1Sept – 6 Sept	Point-wise and uniform convergence of sequences of functions, Cauchy criterion for uniform convergence, Dini's theorem, Uniform convergence and continuity.
7 Sept , 2025	Sunday
2 nd Week 8 Sept– 13Sept	Uniform convergence and Riemann integration, Uniform convergence and differentiation, Test, Convergence and uniform convergence of series of functions, Weierstrass M-Test,
14 Sept , 2025	Sunday
3 rd Week 15Sept–20 Sept	integration and differentiation of series of functions, existence of a continuous nowhere-differentiable function,
21Sept,2025 22Sept,2025 23Sept,2025	Sunday Maharaja Agrasen Jayanti Shaheedi Divas/Haryana War Heroes' Martyrdom Day
4 th Week 24Sept–27 Sept	Weierstrass approximation theorem ,Test
28Sept,2025	Sunday
5 th Week 29 Sept – 30 Sept,2025	Discussion on class problems, Test

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Name of the Teacher– Deepika
Class – M.Sc. (Mathematics), Sem- I
Subject– Real Analysis
Paper–M24-MAT-101

October,2025 1 st Week 1Oct –4 Oct	Functions of several variables: Linear transformations, The space of linear transformations on \mathbb{R}^n to \mathbb{R}^m as a metric space, Open sets, Continuity.
2Oct, 2025 5Oct,2025	Mahatma Gandhi Jayanti/ Dussehra Sunday
2 nd Week 6 Oct-11Oct	Derivative in an open subset of \mathbb{R}^n , Chain rule, Partial derivatives, Continuously differentiable mappings, Test.
7Oct,2025 12Oct,2025	Maharishi Valmiki Jayanti/Maharaja Ajmidh Jayanti Sunday
3 rd Week 13 Oct-18 Oct	The contraction principle, The inverse function theorem, The implicit function theorem,
19Oct – 26 Oct	Vacations (Diwali)
5 th Week 27Oct- 31 Oct	Fourier Series: Formulation of convergence problems, The necessary and sufficient condition for the Fourier series for f at x to converge to $f(x)$, Test, Discussion on class problems.

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Class – M.Sc. (Mathematics), Sem- I
Subject– Real Analysis
Paper–M24-MAT-101

November,2025 1 st Week 1Nov,2025 2 Nov, 2025	Haryana Day Sunday
2 nd Week 3 Nov-8Nov	The (C, I) summability of Fourier series, Fejer theorem, The L^2 theory of Fourier series, Bessel's inequality, Riesz Fischer theorem, Parseval's equality.
5 Nov,2025 9 Nov,2025	Guru Nanak Dev Jayanti Sunday
3 rd Week 10 Nov-15 Nov	The L^2 theory of Fourier series, Bessel's inequality, Riesz Fischer theorem, Parseval's equality, convergence of Fourier series, Riemann-Lebesgue theorem, Orthonormal expansions in $L^2[a,b]$, Bessel's inequality for generalized Fourier series.
4 th Week 16Nov,2025 Onwards	Sessional Exams
23Nov,2025	Sunday

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**Lesson Plan for the Odd Semester
(August to November, 2025)**

Name of the Teacher – Monila Bansal
Class- M.Sc. (Sem-I)
Subject- Mathematics
Paper- Complex Analysis (M24-MAT-102)

4thWeek 18Aug -23Aug	Discussion about course outcomes and programme outcomes An introduction to Complex analysis Introduction to Function of a complex variable
24Aug,2025	Sunday
5thWeek 25Aug -30Aug	Analytic function and its theorems Harmonic function and its properties.
31Aug, 2025	Sunday

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**Lesson Plan for the Odd Semester
(August to November, 2025)**

Name of the Teacher – Monila Bansal
Class- M.Sc. (Sem-I)
Subject- Mathematics
Paper- Complex Analysis (M24-MAT-102)

September,2025 1 st Week 1Sept – 6 Sept	Schwarz Reflection principle Elementary Functions: Exponential , Logarithmic , Trigonometric
7 Sept , 2025	Sunday
2 nd Week 8 Sept– 13Sept	Elementary Functions: Hyperbolic, Inverse Trigonometric, inverse hyperbolic Complex exponents, Complex integration.
14 Sept , 2025	Sunday
3 rd Week 15Sept–20 Sept	Definite integral, Contours, Branch Cuts Cauchy goursat theorem and its examples
21Sept,2025 22Sept,2025 23Sept,2025	Sunday Maharaja Agrasen Jayanti Shaheedi Divas/Haryana War Heroes' Martyrdom Day
4 th Week 24Sept–27 Sept	Cauchy theorem for simply and multiple connected domain Cauchy integral formula Morera's theorem liouville's theorem
28Sept,2025	Sunday
5 th Week 29 Sept – 30 Sept,2025	Fundamental theorem of algebra

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**Lesson Plan for the Odd Semester
(August to November, 2025)**

Name of the Teacher – Monila Bansal
Class- M.Sc. (Sem-I)
Subject- Mathematics
Paper- Complex Analysis (M24-MAT-102)

October,2025 1 st Week 1Oct –4 Oct	Maximum modulus principle Power Series: Taylor series; Laurent series
2Oct, 2025 5Oct,2025	Mahatma Gandhi Jayanti/Dussehra Sunday
2 nd Week 6 Oct-11Oct	Uniform / absolute convergence Differentiation, integration, multiplication, division of a power series
7Oct,2025 12Oct,2025	Maharishi Valmiki Jayanti/Maharaja Ajmidh Jayanti Sunday
3 rd Week 13 Oct-18 Oct	Singularities; Poles; Residues; Cauhy's residue theorem; Zeros of an analytic function
19Oct – 26 Oct	Vacations (Diwali)
5 th Week 27Oct- 31 Oct	Evaluation of improper integrals; Jordan's Lemma,Indented paths; Integration along a branch cut ; Definite integrals involving sines and cosines;

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Name of the Teacher – Monila Bansal
Class- M.Sc. (Sem-I)
Subject- Mathematics
Paper- Complex Analysis (M24-MAT-102)

November,2025 1 st Week 1Nov,2025 2 Nov, 2025	Haryana Day Sunday
2 nd Week 3 Nov-8Nov	Argument principle ;Rouche's theorem; Schwarz Lemma Transformation: linear, bilinear,sine, $z^2, z^{1/2}$
5 Nov,2025 9 Nov,2025	Guru Nanak Dev Jayanti Sunday
3 rd Week 10 Nov-15 Nov	Mapping: Isogonal; conformal; Scale Factors ;Local Inverses;Harmonic conjugates Sessional Exams
16Nov,2025	Sunday
4 th Week 17Nov-22 Nov	Sessional Exams
23Nov,2025	Sunday
5 th Week 24November,2025 Onwards	Sessional Exams

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**Lesson Plan for the Odd Semester
(August to November, 2025)**

Name of the Teacher–Ms. Monila Bansal

Class –M.Sc (p) Mathematics (Sem-I)

Subject– Theory of Ordinary Differential equation

Paper–M24-MAT-103

4thWeek 18Aug -23Aug	Discussion about course outcomes and program outcomes, Introduction of ordinary differential equation, Existence and Uniqueness of solutions: Existence of solutions, Initial value problems, ϵ- approximate solution, Equi-continuous set of functions, Ascoli lemma.
24Aug,2025	Sunday
5thWeek 25Aug -30Aug	Cauchy-Peano existence theorem and its corollary, Uniqueness of solutions, Lipschitz condition, Gronwall's inequality, Inequality involving approximate solutions. •
31Aug, 2025	Sunday

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**Lesson Plan for the Odd Semester
(August to November, 2025)**

Name of the Teacher–Ms. Monila Bansal
Class –M.Sc (p) Mathematics (Sem-I)
Subject– Theory of Ordinary Differential equation
Paper–M24-MAT-103

September,2025 1 st Week 1Sept – 6 Sept	Method of successive approximations, Picard- Lindelof theorem, Continuation of solutions, Maximal interval of existence, Extension theorem.
7 Sept , 2025	Sunday
2 nd Week 8 Sept– 13Sept	Theory of linear differential equations: Linear Differential Equation (LDE) of order n, Basic theory of homogeneous linear equation. Wronskian theory: Definition, necessary and sufficient condition for linear dependence and linear independence of solutions homogeneous LDE..
14 Sept , 2025	Sunday
3 rd Week 15Sept–20 Sept	Abel's Identity, Fundamental sets, More Wronskian theory, Reduction of order, Non-homogeneous linear differential equation of order n: Variation of parameters, Test.
21Sept,2025 22Sept,2025 23Sept,2025	Sunday Maharaja Agrasen Jayanti Shaheedi Divas/Haryana War Heroes' Martyrdom Day
4 th Week 24Sept–27 Sept	Adjoint equations, Lagrange's Identity, Green's formula, Self adjoint equation of second order, test.
28Sept,2025	Sunday
5 th Week 29 Sept – 30 Sept,2025	Linear differential equation of order n with constant coefficients, Characteristic roots, Fundamental set.

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**Lesson Plan for the Odd Semester
(August to November, 2025)**

Name of the Teacher–Ms. Monila Bansal
Class –M.Sc (p) Mathematics (Sem-I)
Subject– Theory of Ordinary Differential equation
Paper–M24-MAT-103

October,2025 1 st Week 1Oct –4 Oct	Linear second order equations: Preliminaries, Superposition principle, Riccati's equation, Pruffer transformation.
2Oct, 2025 5Oct,2025	Mahatma Gandhi Jayanti/Dussehra Sunday
2 nd Week 6 Oct-11Oct	Oscillations of second order differential equations: Zero of solution, Oscillatory and non-oscillatory equations, Abel's formula, Common zero of solutions and their linear dependence..
7Oct,2025 12Oct,2025	Maharishi Valmiki Jayanti/Maharaja Ajmidh Jayanti Sunday
3 rd Week 13 Oct-18 Oct	Sturm separation theorem, Sturm fundamental comparison theorem and its corollaries, Elementary linear oscillations
19Oct – 26 Oct	Vacations (Diwali)
5 th Week 27Oct- 31 Oct	Comparison theorem of Hille-Wintner, Oscillations of $x''+a(t)x=0$. Second order boundary value problems (BVP): Linear problems.

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Name of the Teacher–Ms. Monila Bansal
Class –M.Sc (p) Mathematics (Sem-I)
Subject– Theory of Ordinary Differential equation
Paper–M24-MAT-103

November,2025 1 st Week 1Nov,2025 2 Nov, 2025	Haryana Day Sunday
2 nd Week 3 Nov-8Nov	Periodic boundary conditions, regular linear BVP, singular linear BVP, non - linear BVP, Test. Sturm- Liouville BVP: Definition, Characteristic values Characteristic values, characteristic functions, Orthogonality of characteristic functions, Test.
5 Nov,2025 9 Nov,2025	Guru Nanak Dev Jayanti Sunday
3 rd Week 10 Nov-15 Nov	Orthogonality of characteristic functions, Green's functions: Application of boundary value problems, Picard theorem Sessional Exams
16Nov,2025	Sunday
4 th Week 17Nov-22 Nov	Sessional Exams
23Nov,2025	Sunday
5 th Week 24November,2025 Onwards	University Exams

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**Lesson Plan for the Odd Semester
(July to November, 2025)**

**Name of the Teacher– Deepika
Class – M.Sc. (Mathematics), Sem- I
Subject–Mechanics of Solids
Paper–M24-MAT-104**

4thWeek 18Aug -23Aug	Tensor Algebra: Coordinate-transformation, Cartesian tensors of different order, properties of tensors. Isotropic tensors of different orders and relation between them.
24Aug,2025	Sunday
5thWeek 25Aug -30Aug	Symmetric and skew symmetric tensors, Tensor invariants. Deviatoric tensors. Eigen-values and Eigen vectors of a tensor. Tensor Analysis: Scalar, vector, tensor functions, Comma notation, Gradient, divergence and curl of a vector / tensor field.
31Aug, 2025	Sunday

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**Lesson Plan for the Odd Semester
(July to November, 2025)**

Name of the Teacher– Deepika
Class – M.Sc. (Mathematics), Sem- I
Subject–Mechanics of Solids
Paper–M24-MAT-104

September,2025 1 st Week 1Sept – 6 Sept	Tensor Analysis: Scalar, Vector, Tensor functions, Comma notation, Gradient, divergence and curl of a vector / tensor field, Test
7 Sept , 2025	Sunday
2 nd Week 8 Sept– 13Sept	Analysis of Strain: Affine transformation, Infinitesimal affine deformation, Strain tensor, Geometrical Interpretation of strain components.
14 Sept , 2025	Sunday
3 rd Week 15Sept–20 Sept	Strain quadric of Cauchy. Principal strains, Invariants, General infinitesimal deformation, Examples of strain, Equations of compatibility.
21Sept,2025 22Sept,2025 23Sept,2025	Sunday Maharaja Agrasen Jayanti Shaheedi Divas/Haryana War Heroes' Martyrdom Day
4 th Week 24Sept–27 Sept	Analysis of Stress: Stress Vector, Stress tensor, Equations of equilibrium, Transformation of coordinates. Stress quadric of Cauchy, Principal stresses. Maximum normal and shear stresses
28Sept,2025	Sunday
5 th Week 29 Sept – 30 Sept,2025	Stress quadric of Cauchy, Principal stresses, Maximum normal and shear stresses Test.

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**Lesson Plan for the Odd Semester
(July to November, 2025)**

Name of the Teacher– Deepika
Class – M.Sc. (Mathematics), Sem- I
Subject–Mechanics of Solids
Paper–M24-MAT-104

October,2025 1 st Week 1Oct –4 Oct	Mohr's circles, Examples of stress, Equations of Elasticity: Generalised Hooke's Law.
2Oct, 2025 5Oct,2025	Mahatma Gandhi Jayanti/Dussehra Sunday
2 nd Week 6 Oct-11Oct	Anisotropic symmetries, Homogeneous Isotropic media. Elasticity moduli for Isotropic media, Equilibrium and dynamic equations for an isotropic elastic solid, Discussion on class problems.
7Oct,2025 12Oct,2025	Maharishi Valmiki Jayanti/Maharaja Ajmidh Jayanti Sunday
3 rd Week 13 Oct-18 Oct	Strain energy function and its connection with Hooke's law, Beltrami-Michell compatibility equations. Uniqueness of solution. Clapeyron's theorem. Saint-Venant's principle.
19Oct – 26 Oct	Vacations (Diwali)
5 th Week 27Oct- 31 Oct	Variational Methods: Variational problems and Euler' equations, Theorem of minimum potential energy, Test.

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Name of the Teacher– Deepika
Class – M.Sc. (Mathematics), Sem- I
Subject–Mechanics of Solids
Paper–M24-MAT-104

November,2025 1 st Week 1Nov,2025 2 Nov, 2025	Haryana Day Sunday
2 nd Week 3 Nov-8Nov	Theorem of minimum complementary energy. Reciprocal theorem of Betti and Rayleigh. Ritz method: one and two dimensional cases.
5 Nov,2025 9 Nov,2025	Guru Nanak Dev Jayanti Sunday
3 rd Week 10 Nov-15 Nov	Galerkin method, Method of Kantorovich, Wave propagation in infinite regions, Surface waves, Test, Discussion on class problems.
16Nov,2025	Sunday
4 th Week 17Nov,2025 Onwards	Sessional Exams
23Nov,2025	Sunday

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**Lesson Plan for the Odd Semester
(July to November, 2025)**

Name of the Teacher–Manju Rani

Class – M.Sc. (Sem. – I)

Subject– Mathematics

Paper– Advanced Abstract Algebra (M24-MAT-105)

4thWeek 18Aug -23Aug	Normal subgroup, quotient group, Normalizer and centralizer of a non empty subset of a group, first, second and third isomorphism theorems.
24Aug,2025	Sunday
5thWeek 25Aug -30Aug	Conjugate elements and conjugacy classes. Class equation of a finite group G and its applications, G-set orbit of an element in group ,Burnside theorem, Normal and Composition series of a group G, Zassenhaus lemma.
31Aug, 2025	Sunday

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**Lesson Plan for the Odd Semester
(July to November, 2025)**

Name of the Teacher– Manju Rani

Class – M.Sc. (Sem. - I)

Subject– Mathematics

Paper– Advanced Abstract Algebra (M24-MAT-105)

September,2025 1 st Week 1Sept – 6 Sept	Scheier’s refinement theorem, Jordan Holder theorem, solvable group, Nilpotent group, commutator subgroup.
7 Sept , 2025	Sunday
2 nd Week 8 Sept– 13Sept	Cyclic decomposition, even and odd decomposition, Alternation group, Simplicity of the alternating group.
14 Sept , 2025	Sunday
3 rd Week 15Sept–20 Sept	Cauchy’s theorem, Sylow’s first, second and third theorems. Application of Sylow theory to groups of smaller orders. Test
21Sept,2025 22Sept,2025 23Sept,2025	Sunday Maharaja Agrasen Jayanti Shaheedi Divas/Haryana War Heroes' Martyrdom Day
4 th Week 24Sept–27 Sept	Modules, Submodules, Direct sum, Finitely generated modules, Cyclic module
28Sept,2025	Sunday
5 th Week 29 Sept – 30 Sept,2025	R-homomorphism, Quotient module.

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**Lesson Plan for the Odd Semester
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Name of the Teacher– Manju Rani

Class – M.Sc. (Sem. - I)

Subject– Mathematics

Paper– Advanced Abstract Algebra (M24-MAT-105)

October,2025 1 st Week 1Oct –4 Oct	Completely reducible modules, Schur's lemma, free modules, Representation of linear mapping and rank of linear mapping.
2Oct, 2025 5Oct,2025	Mahatma Gandhi Jayanti/Dussehra Sunday
2 nd Week 6 Oct-11Oct	Similar linear transformation, invariant subspaces of vector spaces, Reduction of a linear transformation to triangular form, Nilpotent transformation.
7Oct,2025 12Oct,2025	Maharishi Valmiki Jayanti/Maharaja Ajmidh Jayanti Sunday
3 rd Week 13 Oct-18 Oct	Nilpotent transformation, Index of nilpotency of a nilpotent transformation.
19Oct – 26 Oct	Vacations (Diwali)
5 th Week 27Oct- 31 Oct	Cyclic subspace with respect to a nilpotent transformation, Test.

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**Lesson Plan for the Odd Semester
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Name of the Teacher– Manju Rani

Class- M.Sc. (Sem. – I)

Subject– Mathematics

Paper– Advanced Abstract Algebra (M24-MAT-105)

November,2025 1 st Week 1Nov,2025 2 Nov, 2025	Haryana Day Sunday
2 nd Week 3 Nov-8Nov	Cyclic module relative to a linear transformation.
5 Nov,2025 9 Nov,2025	Guru Nanak Dev Jayanti Sunday
3 rd Week 10 Nov-15 Nov	Rational canonical form of a linear transformation and its elementary divisors, Uniqueness of elementary divisor.
16Nov,2025	Sunday
4 th Week 17Nov, 2025 Onwards	Sessional Exams
23Nov,2025	Sunday

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**Lesson Plan for the Odd Semester
(August to November, 2025)**

Name of the Teacher–Ms. Monila Bansal
Class –M.Sc (F) Mathematics (Sem-III)
Subject– Fluid Mechanics
Paper–M24-MAT-301

August,2025 1 st Week 1Aug – 2 Aug	Discussion about course outcomes and program outcomes An introduction to fluid dynamics Some basic definition of fluid mechanics
3 Aug, 2025	Sunday
2 nd Week 4Aug– 8Aug	Velocity at a point of a fluid Lagrangian and Eulerian methods Relationship between Lagrangian and Eulerian methods
9Aug, 2025 10Aug, 2025	RakshaBandhan Sunday
3 rd Week 11Aug-14Aug	Stream lines, path lines and streak lines Vorticity and circulation Vortex lines Irrotational and rotational motion, velocity potential. Material derivative of fluid
15 Aug, 2025 16 Aug, 2025 17Aug, 2025	Independence Day Janmashtmi Sunday
4 th Week 18Aug -23Aug	Acceleration of a fluid Significance of equation of continuity, Equation of continuity in vector form Equation of continuity in Cartesian form Equation of continuity by lagrangian method Equivalence relation between lagrangian and eulerian equation of continuity
24Aug,2025	Sunday
5 th Week 25Aug -30Aug	Reynolds transport theorem, rate of change of material integral, analysis of local fluid motion.
31Aug, 2025	Sunday

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**Lesson Plan for the Odd Semester
(August to November, 2025)**

Name of the Teacher–Ms. Monila Bansal

Class –M.Sc (F) Mathematics (Sem-III)

Subject– Fluid Mechanics

Paper–M24-MAT-301

September,2025 1 st Week 1Sept – 6 Sept	Boundary surfaces and boundary surface conditions Properties of fluids-static and dynamic pressure Euler’s equation of motion Lagrange’s equation of motion
7 Sept , 2025	Sunday
2 nd Week 8 Sept– 13Sept	Bernouilli’s theorem Application of Bernouilli’s equation in one dimensional flow problems Steady motion under conservative body forces.
14 Sept , 2025	Sunday
3 rd Week 15Sept–20 Sept	Kelvin circulation theorem Kelvin minimum energy theorem Vorticity equation
21Sept,2025 22Sept,2025 23Sept,2025	Sunday Maharaja Agrasen Jayanti Shaheedi Divas/Haryana War Heroes' Martyrdom Day
4 th Week 24Sept–27 Sept	Energy equation for incompressible flow Kinetic energy of irrotational flow Mean potential over spherical surface
28Sept,2025	Sunday
5 th Week 29 Sept – 30 Sept,2025	Kinetic energy of infinite liquid Uniqueness theorem

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**Lesson Plan for the Odd Semester
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Name of the Teacher–Ms. Monila Bansal

Class –M.Sc (F) Mathematics (Sem-III)

Subject– Fluid Mechanics

Paper–M24-MAT-301

October,2025 1 st Week 1Oct –4 Oct	Axially symmetric flows Sphere at rest in a uniform stream Sphere in motion in fluid at rest at infinity
2Oct, 2025 5Oct,2025	Mahatma Gandhi Jayanti/Dussehra Sunday
2 nd Week 6 Oct-11Oct	Equation of motion of a sphere Kinetic energy generated by impulsive motion Motion of two concentric spheres.
7Oct,2025 12Oct,2025	Maharishi Valmiki Jayanti/Maharaja Ajmidh Jayanti Sunday
3 rd Week 13 Oct-18 Oct	Three-dimensionaal sources, sinks and doublets. Images of sources, sinks and doublets in rigid impermeable infinite plane and impermeable spherical sphere.
19Oct – 26 Oct	Vacations (Diwali)
5 th Week 27Oct- 31 Oct	Two-Dimensional flows: use of cylindrical polar coordinate Stream function, some fundamental stream functions Axisymmetric flow

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Class –M.Sc (F) Mathematics (Sem-III)
Subject– Fluid Mechanics
Paper–M24-MAT-301

November,2025 1 st Week 1 Nov,2025 2 Nov, 2025	Haryana Day Sunday
2 nd Week 3 Nov-8Nov	Equations satisfied by Stoke’s Stream function in irrotational flow, Basic Stokes’s stream function,Boundary Condition satisfied by the stream function Irrotational plane flows, complex potential
5 Nov,2025 9 Nov,2025	Guru Nanak Dev Jayanti Sunday
3 rd Week 10 Nov-15 Nov	Image system in plane flows Milne Thomson circle theorem Circular cylinder in uniform stream with circulation Blasius theorem
16Nov,2025	Sunday
4 th Week 17Nov-22 Nov	Sessional Exams
23Nov,2025	Sunday
5 th Week 24November,2025 Onwards	Sessional Exams

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**Lesson Plan for the Odd Semester
(August to November, 2025)**

Name of the Teacher–Manju Rani
Class – M.Sc. (Math)-Final Year
Subject–Functional Analysis
Paper–M24-MAT-302

August,2025 1 st Week 1Aug – 2 Aug	Normed linear spaces, Banach spaces and examples.
3 Aug, 2025	Sunday
2 nd Week 4Aug– 8Aug	Continued examples, subspace of a Banach space, completion of a Normed space, finite dimensional normed spaces and subspaces.
9Aug, 2025 10Aug, 2025	Raksha Bandhan Sunday
3 rd Week 11Aug-14Aug	Equivalent norms, compactness and finite dimension, F.Riesz’s lemma. Bounded and continuous linear operators, differentiation operator, Integral Operator, bounded linear extension, linear functional.
15 Aug, 2025 16 Aug, 2025 17Aug, 2025	Independence Day Janmashtmi Sunday
4 th Week 18Aug -23Aug	Bounded linear functional , continuity and boundedness definite integral, Normed spaces of operators, dual spaces with examples.
24Aug,2025	Sunday
5 th Week 25Aug -30Aug	Hahn-Banach theorem for real linear spaces, complex linear spaces and Normed linear spaces, application to bounded linear functionals on $C[a,b]$.
31Aug, 2025	Sunday

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**Lesson Plan for the Odd Semester
(July to November, 2025)**

Name of the Teacher– Manju Rani

Class – MSc.(Math)-Final Year

Subject– Functional Analysis

Paper– M24-MAT-302

September,2025 1 st Week 1Sept – 6 Sept	Riesz-representation theorem for bounded linear functionals on $C[a,b]$. Adjoint operator, norm of the adjoint operator. Reflexive space.
7 Sept , 2025	Sunday
2 nd Week 8 Sept– 13Sept	Adjoint operator, norm of the adjoint operator. Reflexive spaces, Uniform boundedness theorem. Some of its applications to the space of polynomials.
14 Sept , 2025	Sunday
3 rd Week 15Sept–20 Sept	Fourier series. Strong and weak convergence, weak convergence in l . Convergence of sequences of operators, uniform operator convergence
21Sept,2025 22Sept,2025 23Sept,2025	Sunday Maharaja Agrasen Jayanti Shaheedi Divas/Haryana War Heroes' Martyrdom Day
4 th Week 24Sept–27 Sept	Relation between closedness and boundedness of a linear operator. Inner product spaces, Hilbert spaces and their examples, pythagorean theorem.
28Sept,2025	Sunday
5 th Week 29 Sept – 30 Sept,2025	Pythagorean theorem, Apolloniu's identity, Schwarz inequality, continuity of innerproduct, completion of an inner product space.

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**Lesson Plan for the Odd Semester
(July to November, 2025)**

Name of the Teacher– Manju Rani

Class – M.Sc. (Math)-Final Year

Subject– Functional Analysis

Paper– M24-MAT-302

October,2025 1 st Week 1Oct –4 Oct	Orthonormal sets and sequences, Bessel's inequality. Series related to orthonormal sequences and sets, Sesquilinear forms on a Hilbert space.
2Oct, 2025 5Oct,2025	Mahatma Gandhi Jayanti/Dussehra Sunday
2 nd Week 6 Oct-11Oct	Total (complete) orthonormal sets and sequences, Parseval's identity separable Hilbert spaces. Representation of functionals on Hilbert spaces.
7Oct,2025 12Oct,2025	Maharishi Valmiki Jayanti/Maharaja Ajmidh Jayanti Sunday
3 rd Week 13 Oct-18 Oct	Riesz representation theorem for bounded linear functionals on a Hilbert space, Sesquilinear form.
19Oct – 26 Oct	Vacations (Diwali)
5 th Week 27Oct- 31 Oct	Riesz representation theorem for bounded, Test, Discussion on class problems.

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KARNAL**

**Lesson Plan for the Odd Semester
(July to November, 2025)**

Name of the Teacher– Manju Rani
Class – M.Sc. (Math)-Final Year
Subject– Functional Analysis
Paper– M24-MAT-302

November,2025 1 st Week 1Nov,2025 2 Nov, 2025	Haryana Day Sunday
2 nd Week 3 Nov-8Nov	Hilbert adjoint operator, its existence and uniqueness, properties of Hilbert adjoint operators.
5 Nov,2025 9 Nov,2025	Guru Nanak Dev Jayanti Sunday
3 rd Week 10 Nov-15 Nov	Self adjoint, unitary, normal operator.
16Nov,2025	Sunday
4 th Week 17Nov-22 Nov	Sessional Exams
23Nov,2025	Sunday

**KUMARI VIDYAVATI ANAND D.A.V. COLLEGE FOR WOMEN,
KARNAL**

**Lesson Plan for the Odd Semester
(July to November, 2025)**

Name of the Teacher– Deepika
Class – M.Sc. (Mathematics), Sem-3
Subject– Elasticity
Paper– M24-MAT-306

August,2025 1 st Week 1Aug – 2 Aug	Extension: Extension of beams by longitudinal forces, Beam stretched by its own weight.
3 Aug, 2025	Sunday
2 nd Week 4Aug– 8Aug	Bending of beams by terminal couples, Torsion: Torsion of a circular shaft, Torsion of cylindrical bars.
9Aug, 2025 10Aug, 2025	Raksha Bandhan Sunday
3 rd Week 11Aug-14Aug	Torsional rigidity, Torsion and stress functions, Test.
15 Aug, 2025 16 Aug, 2025 17Aug, 2025	Independence Day Janmashtmi Sunday
4 th Week 18Aug -23Aug	Lines of shearing stress, Torsion of an elliptic cylinder.
24Aug,2025	Sunday
5 th Week 25Aug -30Aug	Simple torsion problems , Effect of grooves, Test
31Aug, 2025	Sunday

**KUMARI VIDYAVATI ANAND D.A.V. COLLEGE FOR WOMEN,
KARNAL**

**Lesson Plan for the Odd Semester
(July to November, 2025)**

Name of the Teacher– Deepika
Class – M.Sc. (Mathematics), Sem-3
Subject– Elasticity
Paper– M24-MAT-306

September,2025 1 st Week 1Sept – 6 Sept	Torsion of rectangular beam, Torsion of a triangular prism. Solution of torsion problems by means of conformal mapping.
7 Sept , 2025	Sunday
2 nd Week 8 Sept– 13Sept	Torsion-membrane analogy, Torsion of hollow beams, Torsion of anisotropic beams.
14 Sept , 2025	Sunday
3 rd Week 15Sept–20 Sept	Flexure of beams by terminal loads, Flexure of circular and elliptic beams,
21Sept,2025 22Sept,2025 23Sept,2025	Sunday Maharaja Agrasen Jayanti Shaheedi Divas/Haryana War Heroes' Martyrdom Day
4 th Week 24Sept–27 Sept	Bending of rectangular beams, Bending of circular pipes.
28Sept,2025	Sunday
5 th Week 29 Sept – 30 Sept,2025	Class problems, Test

**KUMARI VIDYAVATI ANAND D.A.V. COLLEGE FOR WOMEN,
KARNAL**

**Lesson Plan for the Odd Semester
(July to November, 2025)**

Name of the Teacher– Deepika
Class – M.Sc. (Mathematics), Sem-3
Subject– Elasticity
Paper– M24-MAT-306

October,20 25 1 st Week 1Oct –4 Oct	Two dimensional problems: Plane deformation, Generalized plane stress.
2Oct, 2025 5Oct,2025	Mahatma Gandhi Jayanti/Dussehra Sunday
2 nd Week 6 Oct-11Oct	Plane elastostatic problems. Airy stress function. General solution of biharmonic equation.
7Oct,2025 12Oct,2025	Maharishi Valmiki Jayanti/Maharaja Ajmidh Jayanti Sunday
3 rd Week 13 Oct-18 Oct	Stresses and displacements in terms of complex potentials, The structure of functions $\phi(z)$ and $\psi(z)$, First and second boundary value problems in plane elasticity, Test
19Oct – 26 Oct	Vacations (Diwali)
5 th Week 27Oct- 31 Oct	Existence and uniqueness of the solutions, Three dimensional problems: General solutions, Concentrated forces, Discussion on class problems.

**KUMARI VIDYAVATI ANANDD.A.V. COLLEGE FOR WOMEN,
KARNAL**

**Lesson Plan for the Odd Semester
(July to November, 2025)**

Name of the Teacher– Deepika
Class – M.Sc. (Mathematics), Sem-3
Subject– Elasticity
Paper– M24-MAT-306

November,2025 1 st Week 1Nov,2025 2 Nov, 2025	Haryana Day Sunday
2 nd Week 3 Nov-8Nov	Sessional Exams
5 Nov,2025 9 Nov,2025	Guru Nanak Dev Jayanti Sunday
3 rd Week 10 Nov-15 Nov	The problem of Boussinesq. Elastic sphere: pressures, harmonics, equilibrium. Betti's Integration method.
16Nov,2025	Sunday
4 th Week 17Nov-22 Nov	Vibrations of elastic solids, Wave propagation in infinite regions, Surface waves, Revision
23Nov,2025	Sunday
5 th Week 24November,2025 Onwards	University Examinations

**KUMARI VIDYAVATI ANAND D.A.V. COLLEGE FOR WOMEN,
KARNAL**

**Lesson Plan for the Odd Semester
(July to November, 2025)**

Name of the Teacher–Manju Rani
Class – M.Sc. (Math) - Final Year
Subject– Number Theory
Paper–M24-MAT-310

August,2025 1 st Week 1Aug – 2 Aug	Greatest integer function and its related theorem.
3 Aug, 2025	Sunday
2 nd Week 4Aug– 8Aug	Greatest integer function, Arithmetic function, multiplicative function,
9Aug, 2025 10Aug, 2025	Raksha Bandun day
3 rd Week 11Aug-14Aug	Completely multiplicative function, mobius - inversion formula.
15 Aug, 2025 16 Aug, 2025 17Aug, 2025	Independence Day Janmashtmi Sunday
4 th Week 18Aug -23Aug	Recurrence function, combinational number theory.
24Aug,2025	Sunday
5 th Week 25Aug -30Aug	Solution of the equation $ax+by =c$, simultaneous linear equations and related theorem.
31Aug, 2025	Sunday

**KUMARI VIDYAVATI ANAND D.A.V. COLLEGE FOR WOMEN,
KARNAL**

**Lesson Plan for the Odd Semester
(July to November, 2025)**

Name of the Teacher– Manju Rani

Class – M.Sc. (Math) - Final Year

Subject– Number Theory

Paper–M24-MAT-310

September,2025 1 st Week 1Sept – 6 Sept	Unimodular matrices, Pythagorean triangles, some assorted examples,
7 Sept , 2025	Sunday
2 nd Week 8 Sept– 13Sept	Some assorted examples.
14 Sept , 2025	Sunday
3 rd Week 15Sept–20 Sept	Ternary quadratic forms, rational points on curves.
21Sept,2025 22Sept,2025 23Sept,2025	Sunday Maharaja Agrasen Jayanti Shaheedi Divas/Haryana War Heroes' Martyrdom Day
4 th Week 24Sept–27 Sept	Farey sequences, rational approximations.
28Sept,2025	Sunday
5 th Week 29 Sept – 30 Sept,2025	Hurwitz theorem, irrational numbers.

**KUMARI VIDYAVATI ANAND D.A.V. COLLEGE FOR WOMEN,
KARNAL**

**Lesson Plan for the Odd Semester
(July to November, 2025)**

Name of the Teacher– Manju Rani

Class – MSc (Math) - Final Year

Subject– Number Theory

Paper–M24-MAT-310

October,2025 1 st Week 1Oct –4 Oct	Test, Blichfeldt's principle, Minkowski's Convex body theorem.
2Oct, 2025 5Oct,2025	Mahatma Gandhi Jayanti/Dussehra Sunday
2 nd Week 6 Oct-11Oct	Lagrange's four square theorem, Revision
7Oct,2025 12Oct,2025	Maharishi Valmiki Jayanti/Maharaja Ajmidh Jayanti Sunday
3 rd Week 13 Oct-18 Oct	Euclidean algorithm, finite and infinite continued fraction.
19Oct – 26 Oct	Vacations (Diwali)
5 th Week 27Oct- 31 Oct	Approximations to irrational numbers, Best possible approximations.

**KUMARI VIDYAVATI ANANDD.A.V. COLLEGE FOR WOMEN,
KARNAL**

**Lesson Plan for the Odd Semester
(July to November, 2025)**

Name of the Teacher– Manju Rani
Class – MSc (Math)- Final Year
Subject–Number Theory
Paper–M24-MAT-310

November,2025 1st Week 1Nov,2025 2 Nov, 2025	Haryana Day Sunday
2ndWeek 3 Nov-8Nov	Hurwitz theorem, Periodic continued fractions
5 Nov,2025 9 Nov,2025	Guru Nanak Dev Jayanti Sunday
3rdWeek 10 Nov-15 Nov	Pell's equation, Revision.
16Nov,2025	Sunday
4thWeek 17Nov-22 Nov	Sessional Exams
23Nov,2025	Sunday

**KUMARI VIDYAVATI ANAND D.A.V. COLLEGE FOR WOMEN,
KARNAL**

**Lesson Plan for the Odd Semester
(August to November, 2025)**

Name of the Teacher–Ms. Monila Bansal

Class –M.Sc (F) Mathematics (Sem-III)

Subject– Integral Equation

Paper–M24-MAT-313

August,2025 1 st Week 1Aug – 2 Aug	Discussion about course outcomes and program outcomes Definition of integral equation and their classifications Eigen values and eigen functions, Special kinds of kernel ,convolution integral The inner or scalar product of two functions
3 Aug, 2025	Sunday
2 nd Week 4Aug– 8Aug	Reduction to a system of algebraic equations Examples related to algebraic equation
9Aug, 2025 10Aug, 2025	RakshaBandhan Sunday
3 rd Week 11Aug-14Aug	Fredholm alternative Fredholm theorem Fredholm alternative theorem
15 Aug, 2025 16 Aug, 2025 17Aug, 2025	Independence Day Janmashtmi Sunday
4 th Week 18Aug -23Aug	Approximate method Related examples Method of successive approximation
24Aug,2025	Sunday
5 th Week 25Aug -30Aug	Iterative scheme for fredholm and volterra integral equation Conditions of uniform convergence and uniqueness of series solution Resolvent kernel and related examples Theorem based on resolvent kernel
31Aug, 2025	Sunday

**KUMARI VIDYAVATI ANAND D.A.V. COLLEGE FOR WOMEN,
KARNAL**

**Lesson Plan for the Odd Semester
(August to November, 2025)**

Name of the Teacher–Ms. Monila Bansal

Class –M.Sc (F) Mathematics (Sem-III)

Subject– Integral Equation

Paper–M24-MAT-313

September,2025 1 st Week 1Sept – 6 Sept	Classical fredholm’s theory,the method of solution fredholm equation
7 Sept , 2025	Sunday
2 nd Week 8 Sept– 13Sept	Fredholm’s first theorem Examples of Fredholm’s first theorem
14 Sept , 2025	Sunday
3 rd Week 15Sept–20 Sept	Fredholm’s second theorem Fredholm’s third theorem
21Sept,2025 22Sept,2025 23Sept,2025	Sunday Maharaja Agrasen Jayanti Shaheedi Divas/Haryana War Heroes' Martyrdom Day
4 th Week 24Sept–27 Sept	Examples related to fredholm’s theorem Symmetric kernels Complex Hilbert space Orthonormal system of functions
28Sept,2025	Sunday
5 th Week 29 Sept – 30 Sept,2025	Riesz –Fisher theorem

**KUMARI VIDYAVATI ANAND D.A.V. COLLEGE FOR WOMEN,
KARNAL**

**Lesson Plan for the Odd Semester
(August to November, 2025)**

Name of the Teacher—Ms. Monila Bansal

Class —M.Sc (F) Mathematics (Sem-III)

Subject— Integral Equation

Paper—M24-MAT-313

October,2025 1 st Week 1Oct –4 Oct	A complete two dimensional orthonormal set over rectangle Fundamental properties of eigenvalues and eigen functions for symmetric kernels
2Oct, 2025 5Oct,2025	Mahatma Gandhi Jayanti/Dussehra Sunday
2 nd Week 6 Oct-11Oct	expansion in eigen functions and bilinear form Hilbert-schmidt theorem and some immediate consequences
7Oct,2025 12Oct,2025	Maharishi Valmiki Jayanti/Maharaja Ajmidh Jayanti Sunday
3 rd Week 13 Oct-18 Oct	Definite kernels and Mercer's theorem Solution of a symmetric integral equation
19Oct – 26 Oct	Vacations (Diwali)
5 th Week 27Oct- 31 Oct	Approximation of a general l_2 —kernel by a separable kernel The operator method in theory of integral equations Rayleigh-ritz method for finding the first eigen value Related examples

**KUMARI VIDYAVATI ANAND D.A.V. COLLEGE FOR WOMEN,
KARNAL**

**Lesson Plan for the Odd Semester
(August to November, 2025)**

Name of the Teacher–Ms. Monila Bansal
Class –M.Sc (F) Mathematics (Sem-III)
Subject– Integral Equation
Paper–M24-MAT-313

November,2025 1 st Week 1Nov,2025 2 Nov, 2025	Haryana Day Sunday
2 nd Week 3 Nov-8Nov	Inversion formula for singular integral equation And related examples Cauchy’s principal value for integral solution Cauchy type singular integral equation
5 Nov,2025 9 Nov,2025	Guru Nanak Dev Jayanti Sunday
3 rd Week 10 Nov-15 Nov	Riemann Hilbert problem The Hilbert –Kernel solution of the Hilbert type singular integral equation
16Nov,2025	Sunday
4 th Week 17Nov-22 Nov	Sessional Exams
23Nov,2025	Sunday
5 th Week 24November,2025 Onwards	Sessional Exams

**KUMARI VIDYAVATI ANAND D.A.V. COLLEGE FOR WOMEN,
KARNAL**

**Lesson Plan for the Odd Semester
(August to November, 2025)**

Name of the Teacher–Mrs. Anita
Class –M.Sc. (F) Mathematics
Subject–Introductory Economics
Paper–M24-OEC-309

August,2025 1 st Week 1Aug – 2 Aug	Micro Economics Meaning, Nature and Branches of Economics,.
3 Aug, 2025	Sunday
2 nd Week 4Aug– 8Aug	Central Economic Problems, Concepts of Demand
9Aug, 2025 10Aug, 2025	RakshaBandhan Sunday
3 rd Week 11Aug-14Aug	Supply, Factors of Production, Concepts of Cost
15 Aug, 2025 16 Aug, 2025 17Aug, 2025	Independence Day Janmashtmi Sunday
4 th Week 18Aug -23Aug	Revenue, Market Forms and their Features
24Aug,2025	Sunday
5 th Week 25Aug -30Aug	Macro Economics Basic Concepts in National Income, Concepts of Saving and Investment,.
31Aug, 2025	Sunday

**KUMARI VIDYAVATI ANAND D.A.V. COLLEGE FOR WOMEN,
KARNAL**

**Lesson Plan for the Odd Semester
(August to November, 2025)**

**Name of the Teacher–Mrs. Anita
Class –M.Sc. (F) Mathematics
Subject–Introductory Economics
Paper–M24-OEC-309**

September,2025 1 st Week 1Sept – 6 Sept	Money and its Functions, Current Account and Capital Account.
7 Sept , 2025	Sunday
2 nd Week 8 Sept– 13Sept	Capital Account, Balance of Payment and Balance of Trade
14 Sept , 2025	Sunday
3 rd Week 15Sept–20 Sept	Balance of Trade, Concept of Exchange Rate
21Sept,2025 22Sept,2025 23Sept,2025	Sunday Maharaja Agrasen Jayanti Shaheedi Divas/Haryana War Heroes' Martyrdom Day
4 th Week 24Sept–27 Sept	Public Finance and Development Economics Direct Taxes and Indirect Taxes, Merits and Demerits,
28Sept,2025	Sunday
5 th Week 29 Sept – 30 Sept,2025	Fiscal Policy and its Instruments,

**KUMARI VIDYAVATI ANAND D.A.V. COLLEGE FOR
WOMEN, KARNAL**

**Lesson Plan for the Odd Semester
(August to November, 2025)**

Name of the Teacher–Mrs. Anita
Class –M.Sc. (F) Mathematics
Subject–Introductory Economics
Paper–M24-OEC-309

October,2025 1 st Week 1Oct –4 Oct	Budget and Fiscal Deficits, Concept of Economic Growth and Economic Development,
2Oct, 2025 5Oct,2025	Mahatma Gandhi Jayanti/Dussehra Sunday
2 nd Week 6 Oct-11Oct	Human Development Index, Gender Development Index.
7Oct,2025 12Oct,2025	Maharishi Valmiki Jayanti/Maharaja Ajmidh Jayanti Sunday
3 rd Week 13 Oct-18 Oct	Indian Economy Policy Basic Features of Indian Economy in Present Times,
19Oct – 26 Oct	Vacations (Diwali)
5 th Week 27Oct- 31 Oct	Poverty Alleviation Programmes, Causes of Inflation,

**KUMARI VIDYAVATI ANAND D.A.V. COLLEGE FOR
WOMEN, KARNAL**

**Lesson Plan for the Odd Semester
(August to November, 2025)**

Name of the Teacher–Mrs. Anita
Class –M.Sc. (F) Mathematics
Subject–Introductory Economics
Paper–M24-OEC-309

November,2025 1 st Week 1Nov,2025 2 Nov, 2025	Haryana Day Sunday
2 nd Week 3 Nov-8Nov	Sessional Exams
5 Nov,2025 9 Nov,2025	Guru Nanak Dev Jayanti Sunday
3 rd Week 10 Nov-15 Nov	RBI and its Monetary Policy, Role of Agricultural, Industrial, and Service Sectors,
16Nov,2025	Sunday
4 th Week 17Nov-22 Nov	Liberalization, Privatization and Globalization (Concepts)
23Nov,2025	Sunday
5 th Week 24November,2025 Onwards	University Examinations

KUMARI VIDYAVATI ANAND D.A.V. COLLEGE FOR WOMEN, KARNAL

Lesson Plan for the Odd Semester (August to November,2025)

Name of the Teacher – Ms. Silky Puri

Class- B.Sc./B.A. I

Subject- Mathematics

Paper- Calculus (B23-MAT-101)

August,20 25 1 st Week 1Aug – 2 Aug	ϵ - δ definition of limit and continuity of a real valued function, Basic properties of limits.
3 Aug, 2025	Sunday
2 nd Week 4Aug– 8Aug	Types of discontinuities, Differentiability of functions, Application of L’ Hospital rule to indeterminate forms. Successive differentiation. Leibntiz theorem.
9Aug, 2025 10Aug, 2025	RakshaBandhan Sunday
3 rd Week 11Aug-14Aug	Taylor’s and Maclaurin’s series expansion with different forms of remainder.
15 Aug, 2025 16 Aug, 2025 17Aug, 2025	Independence Day Janmashtmi Sunday
4 th Week 18Aug -23Aug	Asymptotes: Horizontal, vertical and oblique asymptotes for algebraic curves.
24Aug,2025	Sunday
5 th Week 25Aug -30Aug	Asymptotes for polar curves.Intersection of a curve and its asymptotes, Curvature.
31Aug, 2025	Sunday

KUMARI VIDYAVATI ANAND D.A.V.COLLEGE FOR WOMEN, KARNAL

**Lesson Plan for the Odd Semester
(August to November,2025)**

Name of the Teacher – Ms. Silky Puri

Class- B.Sc./B.A.I

Subject- Mathematics

Paper- Calculus(B23-MAT-101)

September,2025 5 ^{1st} Week 1Sept – 6 Sept	Curvature and radius of curvature of curves (cartesian, parametric, polar and intrinsic forms).
7 Sept , 2025	Sunday
2 nd Week 8 Sept– 13Sept	Newton’s method, Centre of curvature, Circle of curvature.
14 Sept , 2025	Sunday
3 rd Week 15Sept–20 Sept	Multiple points, Node, Cusp. Conjugate point, Tests for concavity, Tests for convexity.
21Sept,2025 22Sept,2025 23Sept,2025	Sunday Maharaja AgrasenJayanti Shaheedi Divas/Haryana War Heroes' Martyrdom Day
4 th Week 24Sept–27 Sept	Points of inflexion, Tracing of curves.
28Sept,2025	Sunday
5 th Week 29 Sept – 30 Sept,2025	Points of inflexion, Tracing of curves. Examples.

KUMARI VIDYAVATI ANAND D.A.V.COLLEGE FOR WOMEN, KARNAL

Lesson Plan for the Odd Semester (August to November,2025)

Name of the Teacher – Ms. Silky Puri

Class- B.Sc./B.A.I

Subject- Mathematics

Paper- Calculus(B23-MAT-101)

October,2025 5 ^{1st} Week 1Oct –4 Oct	Rectification with examples.
2Oct, 2025 5Oct,2025	Mahatma Gandhi Jayanti/Dussehra Sunday
2 nd Week 6 Oct-11Oct	Intrinsic equation of a curve, Quadrature with examples.
7Oct,2025 12Oct,2025	Maharishi Valmiki Jayanti/Maharaja Ajmidh Jayanti Sunday
3 rd Week 13 Oct-18 Oct	Area bounded by closed curves with examples.
19Oct – 26 Oct	Vacations (Diwali)
5 th Week 27Oct- 31 Oct	Volumes and surfaces of solids of revolution with examples.

KUMARI VIDYAVATI ANAND D.A.V.COLLEGE FOR WOMEN, KARNAL

Lesson Plan for the Odd Semester (August to November,2025)

Name of the Teacher – Ms. Silky Puri

Class- B.Sc./B.A.I

Subject- Mathematics

Paper- Calculus(B23-MAT-101)

November,2025 5 1 st Week 1Nov,2025 2 Nov, 2025	Haryana Day Sunday
2 nd Week 3 Nov-8Nov	Sessional Exams
5 Nov,2025 9 Nov,2025	Guru Nanak Dev Jayanti Sunday
3 rd Week 10 Nov-15 Nov	Revision of Syllabus.
16Nov,2025	Sunday
4 th Week 17Nov-22 Nov	REVISION AND TESTS.
23Nov,2025	Sunday
5 th Week 24November,2025 Onwards	University Examinations

**KUMARI VIDYAVATI ANAND D.A.V. COLLEGE FOR WOMEN,
KARNAL**

**Lesson Plan for the Odd Semester
(August to November,2025)**

Name of the Teacher – Dr. Shweta Dhawan

Class- B.A/B.Sc (II) NEP

Subject- Mathematics

Paper- Elements of Differential Equations-1

August,2025 1 st Week 1Aug – 2 Aug	Solution of differential equations of first order and first degree of all types..repeated...continue
3 Aug, 2025	Sunday
2 nd Week 4Aug– 8Aug	Exact Differential Equations... Solution of Exact Differential Equation of all types
9Aug, 2025 10Aug, 2025	RakshaBandhan Sunday
3 rd Week 11Aug-14Aug	Solution of Exact Differential Equation of all types..continue
15 Aug, 2025 16 Aug, 2025 17Aug, 2025	Independence Day Janmashtmi Sunday
4 th Week 18Aug -23Aug	Equations of first order but not of first degree of all types and their solutions
24Aug,2025	Sunday
5 th Week 25Aug -30Aug	Solutions of Equations of first order but not of first degree of all types...Continue
31Aug, 2025	Sunday

**KUMARIVIDYAVATI ANAND D.A.V.COLLEGE FOR WOMEN,
KARNAL**

**Lesson Plan for the Odd Semester
(August to November,2025)**

Name of the Teacher – Dr. Shweta Dhawan

Class- B.A/B.Sc (II) NEP

Subject- Mathematics

Paper- Elements of Differential Equations-1

September,2025 1 st Week 1Sept – 6 Sept	Orthogonal Trajectories
7 Sept , 2025	Sunday
2 nd Week 8 Sept– 13Sept	Orthogonal Trajectories....Continue
14 Sept , 2025	Sunday
3 rd Week 15Sept–20 Sept	Linear Differential Equations with constant Co-efficients and their solutions
21Sept,2025 22Sept,2025 23Sept,2025	Sunday Maharaja Agrasen Jayanti Shaheedi Divas/Haryana War Heroes' Martyrdom Day
4 th Week 24Sept–27 Sept	Solution of Linear Differential Equations with constant Co-efficients ...continue
28Sept,2025	Sunday
5 th Week 29 Sept – 30 Sept,2025	Cauchy- Euler Equations and its solution

**KUMARI VIDYAVATI ANAND D.A.V. COLLEGE FOR WOMEN,
KARNAL**

**Lesson Plan for the Odd Semester
(August to November,2025)**

Name of the Teacher – Dr. Shweta Dhawan

Class- B.A/B.Sc (II) NEP

Subject- Mathematics

Paper- Elements of Differential Equations-1

October,2025 1 st Week 1Oct –4 Oct	Cauchy- Euler Equations and its solution..Continue
2Oct, 2025 5Oct,2025	Mahatma Gandhi Jayanti/Dussehra Sunday
2 nd Week 6 Oct-11Oct	Linear Differential Equations of Second order with variable coefficients and its solution
7Oct,2025 12Oct,2025	Maharishi Valmiki Jayanti/Maharaja Ajmidh Jayanti Sunday
3 rd Week 13 Oct-18 Oct	Solution of Linear Differential Equations of Second order with variable coefficients ...Continue
19Oct – 26 Oct	Vacations (Diwali)
5 th Week 27Oct- 31 Oct	Ordinary Simultaneous Differential Equations and its solution

**KUMARI VIDYAVATI ANAND D.A.V.COLLEGE FOR WOMEN,
KARNAL**

**Lesson Plan for the Odd Semester
(August to November,2025)**

Name of the Teacher – Dr. Shweta Dhawan

Class- B.Sc/B.A (V Sem)

Subject- MATHEMATICS

Paper- Sequence and Series

August,2025 1 st Week 1Aug – 2 Aug	Intrraction With students Discuss Programme outcomes and Course outcomes Boundedness of the set of real numbers
3 Aug, 2025	Sunday
2 nd Week 4Aug– 8Aug	Least upper bound and Greatest lower bound of a set, Archimedean, algebraic and ordered properties in \mathbb{R} , The real number system as a complete ordered field.
9Aug, 2025 10Aug, 2025	RakshaBandhan Sunday
3 rd Week 11Aug-14Aug	Least upper bound and Greatest lower bound of a set, Archimedean, algebraic and ordered properties in \mathbb{R} , The real number system as a complete ordered field.
15 Aug, 2025 16 Aug, 2025 17Aug, 2025	Independence Day Janmashtmi Sunday
4 th Week 18Aug -23Aug	Neighbourhoods, interiors points, isolated points, limits points
24Aug,2025	Sunday
5 th Week 25Aug -30Aug	open sets, closed sets, interior of a set
31Aug, 2025	Sunday

**KUMARI VIDYAVATI ANAND D.A.V.COLLEGE FOR WOMEN,
KARNAL**

**Lesson Plan for the Odd Semester
(August to November,2025)**

Name of the Teacher – Dr. Shweta Dhawan

Class- B.Sc/B.A (V Sem)

Subject- MATHEMATICS

Paper- Sequence and Series

September,2025 1 st Week 1Sept – 6 Sept	Closure of a set in real number and their properties
7 Sept , 2025	Sunday
2 nd Week 8 Sept– 13Sept	Bolzano-Weierstrass theorem, open covers, compact sets and Heine-Borel theorem
14 Sept , 2025	Sunday
3 rd Week 15Sept–20 Sept	Denumerable and non denumerable sets, Denumerability of integers
21Sept,2025 22Sept,2025 23Sept,2025	Sunday Maharaja AgrasenJayanti Shaheedi Divas/Haryana War Heroes' Martyrdom Day
4 th Week 24Sept–27 Sept	Rational and non denumerability of real numbers
28Sept,2025	Sunday
5 th Week 29 Sept – 30 Sept,2025	Real sequences and their convergence, Theorems on limit of sequence

**KUMARI VIDYAVATI ANAND D.A.V.COLLEGE FOR WOMEN,
KARNAL**

**Lesson Plan for the Odd Semester
(August to November,2025)**

Name of the Teacher – Dr. Shweta Dhawan

Class- B.Sc/B.A (V Sem)

Subject- MATHEMATICS

Paper- Sequence and Series

October,2025 1 st Week 1Oct –4 Oct	Bounded and monotonic sequences
2Oct, 2025 5Oct,2025	Mahatma Gandhi Jayanti/Dussehra Sunday
2 nd Week 6 Oct-11Oct	Cauchy's sequence, Cauchy general principle of convergence, Subsequences and subsequential limits, limit superior and limit inferior
7Oct,2025 12Oct,2025	Maharishi Valmiki Jayanti/Maharaja Ajmidh Jayanti Sunday
3 rd Week 13 Oct-18 Oct	Convergence and divergence of infinite Series, Comparison tests of positive terms infinite series
19Oct – 26 Oct	Vacations (Diwali)
5 th Week 27Oct- 31 Oct	Cauchy's general principle of series, Convergence and divergence of geometrical series, Hyper Harmonic series of pseries, D-Alembert's ratio test

**KUMARI VIDYAVATI ANAND D.A.V.COLLEGE FOR WOMEN,
KARNAL**

**Lesson Plan for the Odd Semester
(August to November,2025)**

Name of the Teacher – Dr. Shweta Dhawan

Class- B.Sc/B.A (V Sem)

Subject- MATHEMATICS

Paper- Sequence and Series

November,2025 1 st Week 1Nov,2025 2 Nov, 2025	Haryana Day Sunday
2 nd Week 3 Nov-8Nov	Sessional Exams
5 Nov,2025 9 Nov,2025	Guru Nanak Dev Jayanti Sunday
3 rd Week 10 Nov-15 Nov	Raabe's test, Logarithmic test, Cauchy's nth root test, De-Morgan and Bertrand's test, Gauss Test, Cauchy's integral test, Cauchy's condensation test
16Nov,2025	Sunday
4 th Week 17Nov-22 Nov	Alternating series, Absolute and conditional convergence, Leibnitz test, Arbitrary Series, Abel's and Dirichlet's test, Insertion and removal of Paranthesis, Re arrangement of terms in a series, Riemannn's re arrangement theorem and Pringsheim's theorem, Cauchy product of series
23Nov,2025	Sunday
5 th Week 24November,2025 Onwards	University Examinations

**KUMARI VIDYAVATI ANAND D.A.V.COLLEGE FOR WOMEN,
KARNAL**

**Lesson Plan for the Odd Semester
(July to November,2025)**

Name of the Teacher –Ms. MEENU KALRA

Class-B.Com.-I

Subject- MATHEMATICS

Paper-ELEMENTS OF BUSINESS MATHEMATICS

August,2025 1 st Week 1Aug – 2 Aug	SET THEORY: Representation of sets:Tabular or roster form,Set builder form, finite and infinite sets.Examples
3 Aug, 2025	Sunday
2 nd Week 4Aug– 8Aug	Venn Diagrams;Union and intersection of sets,Difference and symmetric difference of sets.Demorgan’s laws,Examples
9Aug, 2025 10Aug, 2025	RakshaBandhan Sunday
3 rd Week 11Aug-14Aug	Practical Application of sets,Examples Student problems
15 Aug, 2025 16 Aug, 2025 17Aug, 2025	Independence Day Janmashtmi Sunday
4 th Week 18Aug -23Aug	Class test &Revision
24Aug,2025	Sunday

5thWeek 25Aug -30Aug	Logical Statements and Truth Tables: Truth Table,Simple and compound statements Logical Connectives: Conjunction &Disjunction,Negation Examples
31Aug, 2025	Sunday

**KUMARI VIDYAVATI ANAND D.A.V.COLLEGE FOR WOMEN,
KARNAL**

**Lesson Plan for the Odd Semester
(July to November,2025)**

Name of the Teacher –Ms. MEENU KALRA

Class-B.Com.-I

Subject- MATHEMATICS

Paper-ELEMENTS OF BUSINESS MATHEMATICS

September,2025 1 st Week 1Sept – 6 Sept	Logarithms:Product formula,Quotient formula,Power formula,Examples
7 Sept , 2025	Sunday
2 nd Week 8 Sept– 13Sept	Rules to find characteristics and mantissa,Logarithms& Antilogarithms,Examples Arithmetic and geometric progression: Sequences,General term,Arithmetic Progression(A.P.)
14 Sept , 2025	Sunday
3 rd Week 15Sept–20 Sept	Geometric progression,Its general term Examples Sum of first n terms of G.P. Examples Sum of a G.P. upto infinity Examples
21Sept,2025 22Sept,2025 23Sept,2025	Sunday Maharaja AgrasenJayanti Shaheedi Divas/Haryana War Heroes' Martyrdom Day
4 th Week 24Sept–27 Sept	Algebra of matrices: Matrices & their types,Related examples Basic Operation on matrices.(Addition,Subtraction,Scalar multiplication,Negative of matrices)
28Sept,2025	Sunday
5 th Week 29 Sept – 30 Sept,2025	Multiplication of matrices,Examples Symmetric and Skew Symmetric matrices; Related Examples

**KUMARIVIDYAVATI ANANDD.A.V.COLLEGE FOR WOMEN,
KARNAL**

**Lesson Plan for the Odd Semester
(July to November, 2025)**

Name of the Teacher –Ms. MEENU KALRA

Class-B.Com.-I

Subject- MATHEMATICS

Paper-ELEMENTS OF BUSINESS MATHEMATICS

October, 2025 1 st Week 1 Oct – 4 Oct	Determinants: Minor & Cofactors; Singular and Non-Singular matrices; Properties of Determinants, Its application in finding the area of a triangle Adjoint & Inverse of a matrix
2 Oct, 2025 5 Oct, 2025	Mahatma Gandhi Jayanti/Dussehra Sunday
2 nd Week 6 Oct-11 Oct	Student Problems Class Test & Revision
7 Oct, 2025 12 Oct, 2025	Maharishi Valmiki Jayanti/Maharaja Ajmidh Jayanti Sunday
3 rd Week 13 Oct-18 Oct	Solution of system of linear equations using determinants, Solution of system of linear equations using matrices. Examples.
19 Oct – 26 Oct	Vacations (Diwali)
5 th Week 27 Oct- 31 Oct	Compound Interest, Examples Continuous compounding of interest, Examples Student Problems Class test & Revision

**KUMARIVIDYAVATI ANAND D.A.V.COLLEGE FOR WOMEN,
KARNAL**

**Lesson Plan for the Odd Semester
(July to November,2025)**

Name of the Teacher –Ms. MEENU KALRA

Class-B.Com.-I

Subject- MATHEMATICS

Paper-ELEMENTS OF BUSINESS MATHEMATICS

November,2025 1 st Week 1Nov,2025 2 Nov, 2025	Haryana Day Sunday
2 nd Week 3 Nov-8Nov	Sessional Exams
5 Nov,2025 9 Nov,2025	Guru Nanak Dev Jayanti Sunday
3 rd Week 10 Nov-15 Nov	Annuities: Annuity Immediate & Annuity due;Examples Present value of an annuity.Examples
16Nov,2025	Sunday
4 th Week 17Nov-22 Nov	Practical application of annuity Student Problems REVISION
23Nov,2025	Sunday
5 th Week 24November,2025 Onwards	University Examinations

**KUMARI VIDYAVATI ANAND D.A.V. COLLEGE FOR WOMEN,
KARNAL**

**Lesson Plan for the Odd Semester
(August to November,2025)**

Name of the Teacher – Mrs. MEENU KALRA

Class- B.B.A.-I

Subject- MATHEMATICS

Paper- ELEMENTS OF BUSINESS MATHEMATICS

August,2025 1 st Week 1Aug – 2 Aug	Sets,Notation & their representation,Definitions Examples
3 Aug, 2025	Sunday
2 nd Week 4Aug– 8Aug	Venn Diagrams,Union & Intersection of sets,Difference of sets Questions related to sets
9Aug, 2025 10Aug, 2025	RakshaBandhan Sunday
3 rd Week 11Aug-14Aug	Symmetric difference of sets,Demorgan’s laws Examples
15 Aug, 2025 16 Aug, 2025 17Aug, 2025	Independence Day Janmashtmi Sunday
4 th Week 18Aug -23Aug	Practical Applications of set operations Example
24Aug,2025	Sunday
5 th Week 25Aug -30Aug	Quadratic Equations,Roots of an equation,Solution of complete quadratic equation.Examples
31Aug, 2025	Sunday

KUMARI VIDYAVATI ANAND D.A.V. COLLEGE FOR WOMEN, KARNAL

Lesson Plan for the Odd Semester (August to November,2025)

Name of the Teacher – Mrs. MEENU KALRA

Class- B.B.A.-I

Subject- MATHEMATICS

Paper- ELEMENTS OF BUSINESS MATHEMATICS

September,2025 1 st Week 1Sept – 6 Sept	Solving a quadratic equation by completing the square method. Examples Solution of a quadratic equation by using quadratic formula Examples Student's problems & their solutions.
7 Sept , 2025	Sunday
2 nd Week 8 Sept– 13Sept	Equations Reducible To Quadratics Examples Nature of roots of a quadratic equation Examples
14 Sept , 2025	Sunday
3 rd Week 15Sept–20 Sept	Relation between roots and coefficient of the quadratic equation Examples
21Sept,2025 22Sept,2025 23Sept,2025	Sunday Maharaja Agrasen Jayanti Shaheedi Divas/Haryana War Heroes' Martyrdom Day
4 th Week 24Sept–27 Sept	Formulation and solution of word problems involving quadratic equations Examples
28Sept,2025	Sunday
5 th Week 29 Sept – 30 Sept,2025	Binomial theorem for any positive integral index Examples

**KUMARI VIDYAVATI ANAND D.A.V.COLLEGE FOR WOMEN,
KARNAL**

**Lesson Plan for the Odd Semester
(August to November,2025)**

Name of the Teacher – Mrs. MEENU KALRA

Class- B.B.A.-I

Subject- MATHEMATICS

Paper- ELEMENTS OF BUSINESS MATHEMATICS

October,2025 1 st Week 1Oct –4 Oct	General term in a binomial expansion,Middle term in a binomial expansion.Examples Function &Limits. Examples Exponential and logarithmic limits,Finite & Infinite limits
2Oct, 2025 5Oct,2025	Mahatma Gandhi Jayanti/Dussehra Sunday
2 nd Week 6 Oct-11Oct	Left and right hand limits Continuity of function Examples
7Oct,2025 12Oct,2025	Maharishi Valmiki Jayanti/Maharaja Ajmidh Jayanti Sunday
3 rd Week 13 Oct-18 Oct	Matrix:Its definitions and examples.Basic operations on matrices,Addition,Subtraction of matrices Multiplication of matrices Examples
19Oct – 26 Oct	Vacations (Diwali)
5 th Week 27Oct- 31 Oct	Transpose of matrix,Symmetric and Skew-symmetric matrices Examples Determinant of a square matrix of order two Adjoint of a matrix,Inverse of a square matrix Examples

**KUMARI VIDYAVATI ANAND D.A.V.COLLEGEFORWOMEN,
KARNAL**

**Lesson Plan for the Odd Semester
(August to November,2025)**

Name of the Teacher – Mrs. MEENU KALRA

Class- B.B.A.-I

Subject- MATHEMATICS

Paper- ELEMENTS OF BUSINESS MATHEMATICS

November,2025 1 st Week 1 Nov,2025 2 Nov, 2025	Haryana Day Sunday
2 nd Week 3 Nov-8Nov	Sessional Exams
5 Nov,2025 9 Nov,2025	Guru Nanak Dev Jayanti Sunday
3 rd Week 10 Nov-15 Nov	Solution of system of linear equations using Cramer's rule & using matrices Examples
16Nov,2025	Sunday
4 th Week 17Nov-22 Nov	Problem discussion REVISION
23Nov,2025	Sunday
5 th Week 24November,2025 Onwards	University Examinations

**KUMARI VIDYAVATI ANAND D.A.V.COLLEGE FOR WOMEN,
KARNAL**

**Lesson Plan for the Odd Semester
(August to November,2025)**

Name of the Teacher – Ms. Meenu Kalra

Class- B.C.A.-I(Sem –I)

Subject- Mathematics

Paper- Mathematical Foundations for Computer Science

August,2025 1 st Week 1Aug – 2 Aug	Sets and their representation,Empty Set,Finite Sets and infinite sets Examples Subsets,Equal Sets,Power Set,Universal Sets Examples
3 Aug, 2025	Sunday
2 nd Week 4Aug– 8Aug	Union and Intersection of sets,Difference of two sets,complement of a set Venn diagram,Demorgan’s Law& their application Questions
9Aug, 2025 10Aug, 2025	RakshaBandhan Sunday
3 rd Week 11Aug-14Aug	Introduction to matrices and their types,Operation on matrices ,Symmetric & Skew-Symmetric matrices Examples
15 Aug, 2025 16 Aug, 2025 17Aug, 2025	Independence Day Janmashtmi Sunday
4 th Week 18Aug -23Aug	Minor,Cofactors.Determinant of a square matrix, Examples Adjoint and inverse of a square matrix. Examples
24Aug,2025	Sunday
5 th Week 25Aug -30Aug	Solutions of a system of linear equations upto order 3 using cramer’s rule QUESTIONS
31Aug, 2025	Sunday

**KUMARI VIDYAVATI ANAND D.A.V.COLLEGE FOR WOMEN,
KARNAL**

**Lesson Plan for the Odd Semester
(August to November,2025)**

Name of the Teacher – Ms. Meenu Kalra

Class- B.C.A.-I(Sem –I)

Subject- Mathematics

Paper- Mathematical Foundations for Computer Science

September,2025 1 st Week 1Sept – 6 Sept	Solution of system of linear equations using matrices QUESTIONS
7 Sept , 2025	Sunday
2 nd Week 8 Sept– 13Sept	Examples related to matrices
14 Sept , 2025	Sunday
3 rd Week 15Sept–20 Sept	Revision & Test
21Sept,2025 22Sept,2025 23Sept,2025	Sunday Maharaja AgrasenJayanti Shaheedi Divas/Haryana War Heroes' Martyrdom Day
4 th Week 24Sept–27 Sept	Revision & Test Problems related to matrices
28Sept,2025	Sunday
5 th Week 29 Sept – 30 Sept,2025	Quardtic Equations,Solution of quardtic equation using elimination & Substitution method. Examples

**KUMARI VIDYAVATI ANAND D.A.V.COLLEGE FOR WOMEN,
KARNAL**

**Lesson Plan for the Odd Semester
(August to November,2025)**

Name of the Teacher – Ms. Meenu Kalra

Class- B.C.A.-I(Sem –I)

Subject- Mathematics

Paper- Mathematical Foundations for Computer Science

October,2025 1 st Week 1Oct –4 Oct	Solution of Quardtic equation by completing the square method. Examples
2Oct, 2025 5Oct,2025	Mahatma Gandhi Jayanti/Dussehra Sunday
2 nd Week 6 Oct-11Oct	Solution of Quardtic equation by using quadratic formula(DISCRIMINANT METHOD) Examples
7Oct,2025 12Oct,2025	Maharishi Valmiki Jayanti/Maharaja Ajmidh Jayanti Sunday
3 rd Week 13 Oct-18 Oct	Equation related to Quadratics Examples Problems related to quadratic equatio Formulation and Solution of word problems related to quadratic equations. Examples
19Oct – 26 Oct	Vacations (Diwali)
5 th Week 27Oct- 31 Oct	Introdution to Sequence and series, Arithmetic progression Problems related to A.P.Geometrical Progression Examples

**KUMARI VIDYAVATI ANAND D.A.V.COLLEGE FOR WOMEN,
KARNAL**

**Lesson Plan for the Odd Semester
(August to November,2025)**

Name of the Teacher – Ms. Meenu Kalra

Class- B.C.A.-I(Sem –I)

Subject- Mathematics

Paper- Mathematical Foundations for Computer Science

November,2025 1 st Week 1Nov,2025 2 Nov, 2025	Haryana Day Sunday
2 nd Week 3 Nov-8Nov	SessionalExams
5 Nov,2025 9 Nov,2025	Guru Nanak Dev Jayanti Sunday
3 rd Week 10 Nov-15 Nov	Differentiation , Differentiation of product of two functions Differentiation of quotient of two functions Chain rule Questions
16Nov,2025	Sunday
4 th Week 17Nov-22 Nov	Differentiation of trigonometrical functions Questions Differentiation of Logarithmic and exponential functions Questions Differentiation of Implicit & Parametric functions Questions REVISION
23Nov,2025	Sunday
5 th Week 24November,2025 Onwards	University Examinations

**KUMARIVIDYAVATI ANANDD.A.V.COLLEGE FOR WOMEN,
KARNAL**

**Lesson Plan for the Odd Semester
(August to November, 2025)**

Name of the Teacher–Mrs. Anita

Class – B.A.-Ist

Subject–Mathematics

Paper– MDC SEM-1

August, 2025 1 st Week 1 Aug – 2 Aug	Sets: Representation of sets. Empty set, finite and infinite sets. Subsets, Equal sets. Power Set, Universal set. Union and intersection of sets.
3 Aug, 2025	Sunday
2 nd Week 4 Aug – 8 Aug	Difference of two sets. Complement of a set. Venn diagram, de-morgan's laws and their applications.
9 Aug, 2025 10 Aug, 2025	Raksha Bandhan Sunday
3 rd Week 11 Aug – 14 Aug	An introduction to matrices and their types. Operation on matrices. Symmetric and skew –symmetric matrices
15 Aug, 2025 16 Aug, 2025 17 Aug, 2025	Independence Day Janmashtmi Sunday
4 th Week 18 Aug – 23 Aug	Minors, cofactors of a matrix. Determinant of a square matrix. Adjoint of a square matrix.
24 Aug, 2025	Sunday
5 th Week 25 Aug – 30 Aug	Inverse of a square matrix. Solutions of a system of linear equations up to order 3.
31 Aug, 2025	Sunday

**KUMARIVIDYAVATI ANANDD.A.V.COLLEGE FOR WOMEN,
KARNAL**

**Lesson Plan for the Odd Semester
(August to November, 2025)**

Name of the Teacher–Mrs. Anita

Class – B.A.-Ist

Subject–Mathematics

Paper– MDC SEM-1

September, 2025 1 st Week 1 Sept – 6 Sept	Complex numbers: operations on complex numbers. Modulus and argument of a complex number. Linear inequalities: algebraic solutions of linear inequalities in two variables.
7 Sept, 2025	Sunday
2 nd Week 8 Sept– 13 Sept	Graphical representation. Quadratic equations. Solution of quadratic equations.
14 Sept, 2025	Sunday
3 rd Week 15 Sept–20 Sept	Arithmetic progression. Geometric progression.
21 Sept, 2025 22 Sept, 2025 23 Sept, 2025	Sunday Maharaja Agrasen Jayanti Shaheedi Divas/Haryana War Heroes' Martyrdom Day
4 th Week 24 Sept–27 Sept	Harmonic progression. Relation between A.M., G.M. AND H.M.
28 Sept, 2025	Sunday
5 th Week 29 Sept – 30 Sept, 2025	Straight lines: slope of a line . Angle between two lines. Different forms of equation of a line: parallel to coordinate axes.

**KUMARIVIDYAVATI ANAND D.A.V. COLLEGE FOR WOMEN,
KARNAL**

**Lesson Plan for the Odd Semester
(August to November, 2025)**

Name of the Teacher–Mrs. Anita

Class – B.A.-Ist

Subject–Mathematics

Paper– MDC SEM-1

October, 2025 1 st Week 1 Oct – 4 Oct	Slope-intercept form. Two- point form. Questions.
2 Oct, 2025 5 Oct, 2025	Mahatma Gandhi Jayanti/Dussehra Sunday
2 nd Week 6 Oct-11 Oct	General form. Distance of a point from a straight line.
7 Oct, 2025 12 Oct, 2025	Maharishi Valmiki Jayanti/Maharaja Ajmidh Jayanti Sunday
3 rd Week 13 Oct-18 Oct	General form. Distance of a point from a straight line.
19 Oct – 26 Oct	Vacations (Diwali)
5 th Week 27 Oct- 31 Oct	Properties of a circle. Questions.

**KUMARIVIDYAVATI ANANDD.A.V. COLLEGE FOR WOMEN,
KARNAL**

**Lesson Plan for the Odd Semester
(August to November, 2025)**

Name of the Teacher–Mrs. Anita

Class – B.A.-Ist

Subject–Mathematics

Paper– MDC SEM-1

November, 2025 1 st Week 1 Nov, 2025 2 Nov, 2025	Haryana Day Sunday
2 nd Week 3 Nov-8 Nov	Sessional Exams
5 Nov, 2025 9 Nov, 2025	Guru Nanak Dev Jayanti Sunday
3 rd Week 10 Nov-15 Nov	To find centre and radius of a circle. Questions.
16 Nov, 2025	Sunday
4 th Week 17 Nov-22 Nov	Revision and tests.
23 Nov, 2025	Sunday
5 th Week 24 November, 2025 Onwards	University Examinations

**KUMARI VIDYAVATI ANAND D.A.V.COLLEGE FOR WOMEN,
KARNAL**

**Lesson Plan for the Odd Semester
(August to November, 2025)**

Name of the Teacher – Ms. MEENU KALRA

Class- B.A.-II(SEM-III)

Subject- MATHEMATICS

Paper- MDC-III(MATHEMATICS FOR ALL)

August, 2025 1 st Week 1 Aug – 2 Aug	Concept of sets, Types of sets: Set Builder Form, Tabular Form Venn diagrams Questions Problem Discussion
3 Aug, 2025	Sunday
2 nd Week 4 Aug – 8 Aug	Functions and Questions related to it. Quadratic Equations, Cubic Equations Examples. Problem Discussion Solution of linear equations in two variables by elimination method. Questions related to Elimination method. Examples.
9 Aug, 2025 10 Aug, 2025	Raksha Bandhan Sunday
3 rd Week 11 Aug - 14 Aug	Class Discussion Student Problems. Arithmetic progression Questions
15 Aug, 2025 16 Aug, 2025 17 Aug, 2025	Independence Day Janmashtmi Sunday
4 th Week 18 Aug - 23 Aug	Sum of n terms of an A.P. Questions related to A.P. Geometric Progression Questions related to G.P. Student problems
24 Aug, 2025	Sunday
5 th Week 25 Aug - 30 Aug	Differentiation: General differentiation, Differentiation of product of two functions (Chain rule), Quotient rule, Trigonometric functions. Questions related to Differentiation. Student problems.
31 Aug, 2025	Sunday

**KUMARIVIDYAVATI ANAND D.A.V.COLLEGE FOR WOMEN,
KARNAL**

**Lesson Plan for the Odd Semester
(August to November, 2025)**

Name of the Teacher – Ms. MEENU KALRA

Class- B.A.-II(SEM-III)

Subject- MATHEMATICS

Paper- MDC-III(MATHEMATICS FOR ALL)

September, 2025 1 st Week 1 Sept – 6 Sept	Differentiation of logarithmic and exponential functions. Differentiation of Implicit functions. Logarithmic Differentiation, Differentiation in case of parametric functions Questions
7 Sept , 2025	Sunday
2 nd Week 8 Sept– 13 Sept	Derivatives of higher order, Application of differentiation, First Derivative test, Second Derivative Test. Questions related to Differentiation.
14 Sept , 2025	Sunday
3 rd Week 15 Sept– 20 Sept	Absolute maxima and absolute minima, Practical problems on maxima and minima Questions related to Practical problems
21 Sept, 2025 22 Sept, 2025 23 Sept, 2025	Sunday Maharaja Agrasen Jayanti Shaheedi Divas/Haryana War Heroes' Martyrdom Day
4 th Week 24 Sept– 27 Sept	Integration: Integration by substitution, integration by parts Questions
28 Sept, 2025	Sunday
5 th Week 29 Sept – 30 Sept, 2025	

**KUMARIVIDYAVATI ANANDD.A.V. COLLEGE FOR WOMEN,
KARNAL**

**Lesson Plan for the Odd Semester
(August to November,2025)**

Name of the Teacher – Ms. MEENU KALRA

Class- B.A.-II(SEM-III)

Subject- MATHEMATICS

Paper- MDC-III(MATHEMATICS FOR ALL)

October,2025 1 st Week 1 Oct –4 Oct	Diagrammatic and Graphical Presentation of data,Bar Diagram,Simple Bar Diagrams,Multiple Bar Diagrams,Frequency Polygons, Questions Measures of central tendency: Arithmetic mean,Median Questions related to topic Student problems
2Oct, 2025 5Oct,2025	Mahatma Gandhi Jayanti/Dussehra Sunday
2 nd Week 6 Oct-11Oct	Mode ,Questions related to mode Geometric mean,Harmonic mean Dispersion Questions
7Oct,2025 12Oct,2025	Maharishi Valmiki Jayanti/Maharaja Ajmidh Jayanti Sunday
3 rd Week 13 Oct-18 Oct	Mean Deviation,Standard Deviation Correlation,Covariance,Karl Pearson Coefficient of correlation Questions Problem Discussion
19Oct – 26 Oct	Vacations (Diwali)
5 th Week 27Oct- 31 Oct	Spearman's Rank Correlation Questions

**KUMARI VIDYAVATI ANAND D.A.V. COLLEGE FOR WOMEN,
KARNAL**

**Lesson Plan for the Odd Semester
(August to November, 2025)**

Name of the Teacher – Ms. MEENU KALRA

Class- B.A.-II(SEM-III)

Subject- MATHEMATICS

Paper- MDC-III(MATHEMATICS FOR ALL)

November, 2025 1 st Week 1 Nov, 2025 2 Nov, 2025	Haryana Day Sunday
2 nd Week 3 Nov-8 Nov	Sessional Exams
5 Nov, 2025 9 Nov, 2025	Guru Nanak Dev Jayanti Sunday
3 rd Week 10 Nov-15 Nov	Differential Equations Questions
16 Nov, 2025	Sunday
4 th Week 17 Nov-22 Nov	Class Test & Revision
23 Nov, 2025	Sunday
5 th Week 24 November, 2025 Onwards	University Examinations

KUMARI VIDYAVATI ANAND D.A.V.COLLEGE FOR WOMEN, KARNAL

Lesson Plan for the Odd Semester (August to November,2025)

Name of the Teacher – Ms. Silky Puri

Class- B.sc. 3rd sem

Subject- Mathematics

Paper- Elements of Quantitative Aptitude(B23-Sec-326)

August,2025 1 st Week 1Aug – 2 Aug	Linear equations.Quadratic equations.
3 Aug, 2025	Sunday
2 nd Week 4Aug– 8Aug	System of algebraic equations in two variables and their applications in simple problems:Problems on ages,Clocks.
9Aug, 2025 10Aug, 2025	RakshaBandhan Sunday
3 rd Week 11Aug-14Aug	Time and distance:problems based on trains.
15 Aug, 2025 16 Aug, 2025 17Aug, 2025	Independence Day Janmashtmi Sunday
4 th Week 18Aug -23Aug	Problems based on Boats and streams.Problems based on pipes and cistern.
24Aug,2025	Sunday
5 th Week 25Aug -30Aug	Work and time:Problems on work and time,Work and Wages.
31Aug, 2025	Sunday

KUMARI VIDYAVATI ANAND D.A.V.COLLEGE FOR WOMEN, KARNAL

Lesson Plan for the Odd Semester (August to November,2025)

Name of the Teacher – Ms. Silky Puri

Class- B.sc. 3rd sem

Subject- Mathematics

Paper- Elements of Quantitative Aptitude(B23-Sec-326)

September,2025 1 st Week 1Sept – 6 Sept	Simple interest,Compound interest.
7 Sept , 2025	Sunday
2 nd Week 8 Sept– 13Sept	Partnership.
14 Sept , 2025	Sunday
3 rd Week 15Sept–20 Sept	Basic idea of set theory to solve practical problems.
21Sept,2025 22Sept,2025 23Sept,2025	Sunday Maharaja AgrasenJayanti Shaheedi Divas/Haryana War Heroes' Martyrdom Day
4 th Week 24Sept–27 Sept	Trigonometry ratios and identities.
28Sept,2025	Sunday
5 th Week 29 Sept – 30 Sept,2025	Height and distance.

KUMARI VIDYAVATI ANAND D.A.V.COLLEGE FOR WOMEN, KARNAL

Lesson Plan for the Odd Semester (August to November,2025)

Name of the Teacher – Ms. Silky Puri

Class- B.sc. 3rd sem

Subject- Mathematics

Paper- Elements of Quantitative Aptitude(B23-Sec-326)

October,2025 1 st Week 1Oct –4 Oct	Basic idea of permutations and combinations
2Oct, 2025 5Oct,2025	Mahatma Gandhi Jayanti/Dussehra Sunday
2 nd Week 6 Oct-11Oct	Events and sample spaces.
7Oct,2025 12Oct,2025	Maharishi Valmiki Jayanti/Maharaja Ajmidh Jayanti Sunday
3 rd Week 13 Oct-18 Oct	Probability.
19Oct – 26 Oct	Vacations (Diwali)
5 th Week 27Oct- 31 Oct	Data interpretation:Raw and group data,Bar graph.

KUMARI VIDYAVATI ANAND D.A.V.COLLEGE FOR WOMEN, KARNAL

Lesson Plan for the Odd Semester (August to November,2025)

Name of the Teacher – Ms. Silky Puri

Class- B.sc. 3rd sem

Subject- Mathematics

Paper- Elements of Quantitative Aptitude(B23-Sec-326)

November,2025 1 st Week 1Nov,2025 2 Nov, 2025	Haryana Day Sunday
2 nd Week 3 Nov-8Nov	Sessional Exams
5 Nov,2025 9 Nov,2025	Guru Nanak Dev Jayanti Sunday
3 rd Week 10 Nov-15 Nov	Pie chart,Mean. Median,Mode
16Nov,2025	Sunday
4 th Week 17Nov-22 Nov	Revision and tests.
23Nov,2025	Sunday
5 th Week 24November,2025 Onwards	University Examinations

**KUMARI VIDYAVATI ANAND D.A.V. COLLEGE FORWOMEN,
KARNAL**

**Lesson Plan for the Odd Semester
(August to November, 2025)**

Name of the Teacher–Mrs. Anita
Class – B.COM 1st Year
Subject– Environmental Studies (VAC)
Paper– B23-VAC-201

August,2025 1 st Week 1Aug – 2 Aug	Introduction to Environmental Studies: Definition and Concept of Environment, Multidisciplinary Nature, Scope, importance of Environmental Studies.
3 Aug, 2025	Sunday
2 nd Week 4Aug– 8Aug	Concept of Sustainability and Sustainable Development, Need for Public Awareness, Institutions of Environment (in India).
9Aug, 2025 10Aug, 2025	RakshaBandhan Sunday
3 rd Week 11Aug-14Aug	Ecosystem: ecology, characteristic, classification, components of an ecosystem. Energy flow in the ecosystem.
15 Aug, 2025 16 Aug, 2025 17Aug, 2025	Independence Day Janmashtmi Sunday
4 th Week 18Aug -23Aug	Function of an ecosystem, Food Chain, Food Web, Ecological Pyramids, Ecological Succession,
24Aug,2025	Sunday
5 th Week 25Aug -30Aug	Major Types of Ecosystems, Natural Resources, Land Resources.
31Aug, 2025	Sunday

**KUMARI VIDYAVATI ANAND D.A.V. COLLEGE FORWOMEN,
KARNAL**

**Lesson Plan for the Odd Semester
(August to November, 2025)**

Name of the Teacher–Mrs. Anita
Class – B.COM 1st Year
Subject– Environmental Studies (VAC)
Paper– B23-VAC-201

September,2025 1 st Week 1Sept – 6 Sept	Forest Resources, Dams, Mining, Water Resources and their Uses, Flood.
7 Sept , 2025	Sunday
2 nd Week 8 Sept– 13Sept	Drought, Sustainable Water Management, Water Conflicts. Energy Resources and its Types,
14 Sept , 2025	Sunday
3 rd Week 15Sept–20 Sept	Biodiversity and its Conservation: definitions, levels of Biodiversity. Functions of Biodiversity, value of Biodiversity, Threats to Biodiversity
21Sept,2025 22Sept,2025 23Sept,2025	Sunday Maharaja AgrasenJayanti Shaheedi Divas/Haryana War Heroes' Martyrdom Day
4 th Week 24Sept–27 Sept	Environmental Pollution (air, water, thermal, soil, noise, marine and nuclear).
28Sept,2025	Sunday
5 th Week 29 Sept – 30 Sept,2025	Environmental Policies and Practices: Climate, Global Warming, Acid Rain,

**KUMARI VIDYAVATI ANAND D.A.V. COLLEGE FOR
WOMEN, KARNAL**

**Lesson Plan for the Odd Semester
(August to November, 2025)**

Name of the Teacher–Mrs. Anita
Class – B.COM 1st Year
Subject– Environmental Studies (VAC)
Paper– B23-VAC-201

October,2025 1 st Week 1Oct –4 Oct	Ozone Layer Depletion and their impacts on human communities.
2Oct, 2025 5Oct,2025	Mahatma Gandhi Jayanti/Dussehra Sunday
2 nd Week 6 Oct-11Oct	Environmental legislation and Law, International Agreements. The Convention on Biodiversity, Nature reserves,
7Oct,2025 12Oct,2025	Maharishi Valmiki Jayanti/Maharaja Ajmidh Jayanti Sunday
3 rd Week 13 Oct-18 Oct	Tribal Populations and Rights. Nuclear Accidents and Holocaust, Waste Land Reclamation.
19Oct – 26 Oct	Vacations (Diwali)
5 th Week 27Oct- 31 Oct	Human Population And Disaster Management. Human Rights, Value Education,

**KUMARI VIDYAVATI ANAND D.A.V. COLLEGE FOR
WOMEN, KARNAL**

**Lesson Plan for the Odd Semester
(August to November, 2025)**

Name of the Teacher–Mrs. Anita
Class – B.COM 1st Year
Subject– Environmental Studies (VAC)
Paper– B23-VAC-201

November,2025 1 st Week 1Nov,2025 2 Nov, 2025	Haryana Day Sunday
2 nd Week 3 Nov-8Nov	SessionalExams
5 Nov,2025 9 Nov,2025	Guru Nanak Dev Jayanti Sunday
3 rd Week 10 Nov-15 Nov	HIV, Role of it in Environment, Social Issues. Environmental Movement and Ethics,
16Nov,2025	Sunday
4 th Week 17Nov-22 Nov	Drugs and their Effects and revision.
23Nov,2025	Sunday
5 th Week 24November,2025 Onwards	University Examinations