

KUMARI VIDYAVATI ANAND D.A.V College for Women, Karnal

Lesson Plan for the Even Semester (January to May, 2025)

Name of the Teacher—Dr. Shweta Dhawan

Class-B.Sc Sem II

Subject-Mathematics

Paper- Algebra and Number Theory

3 rd Week 10 Feb -15 Feb	Interaction With students Discuss Programme outcomes and Course outcomes Matrices: Symmetric, Skew Symmetric , Hermitian and skew Hermitian matrices, Elementary operations on matrices, Rank of a matrix, Inverse of a matrix
12 Feb, 2025 16 Feb, 2025	Guru Ravidas Jayanti Sunday
4 th Week 17 Feb-22 Feb	Elementary operations on matrices, Rank of a matrix, Inverse of a matrix...continued
23 Feb, 2025	Sunday
5 th Week 24 Feb- 28 Feb	Elementary operations on matrices, Rank of a matrix, Inverse of a matrix...continued
26 Feb, 2025	MahaShivratri

KUMARI VIDYAVATI ANAND D.A.V College for Women, Karnal

Lesson Plan for the Even Semester (January to May, 2025)

Name of the Teacher–Dr. Shweta Dhawan

Class-B.Sc Sem II

Subject-Mathematics

Paper- Algebra and Number Theory

March, 2025 1 st Week 1 March, 2025	Linear dependence and Independence of rows and columns of matrix, Row Rank and column rank of a matrix, Eigen values, Eigen vectors and characteristic equation of a matrix
2 March, 2025	Sunday
2 nd Week 3 March– 8 March	Eigen values, Eigen vectors and characteristic equation of a matrix..continued
3 rd Week 9 March - 16 March	Holi Vacations
4 th Week 17 March–22 March	Minimal Polynomial of a matrix, Cayley-Hamilton theorem and its use in finding the inverse of a matrix
23 March, 2025	Sunday, Shaheed Diwas/ Martyrdom Day of Bhagat Singh, Rajguru & Sukhdev
5 th Week 24 March–29 March	Unitary and Orthogonal Matrices..
30 March, 2025	Sunday
6 th Week 31 March, 2025	Id-ul- Fitr

KUMARI VIDYAVATI ANAND D.A.V College for Women, Karnal

Lesson Plan for the Even Semester (January to May, 2025)

Name of the Teacher–Dr. Shweta Dhawan

Class-B.Sc Sem II

Subject-Mathematics

Paper- Algebra and Number Theory

April, 2025 1 st Week 1 April – 5 April	Unitary and Orthogonal Matrices..continued
6 April, 2024	Sunday, Ram Navmi
2 nd Week 7 April – 12 April	Relations between the roots and coefficients of general polynomial equation in one variable, Solution of Polynomial equation having conditions on roots
10 April, 2025 13 April, 2025 14 April, 2025	Mahavir Jayanti Sunday, Vaisakhi Dr. B.R.Ambedkar Jayanti
3 rd Week 15 April – 19 April	Common roots and multiple roots , Transformation of equations
20 April, 2025	Sunday
4 th Week 21 April – 28 April	Sessional Exams
27 April, 2025 29 April, 2025 30 April, 2025	Sunday Parshuram Jayanti Akshya Tritiya

KUMARI VIDYAVATI ANAND D.A.V College for Women, Karnal

Lesson Plan for the Even Semester (January to May, 2025)

Name of the Teacher—Dr. Shweta Dhawan

Class-B.Sc Sem II

Subject-Mathematics

Paper- Algebra and Number Theory

May, 2025 1 st Week 1 May - 3 May	Nature of the roots of an equation, Descartes' rule of signs
4 May, 2025	Sunday
2 nd Week 5 May - 10 May	Solutions of Cubic equation (Cardan's Method), Biquadratic Equations and their solutions
11 May, 2025	Sunday
3 rd Week 12 May - 17 May	Solutions of Cubic equation (Cardan's Method), Biquadratic Equations and their solutions...continued
18 May, 2025	Sunday
4 th Week 19 May - 24 May	Divisibility, Greatest common divisor (gcd), least common multiple (lcm), Prime numbers, Fundamental Theorem of arithmetic
25 May, 2025	Sunday
5 th Week 26 May - 31 May	Linear Congruences, Fermat's theorem, Euler's theorem, Wilson's theorem and its converse, Chinese Remainder theorem, Linear Diophantine equation in two variables
29 May, 2025	Maharana Partap Jayanti
1 June, 2025 Onwards	University Examinations

KUMARI VIDYAVATI ANAND D.A.V College for Women, Karnal

Lesson Plan for the Even Semester (January to May, 2025)

Name of the Teacher—Ms. Silky Puri

Class-B.Sc./B.A. 4th sem

Subject-Mathematics

Paper-Analytical geometry and Vector calculus

January, 2025 4 th Week 20 Jan-25 Jan	General equation of second degree: Classification of conic sections; centre, asymptotes, axes, eccentricity, foci and directrices of conics. Discuss related examples.
26 Jan, 2025	Sunday, Republic Day
5 th Week 27 Jan– 31 Jan	Tangent at any point to a conic, chord of contact, pole of line to a conic. Discuss related examples.

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Lesson Plan for the Even Semester (January to May, 2025)

Name of the Teacher – Ms. Silky Puri

Class – B.Sc./B.A. 4th sem

Subject – Mathematics

Paper – Analytical geometry and Vector calculus

February, 2025 1 st Week 1 Feb, 2025	Director circle of a conic, polar equation of a conic, Tangent and normal to a conic. Discuss related examples.
2 Feb, 2025	Sunday, Basant Panchmi
2 nd Week 3 Feb – 8 Feb	Confocal conics. Discuss related examples.
9 Feb, 2025	Sunday
3 rd Week 10 Feb -15 Feb	Sphere: general form, plane section of a sphere, sphere through a given circle. Intersection of two spheres. Discuss related examples.
12 Feb, 2025 16 Feb, 2025	Guru Ravidas Jayanti Sunday
4 th Week 17 Feb -22 Feb	Tangent plane and line, polar plane and line, orthogonal spheres, radical plane of two spheres and coaxial system of spheres. Discuss related examples.
23 Feb, 2025	Sunday
5 th Week 24 Feb - 28 Feb	Cone: equation of a cone, right circular cone, quadric cone, enveloping cone. Discuss related examples.
26 Feb, 2025	MahaShivratri

KUMARI VIDYAVATI ANAND D.A.V College for Women, Karnal

Lesson Plan for the Even Semester (January to May, 2025)

Name of the Teacher—Ms. Silky Puri

Class-B.Sc./B.A.4th sem

Subject-Mathematics

Paper-Analytical geometry and Vector calculus

March, 2025 1 st Week 1 March, 2025	Tangent plane and condition of tangency. Discuss related examples.
2 March, 2025	Sunday
2 nd Week 3 March– 8 March	Cylinder: Right circular cylinder and enveloping cylinder. Central conicoids. Discuss related examples.
3 rd Week 9 March - 16 March	Holi Vacations
4 th Week 17 March–22 March	Equation of tangent plane. Director sphere. Normal to the conicoids. Discuss related examples.
23 March, 2025	Sunday, Shaheedi Diwas/ Martyrdom Day of Bhagat Singh, Rajguru & Sukhdev
5 th Week 24 March–29 March	Polar plane of a point. Enveloping cone of a conicoid. Discuss related examples.
30 March, 2025	Sunday
6 th Week 31 March, 2025	Id-ul- Fitr

KUMARI VIDYAVATI ANAND D.A.V College for Women, Karnal

Lesson Plan for the Even Semester (January to May, 2025)

Name of the Teacher – Ms. Silky Puri

Class – B.Sc./B.A. 4th sem

Subject – Mathematics

Paper – Analytical geometry and Vector calculus

April, 2025 1 st Week 1 April – 5 April	Enveloping cylinder of a conicoid . Confocal conicoids. Discuss related examples.
6 April, 2024	Sunday, Ram Navmi
2 nd Week 7 April – 12 April	Reduction of second degree equations. Discuss related examples. Scalar product and Vector product of three vectors. four vectors, reciprocal vectors. Discuss related examples.
10 April, 2025 13 April, 2025 14 April, 2025	Mahavir Jayanti Sunday, Vaisakhi Dr. B.R. Ambedkar Jayanti
3 rd Week 15 April – 19 April	Vector differentiation and derivative along a curve , Directional derivative. Discuss related examples.
20 April, 2025	Sunday
4 th Week 21 April – 28 April	Sessional Exams
27 April, 2025 29 April, 2025 30 April, 2025	Sunday Parshuram Jayanti Akshya Tritiya

KUMARI VIDYAVATI ANAND D.A.V College for Women, Karnal

Lesson Plan for the Even Semester (January to May, 2025)

Name of the Teacher—Ms. Silky Puri

Class-B.Sc./B.A.4th sem

Subject-Mathematics

Paper-Analytical geometry and Vector calculus

May, 2025 1 st Week 1 May - 3 May	Gradient of a scalar point function, divergence and curl of vector point functions. their geometrical meanings and vector identities. Discuss related examples.
4 May, 2025	Sunday
2 nd Week 5 May - 10 May	Vector integration: line integral, surface integral and volume integral. Discuss related examples.
11 May, 2025	Sunday
3 rd Week 12 May - 17 May	Theorem of Gauss, Green. Discuss related examples.
18 May, 2025	Sunday
4 th Week 19 May - 24 May	Theorem of Stokes and problem based on these. Discuss related examples.
25 May, 2025	Sunday
5 th Week 26 May - 31 May	Revision and tests.
29 May, 2025	Maharana Partap Jayanti
1 June, 2025 Onwards	University Examinations

KUMARI VIDYAVATI ANAND D.A.V College for Women, Karnal

Lesson Plan for the Even Semester (January to April,2025)

Name of the Teacher–Ms. Anita

Class-B.Sc. 3rd Year

Subject-Real and Complex Analysis

Paper-BM -361

January, 2025 1 st Week 1 Jan – 4 Jan	Jacobians with examples, Beta function with examples.
5 Jan, 2025 6 Jan, 2025	Sunday Shri Guru Gobind Singh Ji Jayanti
2 nd Week 6 Jan – 11 Jan	Test of Jacobians, Gamma functions with related examples,
12 Jan, 2025	Sunday
3 rd Week 13 Jan – 18 Jan	Double integrals with examples. Test of Beta and Gamma functions, Triple integrals.
19 Jan, 2025	Sunday
January, 2025 4 th Week 20 Jan-25 Jan	Dirichlet's integrals, Change of order of integration in double integrals, Fourier's series: Fourier expansion of piecewise monotonic functions,
26 Jan, 2025	Sunday, Republic Day
5 th Week 27 Jan– 31 Jan	Properties of Fourier Coefficients, Dirichlet's conditions.

KUMARI VIDYAVATI ANAND D.A.V College for Women, Karnal

Lesson Plan for the Even Semester (January to April,2025)

Name of the Teacher– M.s Anita

Class- B.Sc. 3rd Year

Subject- Real and Complex Analysis

Paper- BM -361

February,2025 1 st Week 1 Feb, 2025	Parseval's identity for Fourier series. Fourier series for even and odd functions.
2 Feb, 2025	Sunday, BasantPanchmi
2 nd Week 3 Feb – 8 Aug	Half range series, Test of Fourier series, Change of intervals, Extended Complex Plane.
9 Feb, 2025	Sunday
3 rd Week 10Feb -15 Feb	Stereographic projection of complex numbers. Continuity and differentiability of complex functions.
12 Feb, 2025 16 Feb, 2025	Guru RavidasJayanti Sunday
4 th Week 17 Feb-22 Feb	Analytic functions, Cauchy-Riemann equations with examples.
23 Feb, 2025	Sunday
5 th Week 24 Feb- 28 Feb	Harmonic functions with related examples.
26 Feb,2025	MahaShivratri

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Lesson Plan for the Even Semester (January to April,2025)

Name of the Teacher– M.s Anita

Class- B.Sc. 3rd Year

Subject- Real and Complex Analysis

Paper- BM -361

March,2025 1 st Week 1 March, 2025	Mappings by elementary functions: Translation with related examples.
2 March,2025	Sunday
2 nd Week 3 March– 8 March	Rotation, Magnification and Inversion with examples.
3 rd Week 9 March - 16 March	Holi Vacations
4 th Week 17 March–22 March	Conformal Mappings with related examples.
23 March,2025	Sunday, ShaheediDiwas/Martyrdom Day of Bhagat Singh, Rajguru& Sukhdev
5 th Week 24 March–29 March	Sessional Exams
30 March,2025	Sunday
6 th Week 31 March, 2025	Id-ul- Fitr

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Lesson Plan for the Even Semester (January to April,2025)

Name of the Teacher– M.s Anita

Class- B.Sc. 3rd Year

Subject- Real and Complex Analysis

Paper- BM -361

April,2025 1 st Week 1April –5April	Mobius transformations, Fixed points with related examples.
6April,2024	Sunday
2 nd Week 7April-12April	Cross ratio, Inverse Points and Critical mappings with examples.
10 April, 2025 13April,2025 14April,2025	MahavirJayanti Sunday Dr. B.R.AmbedkarJayanti
3 rd Week 15April -19April	Critical mappings with related examples.
20April,2025	Sunday
4 th Week 21April -26April	Revision
27April,2025	Sunday
5 th Week 28April, 2025	Revision
29 April, 2025 30 April, 2025	ParshuramJayanti AkshyaTritya

KUMARI VIDYAVATI ANAND D.A.V College for Women, Karnal

Lesson Plan for the Even Semester (January to April, 2025)

Name of the Teacher – Dr. Shweta Dhawan

Subject- Mathematics

Paper- BM-362

Class- B.A/B.Sc VI Semester

January, 2025 1 st Week 1 Jan – 4 Jan	Vector Space, , examples, Subspace, Examples based on Subspaces, Linear Sum, Direct Sum and examples based on Direct Sum
5 Jan, 2025 6 Jan, 2025	Sunday Shri Guru Gobind Singh Ji Jayanti
2 nd Week 6 Jan – 11 Jan	Linear Combination, Linear Dependence and Linear Independence, Examples, Linear Span, Basis of a vector Space, Theorems based on basis of vector spaces.
12 Jan, 2025	Sunday
3 rd Week 13 Jan – 18 Jan	Theorems based on basis of vector spaces continued..Dimension of Vector Space and based Examples, methods to find basis of Vector space and its Subspaces if spanning Sets of Subspace is given.
19 Jan, 2025	Sunday
January, 2025 4 th Week 20 Jan-25 Jan	Theorems based on basis of vector spaces continued..Dimension of Vector Space and based Examples, methods to find basis of Vector space and its Subspaces if spanning Sets of Subspace is given. Complementary Subspace and example based on it..Quotient Space..Dimension of Quotient Space, and based problems...
26 Jan, 2025	Sunday, Republic Day
5 th Week 27 Jan– 31 Jan	Complementary Subspace and example based on it..Quotient Space..Dimension of Quotient Space, and based problems

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Name of the Teacher – Dr. Shweta Dhawan

Subject- Mathematics

Paper- BM-362

Class- B.A/B.Sc VI Semester

February, 2025 1 st Week 1 Feb, 2025	Linear Transformation and its Properties, example based on Linear Transformation, Types of Linear Transformation, Some important Theorems on Dimension of V.S using notion of Linear Transformation
2 Feb, 2025	Sunday, Basant Panchmi
2 nd Week 3 Feb – 8 Aug	Method to find Linear transformation when its image on basis vectors is given, Null Space, Range Space, Rank of a linear Transformation, Nullity of a Linear Transformation, Fundamental Theorem of Vector Space Homomorphism
9 Feb, 2025	Sunday
3 rd Week 10 Feb -15 Feb	Method to find Linear transformation when its image on basis vectors is given, Null Space, Range Space, Rank of a linear Transformation, Nullity of a Linear Transformation, Fundamental Theorem of Vector Space Homomorphism
12 Feb, 2025 16 Feb, 2025	Guru Ravidas Jayanti Sunday
4 th Week 17 Feb-22 Feb	Sylvester's Law (Rank- Nullity Theorem), Examples based on this Theorem and examples based on one-one and onto Linear Transformations..
23 Feb, 2025	Sunday
5 th Week 24 Feb- 28 Feb	Sylvester's Law (Rank- Nullity Theorem), Examples based on this Theorem and examples based on one-one and onto Linear Transformations..continued
26 Feb, 2025	MahaShivratri

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Name of the Teacher – Dr. Shweta Dhawan

Subject- Mathematics

Paper- BM-362

Class- B.A/B.Sc VI Semester

March, 2025 1 st Week 1 March, 2025	
2 March, 2025	Sunday
2 nd Week 3 March – 8 March	Algebra of Linear Transformation, Minimal Polynomial, of a Linear Transformation, Singular and non-singular Linear Transformation, Matrix of Linear Transformation
3 rd Week 9 March - 16 March	Holi Vacations
4 th Week 17 March – 22 March	Algebra of Linear Transformation, Minimal Polynomial, of a Linear Transformation, Singular and non-singular Linear Transformation, Matrix of Linear Transformation...continued
23 March, 2025	Sunday, Shaheedi Diwas/Martyrdom Day of Bhagat Singh, Rajguru & Sukhdev
5 th Week 24 March – 29 March	Sessional Exams
30 March, 2025	Sunday
6 th Week 31 March, 2025	Id-ul- Fitr

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Name of the Teacher – Dr. Shweta Dhawan

Subject- Mathematics

Paper- BM-362

Class- B.A/B.Sc VI Semester

April, 2025 1 st Week 1 April – 5 April	Change of Basis, Eigen Values and Eigen vectors of Linear Transformation, Inner product Spaces, Cauchy-Schwarz inequality, orthogonal and orthonormal vectors, orthogonal sets and Basis
6 April, 2024	Sunday
2 nd Week 7 April - 12 April	Change of Basis, Eigen Values and Eigen vectors of Linear Transformation, Inner product Spaces, Cauchy-Schwarz inequality, orthogonal and orthonormal vectors, orthogonal sets and Basis...continued
10 April, 2025 13 April, 2025 14 April, 2025	Mahavir Jayanti Sunday Dr. B.R. Ambedkar Jayanti
3 rd Week 15 April - 19 April	Bessel's inequality for finite Dimensional vector spaces, Gram- Schmidt Orthogonalization Process, Adjoint of a Linear Transformation and its Properties, Unitary Linear Transformation and related concepts.
20 April, 2025	Sunday
4 th Week 21 April - 26 April	Bessel's inequality for finite dimensional vector spaces, Gram- Schmidt Orthogonalization Process, Adjoint of a Linear Transformation and its Properties, Unitary Linear Transformation and related concepts....continued
27 April, 2025	Sunday
5 th Week 28 April, 2025	Gram- Schmidt Orthogonalization Process, Adjoint of a Linear Transformation and its Properties, Unitary Linear Transformation and related concepts.
29 April, 2025 30 April, 2025	Parshuram Jayanti Akshya Tritiya

KUMARI VIDYAVATI ANAND D.A.V College for Women, Karnal

Lesson Plan for the Even Semester (January to April, 2025)

Name of the Teacher– Ms. Silky puri

Class- B.sc. 6th sem

Subject-Mathematics

Paper- Dynamics (BM-653)

January, 2025 1 st Week 1 Jan – 4 Jan	Basic concepts and definitions-space,matter,particle,rigid body, Displacement of a particle. Expression for a velocity at a point,relative velocity.Accleration due to gravity,particle projected vertically downwardsComponents of velocity and acceleration along the coordinate axes.
5 Jan, 2025 6 Jan, 2025	Sunday Shri Guru Gobind Singh Ji Jayanti
2 nd Week 6 Jan – 11 Jan	Motion of a particle along a plane curve with constant angular acceleration.Examples related to above topics.Radial and transverse velocities and acceleration polar coordinates.Tangential and normal components of velocity of a particle. Tangential and normal components of acceleration.
12 Jan,2025	Sunday
3 rd Week 13 Jan – 18 Jan	Examples related to above topics.Relative motion:relative displacement,relative velocity and their examples.
19 Jan,2025	Sunday
January,2025 4 th Week 20 Jan-25Jan	Determination of relative velocity,magnitude of relative velocity and its examples. Simple harmonic motion(SHM),Velocity of a particle executing SHM Nature and amplitude of SHM,periodic motion,SHM is period Examples.Student problems.
26Jan,2025	Sunday, Republic Day
5 th Week 27Jan– 31 Jan	Elastic string:-Hooke's law,Work done against the tensionHorizontal and vertical elastic stringNewton's first,second,third laws of motion. Weight of a body and related examples.

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Lesson Plan for the Even Semester (January to April, 2025)

Name of the Teacher – Ms. Silky puri

Class – B.sc. 6th sem

Subject – Mathematics

Paper – Dynamics (BM-653)

February, 2025 5 th Week 1 Feb, 2025	Pressure of a body resting on a horizontal plane moving downwards. Motion of a lift and examples. Motion of two bodies connected by a string, at wood's machine. Work done by a variable force, work done in stretching an elastic string.
2 Feb, 2025	Sunday, Basant Panchmi
2 nd Week 3 Feb – 8 Aug	Power and its examples. Principal of work and energy, principle of conservation of energy Impulse of a constant force & variable force Motion of a particle on a smooth and rough plane curves. Related Examples.
9 Feb, 2025	Sunday
3 rd Week 10 Feb - 15 Feb	Motion on the outside of a smooth vertical circle and related examples. Motion on the inside of a smooth vertical circle and related examples Cycloidal motion: cycloid, result for a cycloid, motion on a cycloid. Examples.
12 Feb, 2025 16 Feb, 2025	Guru Ravidas Jayanti Sunday
4 th Week 17 Feb - 22 Feb	Projectile: introduction – trajectory, angle of projection. Latus rectum, vertex, focus, directrix, axis of the trajectory of a particle. Time of flight, Horizontal range. Velocity at any point of the trajectory and examples.
23 Feb, 2025	Sunday
5 th Week 24 Feb - 28 Feb	Greatest height of a projectile and to find the direction of a projectile.
26 Feb, 2025	Maha Shivratri

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Lesson Plan for the Even Semester (January to April, 2025)

Name of the Teacher – Ms. Silky puri

Class – B.sc. 6th sem

Subject – Mathematics

Paper – Dynamics (BM-653)

March, 2025 1 st Week 1 March, 2025	Direction in which a particle be projected to pass through a given point Least velocity for a particle to hit a given point and time of flight.
2 March, 2025	Sunday
2 nd Week 3 March – 8 March	Related examples. Range and time of flight on inclined plane, max range up the plane Central orbits, central force, thm on central orbit, polar form.
3 rd Week 9 March - 16 March	Holi Vacations
4 th Week 17 March – 22 March	Areal velocity and its theorem. Elliptic orbit and theorem based on it. Hyperbolic orbit and its result.
23 March, 2025	Sunday, Shaheedi Diwas/Martyrdom Day of Bhagat Singh, Rajguru & Sukhdev
5 th Week 24 March – 29 March	Sessional Exams
30 March, 2025	Sunday
6 th Week 31 March, 2025	Id-ul- Fitr

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Name of the Teacher – Ms. Silky puri

Class – B.sc. 6th sem

Subject – Mathematics

Paper – Dynamics (BM-653)

April, 2025 1 st Week 1 April – 5 April	Parabolic orbit and its theorem Velocity in a given circle: to determine orbit Apse, apsidal distances and apsidal angle and theorem related examples.
6 April, 2024	Sunday
2 nd Week 7 April – 12 April	Kepler's laws of planetary motion, Newton's laws of gravitation. Equivalence of Kepler's law for planetary motion and Newton's law. Motion under the inverse square law and examples.
10 April, 2025 13 April, 2025 14 April, 2025	Mahavir Jayanti Sunday Dr. B.R. Ambedkar Jayanti
3 rd Week 15 April – 19 April	REVISION AND TESTS
20 April, 2025	Sunday
4 th Week 21 April – 26 April	Motion of a particle in 3-D velocity of a particle along a curve. Motion of particle in terms of cylindrical polar coordinates
27 April, 2025	Sunday
5 th Week 28 April, 2025	Velocity and acceleration of moving axes. To find acceleration when a point is moving along any curve in 3-D.
29 April, 2025 30 April, 2025	Parshuram Jayanti Akshya Tritiya

KUMARI VIDYAVATI ANAND D.A.V College for Women, Karnal

Lesson Plan for the Even Semester (January to April, 2025)

Name of the Teacher – Ms. Meenu Kalra

Class- B.com.-Ist(Sem-II)

Subject-Mathematics

Paper-B23-COM-204

January, 2025 4 th Week 20 Jan-25 Jan	Differentiation: Limit of a function, Derivative of a function, Rules of Differentiation, Differentiation of product of two functions, Differentiation of quotient of two functions. Questions
26 Jan, 2025	Sunday, Republic Day
5 th Week 27 Jan– 31 Jan	Differentiation of logarithmic and exponential functions, Differentiation of implicit functions. Logarithmic Differentiation, Parametric functions, Derivatives of higher order. Questions

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Lesson Plan for the Even Semester (January to April, 2025)

Name of the Teacher – Ms. Meenu Kalra

Class- B.com.-Ist(Sem-II)

Subject-Mathematics

Paper-B23-COM-204

February, 2025 1 st Week 1 Feb, 2025	Applications of derivatives: Local maxima and minima, First derivative test for local maxima and minima, Second derivative test for finding local maxima and minima, Absolute maxima and minima
2 Feb, 2025	Sunday, Basant Panchmi
2 nd Week 3 Feb – 8 Feb	Practical problems on maxima and minima, Important functions related to commerce and economics
9 Feb, 2025	Sunday
3 rd Week 10 Feb -15 Feb	Questions
12 Feb, 2025 16 Feb, 2025	Guru Ravidas Jayanti Sunday
4 th Week 17 Feb-22 Feb	Problems Class test
23 Feb, 2025	Sunday
5 th Week 24 Feb- 28 Feb	Definite Integral Applications of integration in commerce and economics, Consumer and Producer's surplus Questions
26 Feb, 2025	MahaShivratri

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Lesson Plan for the Even Semester (January to April, 2025)

Name of the Teacher – Ms. Meenu Kalra

Class- B.com.-Ist(Sem-II)

Subject-Mathematics

Paper-B23-COM-204

March, 2025 1 st Week 1 March, 2025	Class Discussion
2 March, 2025	Sunday
2 nd Week 3 March – 8 March	Definite Integral Applications of integration in commerce and economics, Consumer and Producer's surplus Questions
3 rd Week 9 March - 16 March	Holi Vacations
4 th Week 17 March – 22 March	Permutations and combinations, Restricted Permutations, Combinations, Questions
23 March, 2025	Sunday, Shaheedi Diwas/ Martyrdom Day of Bhagat Singh, Rajguru & Sukhdev
5 th Week 24 March – 29 March	Practical problems on combinations Questions
30 March, 2025	Sunday
6 th Week 31 March, 2025	Id-ul- Fitr

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Lesson Plan for the Even Semester (January to April, 2025)

Name of the Teacher –Ms. Meenu Kalra

Class- B.com.-Ist(Sem-II)

Subject-Mathematics

Paper-B23-COM-204

April, 2025 1 st Week 1 April – 5 April	Binomial theorem General term in a binomial expansion, Middle term in a binomial expansion, Questions
6 April, 2024	Sunday, Ram Navmi
2 nd Week 7 April – 12 April	. Application of binomial theorem Questions
10 April, 2025 13 April, 2025 14 April, 2025	Mahavir Jayanti Sunday, Vaisakhi Dr. B.R. Ambedkar Jayanti
3 rd Week 15 April – 19 April	Student problems & Discussion
20 April, 2025	Sunday
4 th Week 21 April – 28 April	Class Discussion
27 April, 2025 29 April, 2025 30 April, 2025	Sunday Parshuram Jayanti Akshya Tritiya

KUMARI VIDYAVATI ANAND D.A.V College for Women, Karnal

Lesson Plan for the Even Semester (January to April, 2025)

Name of the Teacher –Ms. Meenu Kalra

Class- B.com.-Ist(Sem-II)

Subject-Mathematics

Paper-B23-COM-204

May, 2025 1 st Week 1 May - 3 May	Linear programming : Corner point method, Iso-Profit Method
4 May, 2025	Sunday
2 nd Week 5 May – 10 May	Applications of linear programming in solving problems related to business and commerce. Simplex Method Questions
11 May, 2025	Sunday
3 rd Week 12 May - 17 May	Sessional Exams
18 May, 2025	Sunday
4 th Week 19 May - 24 May	Sessional Exams
25 May, 2025	Sunday
5 th Week 26 May - 31 May	Class test & Revision
29 May, 2025	Maharana Partap Jayanti
1 June, 2025 Onwards	University Examinations

KUMARI VIDYAVATI ANAND D.A.V College for Women, Karnal

Lesson Plan for the Even Semester (January to May, 2025)

Name of the Teacher – Mrs. Meenu Kalra

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

Subject- Mathematics

Paper: B23-B.B.A.-204

January, 2025 4 th Week 20 Jan-25 Jan	Average, Ratio and proportion Questions related to average Ratio Questions related to ratio
26 Jan, 2025	Sunday, Republic Day
5 th Week 27 Jan– 31 Jan	Proportion: Questions related to proportion

KUMARI VIDYAVATI ANAND D.A.V College for Women, Karnal

Lesson Plan for the Even Semester (January to May, 2025)

Name of the Teacher – Mrs. Meenu Kalra

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

Subject- Mathematics

Paper: B23-B.B.A.-204

February, 2025 1 st Week 1 Feb, 2025	. Percentage, Profit-Loss, Discount and commission Questions
2 Feb, 2025	Sunday, Basant Panchmi
2 nd Week 3 Feb – 8 Feb	Discount Questions related to discount. Commission and brokerage Questions
9 Feb, 2025	Sunday
3 rd Week 10 Feb -15 Feb	Simple and compound interest: Questions related to Simple interest & Compound interest Continuous compounding of interest Questions
12 Feb, 2025 16 Feb, 2025	Guru Ravidas Jayanti Sunday
4 th Week 17 Feb-22 Feb	. Problems on effective rate of interest, Depreciation and population Questions
23 Feb, 2025	Sunday
5 th Week 24 Feb- 28 Feb	Annuities Questions Present value of an annuity Solution of practical problems related to annuities
26 Feb, 2025	Maha Shivratri

KUMARI VIDYAVATI ANAND D.A.V College for Women, Karnal

Lesson Plan for the Even Semester (January to May, 2025)

Name of the Teacher – Mrs. Meenu Kalra

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

Subject- Mathematics

Paper: B23-B.B.A.-204

March, 2025 1 st Week 1 March, 2025	Present value and amount of annuity Questions
2 March, 2025	Sunday
2 nd Week 3 March – 8 March	. Indices and logarithms Questions related to logarithms
3 rd Week 9 March - 16 March	Holi Vacations
4 th Week 17 March – 22 March	Logarithmic tables and anti-logarithmic
23 March, 2025	Sunday, Shaheedi Diwas/ Martyrdom Day of Bhagat Singh, Rajguru & Sukhdev
5 th Week 24 March – 29 March	Arithmetic Progression Nth term & Sum of nth term Questions
30 March, 2025	Sunday
6 th Week 31 March, 2025	Id-ul- Fitr

KUMARI VIDYAVATI ANAND D.A.V College for Women, Karnal

Lesson Plan for the Even Semester (January to May, 2025)

Name of the Teacher – Mrs. Meenu Kalra

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

Subject- Mathematics

Paper: B23-B.B.A.-204

April, 2025 1 st Week 1 April – 5 April	Geometric progression Nth term and sum of nth term Questions
6 April, 2024	Sunday, Ram Navmi
2 nd Week 7 April - 12 April	Sum of a G. P. Upto infinity Questions
10 April, 2025 13 April, 2025 14 April, 2025	Mahavir Jayanti Sunday, Vaisakhi Dr. B.R. Ambedkar Jayanti
3 rd Week 15 April - 19 April	Linear Programming: Graphical Methods (Corner point method and iso-profit method)
20 April, 2025	Sunday
4 th Week 21 April - 28 April	Sessional Exams
27 April, 2025 29 April, 2025 30 April, 2025	Sunday Parshuram Jayanti Akshya Tritiya

KUMARI VIDYAVATI ANAND D.A.V College for Women, Karnal

Lesson Plan for the Even Semester (January to May, 2025)

Name of the Teacher – Mrs. Meenu Kalra

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

Subject- Mathematics

Paper: B23-B.B.A.-204

May, 2025 1 st Week 1 May - 3 May	Simplex method QUESTIONS
4 May, 2025	Sunday
2 nd Week 5 May - 10 May	Problem Discussion
11 May, 2025	Sunday
3 rd Week 12 May - 17 May	QUESTIONS
18 May, 2025	Sunday
4 th Week 19 May - 24 May	UNIVERSITY EXAMINATION

KUMARI VIDYAVATI ANAND D.A.V College for Women, Karnal

Lesson Plan for the Even Semester (January to May, 2025)

Name of the Teacher –Ms. Meenu Kalra

Class-B.C.A.-I(SEM-II)

Subject-Mathematics

Paper- B-23-CAP-204

January, 2025 4 th Week 20 Jan-25Jan	Indefinite Integral: Questions related to indefinite integral Integration by substitution: Questions related to substitution Questions
26 Jan, 2025	Sunday, Republic Day
5 th Week 27Jan– 31 Jan	Integration by parts; Questions related to Integration; Partial fraction and their uses in integration Questions

KUMARI VIDYAVATI ANAND D.A.V College for Women, Karnal

Lesson Plan for the Even Semester (January to May, 2025)

Name of the Teacher – Ms. Meenu Kalra

Class-B.C.A.-I(SEM-II)

Subject-Mathematics

Paper- B-23-CAP-204

February, 2025 1 st Week 1 Feb, 2025	Some special integrals Questions related to integrati Class test & revision of integration
2 Feb, 2025	Sunday, BasantPanchmi
2 nd Week 3 Feb – 8 Feb	Presentation of data Frequency distribution & Questions related to frequency distribution Questions
9 Feb, 2025	Sunday
3 rd Week 10Feb -15 Feb	Diagrammatic and graphical presentation of data Bar diagrams,Pie chart,Histogram,Frequency polygon Questions
12 Feb, 2025 16 Feb, 2025	Guru RavidasJayanti Sunday
4 th Week 17 Feb-22 Feb	Measures of central tendency Arithmetic Mean using different methods Questions Median :Questions related to median Problems related to mean and median
23 Feb, 2025	Sunday
5 th Week 24 Feb- 28 Feb	Mode,Geometric Mean,Questions related to mode and geometric mean Harmonic mean Questions
26 Feb, 2025	MahaShivratri

KUMARI VIDYAVATI ANAND D.A.V College for Women, Karnal

Lesson Plan for the Even Semester (January to May, 2025)

Name of the Teacher –Ms. Meenu Kalra

Class-B.C.A.-I(SEM-II)

Subject-Mathematics

Paper- B-23-CAP-204

March, 2025 1 st Week 1 March, 2025	Measures of Dispersion; Mean deviation, Questions, Standard deviation Questions related to mean deviation & standard deviation
2 March, 2025	Sunday
2 nd Week 3 March – 8 March	Coefficient of variation, Questions related to variation Problems
3 rd Week 9 March - 16 March	Holi Vacations
4 th Week 17 March – 22 March	Correlation: Its types, degree of correlation Covariance and its calculation Questions
23 March, 2025	Sunday, Shaheedi Diwas/ Martyrdom Day of Bhagat Singh, Rajguru & Sukhdev
5 th Week 24 March – 29 March	Karl Pearson's coefficient of correlation, Questions related to this coefficient
30 March, 2025	Sunday
6 th Week 31 March, 2025	Id-ul- Fitr

KUMARI VIDYAVATI ANAND D.A.V College for Women, Karnal

Lesson Plan for the Even Semester (January to May, 2025)

Name of the Teacher –Ms. Meenu Kalra

Class-B.C.A.-I(SEM-II)

Subject-Mathematics

Paper- B-23-CAP-204

April, 2025 1 st Week 1 April – 5 April	Spearman's rank correlation Questions related to this correlation
6 April, 2024	Sunday, Ram Navmi
2 nd Week 7 April - 12 April	Regression: Lines of regression, Coefficient of regression, Angle between regression lines Questions related to Regression
10 April, 2025 13 April, 2025 14 April, 2025	Mahavir Jayanti Sunday, Vaisakhi Dr. B.R. Ambedkar Jayanti
3 rd Week 15 April - 19 April	Student Problems
20 April, 2025	Sunday
4 th Week 21 April - 28 April	Sessional Exams
27 April, 2025 29 April, 2025 30 April, 2025	Sunday Parshuram Jayanti Akshya Tritiya

KUMARI VIDYAVATI ANAND D.A.V College for Women, Karnal

Lesson Plan for the Even Semester (January to May, 2025)

Name of the Teacher – Ms. Meenu Kalra

Class-B.C.A.-I(SEM-II)

Subject-Mathematics

Paper- B-23-CAP-204

May, 2025 1 st Week 1 May - 3 May	Examples on Regression
4 May, 2025	Sunday
2 nd Week 5 May - 10 May	STUDENT PROBLEMS
11 May, 2025	Sunday
3 rd Week 12 May - 17 May	Class Discussion
18 May, 2025	Sunday
4 th Week 19 May - 24 May	Class test & Revision
25 May, 2025	Sunday
5 th Week 26 May - 31 May	REVISION
29 May, 2025	Maharana Partap Jayanti
1 June, 2025 Onwards	University Examinations

KUMARI VIDYAVATI ANAND D.A.V College for Women, Karnal

Lesson Plan for the Even Semester (January to May,2025)

Name of the Teacher – Mrs. Meenu Kalra

Class- B.A. 2nd Semester

Subject- MDC-Mathematics

Paper- B23-MAT-204

January, 2025 4 th Week 20 Jan-25Jan	Matrices and Determinants: Definition of matrix, Order, Equality, Types of matrices, Operations on matrices: addition, multiplication of matrices. EXAMPLES
26 Jan,2025	Sunday, Republic Day
5 th Week 27Jan– 31 Jan	Multiplication with a scalar and their simple properties, Minors, Co-factors, Determinant, Properties of determinants EXAMPLES

KUMARI VIDYAVATI ANAND D.A.V College for Women, Karnal

Lesson Plan for the Even Semester (January to May,2025)

Name of the Teacher – Mrs. Meenu Kalra

Class- B.A. 2nd Semester

Subject- MDC-Mathematics

Paper- B23-MAT-204

February, 2025 1 st Week 1 Feb, 2025	Applications of determinants in finding the area of a triangle. Adjoint and inverse of a square matrix with related examples
2 Feb, 2025	Sunday, BasantPanchmi
2 nd Week 3 Feb – 8 Feb	Solutions of simultaneous linear equations. EXAMPLES
9 Feb, 2025	Sunday
3 rd Week 10Feb -15 Feb	Differentiation, Derivatives of simple functions, functions having applications in business and social studies.
12 Feb, 2025 16 Feb, 2025	Guru RavidasJayanti Sunday
4 th Week 17 Feb-22 Feb	Maxima and minima of function and their applications to Revenue, Cost Demand, Production.
23 Feb, 2025	Sunday
5 th Week 24 Feb- 28 Feb	Profit functions and other functions related to commercial and social Problems.
26 Feb, 2025	MahaShivratri

KUMARI VIDYAVATI ANAND D.A.V College for Women, Karnal

Lesson Plan for the Even Semester (January to May,2025)

Name of the Teacher – Mrs. Meenu Kalra

Class- B.A. 2nd Semester

Subject- MDC-Mathematics

Paper- B23-MAT-204

March,2025 1 st Week 1 March, 2025	Integration of simple functions and its applications in commercial and economic problems.
2 March,2025	Sunday
2 nd Week 3 March– 8 March	Simple interest with related examples.
3 rd Week 9 March - 16 March	Holi Vacations
4 th Week 17 March–22 March	Compound interest with related examples.
23 March,2025	Sunday, ShaheediDiwas/ Martyrdom Day of Bhagat Singh, Rajguru&Sukhdev
5 th Week 24 March–29 March	Annuities: Types of annuities, Present value and amount of an annuity. EXAMPLES
30 March,2025	Sunday
6 th Week 31 March, 2025	Id-ul- Fitr

KUMARI VIDYAVATI ANAND D.A.V College for Women, Karnal

Lesson Plan for the Even Semester

(January to May, 2025)

Name of the Teacher – Mrs. Meenu Kalra

Class- B.A. 2nd Semester

Subject- MDC-Mathematics

Paper- B23-MAT-204

April, 2025 1 st Week 1 April – 5 April	Annuity (including the case of continuous compounding), Valuation of simple loans and debentures. EXAMPLES
6 April, 2024	Sunday, Ram Navmi
2 nd Week 7 April – 12 April	Problems related to sinking funds, Test for differentiation. Linear Programming: Formulation of linear programming problems (LPP). EXAMPLES
10 April, 2025 13 April, 2025 14 April, 2025	Mahavir Jayanti Sunday, Vaisakhi Dr. B.R. Ambedkar Jayanti
3 rd Week 15 April – 19 April	Linear Programming: Formulation of linear programming problems (LPP) Linear programming problems (LPP) and their solution by graphical and Simplex methods
20 April, 2025	Sunday
4 th Week 21 April – 28 April	Sessional Exams
27 April, 2025 29 April, 2025 30 April, 2025	Sunday Parshuram Jayanti Akshya Tritiya

KUMARI VIDYAVATI ANAND D.A.V College for Women, Karnal

Lesson Plan for the Even Semester (January to May,2025)

Name of the Teacher – Mrs. Meenu Kalra

Class- B.A. 2nd Semester

Subject- MDC-Mathematics

Paper- B23-MAT-204

May,2025 1 st Week 1 May -3 May	Student Problems
4May ,2025	Sunday
2 nd Week 5May–10 May	Applications of linear programming in solving social science and business problems and revision. EXAMPLES
11May,2025	Sunday
3 rd Week 12May-17May	Problem Discussion
18May ,2025	Sunday
4 th Week 19 May - 24 May	Class Test & Revision
25May ,2025	Sunday
5 th Week 26 May - 31 May	REVISION
29May ,2025	MaharanaPartapJayanti
1 June,2025 Onwards	UniversityExaminations

KUMARI VIDYAVATI ANAND D.A.V College for Women, Karnal

Lesson Plan for the Even Semester (January to May, 2025)

Name of the Teacher—Ms. Silky puri

Class-B.Sc.Ist year 2nd sem

Subject-Numerical Ability Enhancement Skills

Paper-B23-SEC-225

January, 2025 4 th Week 20 Jan-25Jan	Real number system, Operation on numbers, Test for divisibility of natural numbers.
26 Jan, 2025	Sunday, Republic Day
5 th Week 27Jan– 31 Jan	Decimal, Fractions, Square roots, Cube roots with related Examples.

KUMARI VIDYAVATI ANAND D.A.V College for Women, Karnal

Lesson Plan for the Even Semester (January to May, 2025)

Name of the Teacher—Ms. Silky puri

Class-B.Sc.Ist year 2nd sem

Subject-Numerical Ability Enhancement Skills

Paper-B23-SEC-225

February, 2025 1 st Week 1 Feb, 2025	Surds and Indices, Use of BODMAS in Examples.
2 Feb, 2025	Sunday, Basant Panchmi
2 nd Week 3 Feb – 8 Feb	HCF, LCM of integers, Ratio and proportion with related Examples.
9 Feb, 2025	Sunday
3 rd Week 10 Feb -15 Feb	Progression: Arithmetic Progression, Geometric Progression.
12 Feb, 2025 16 Feb, 2025	Guru Ravidas Jayanti Sunday
4 th Week 17 Feb-22 Feb	Harmonic Progressions with their simple and Basic Practical applications.
23 Feb, 2025	Sunday
5 th Week 24 Feb- 28 Feb	Number series completion, percentage with Examples, Profit.
26 Feb, 2025	MahaShivratri

KUMARI VIDYAVATI ANAND D.A.V College for Women, Karnal

Lesson Plan for the Even Semester (January to May, 2025)

Name of the Teacher—Ms. Silky puri

Class-B.Sc.Ist year 2nd sem

Subject-Numerical Ability Enhancement Skills

Paper-B23-SEC-225

March, 2025 1 st Week 1 March, 2025	Loss, Alligation or mixture with Examples, Average with Examples.
2 March, 2025	Sunday
2 nd Week 3 March– 8 March	Average speed problems, Calendar with related Examples.
3 rd Week 9 March - 16 March	Holi Vacations
4 th Week 17 March–22 March	Logarithms. Area: Quadrilaterals. Parallelogram, Squares with Examples.
23 March, 2025	Sunday, Shaheed Diwas/ Martyrdom Day of Bhagat Singh, Rajguru & Sukhdev
5 th Week 24 March–29 March	Rectangle, Rhombus with related Examples.
30 March, 2025	Sunday
6 th Week 31 March, 2025	Id-ul- Fitr

KUMARI VIDYAVATI ANAND D.A.V College for Women, Karnal

Lesson Plan for the Even Semester (January to May, 2025)

Name of the Teacher—Ms. Silky puri

Class-B.Sc.Ist year 2nd sem

Subject-Numerical Ability Enhancement Skills

Paper-B23-SEC-225

April, 2025 1 st Week 1 April – 5 April	Trapezium with Examples. Volume of Cube.
6 April, 2024	Sunday, Ram Navmi
2 nd Week 7 April - 12 April	Surface area of Cube, Cuboid, Cylinder with Examples.
10 April, 2025 13 April, 2025 14 April, 2025	Mahavir Jayanti Sunday, Vaisakhi Dr. B.R. Ambedkar Jayanti
3 rd Week 15 April - 19 April	Cone, Sphere with related Examples.
20 April, 2025	Sunday
4 th Week 21 April - 28 April	Sessional Exams
27 April, 2025 29 April, 2025 30 April, 2025	Sunday Parshuram Jayanti Akshya Tritiya

KUMARI VIDYAVATI ANAND D.A.V College for Women, Karnal

Lesson Plan for the Even Semester (January to May,2025)

Name of the Teacher—Ms. Silky puri

Class-B.Sc.Ist year 2nd sem

Subject-Numerical Ability Enhancement Skills

Paper-B23-SEC-225

May,2025 1 st Week 1 May -3 May	Hemisphere with related Examples.
4May ,2025	Sunday
2 nd Week 5May–10 May	Revision and Tests
11May,2025	Sunday
3 rd Week 12May-17May	Revision and Tests
18May ,2025	Sunday
4 th Week 19 May - 24 May	Revision and Tests
25May ,2025	Sunday
5 th Week 26 May - 31 May	Revision and Tests
29May ,2025	MaharanaPartapJayanti
1 June,2025 Onwards	UniversityExaminations

KUMARI VIDYAVATI ANAND D.A.V College for Women, Karnal

Lesson Plan for the Even Semester (January to May,2025)

Name of theTeacher–Ms.Silky puri

Class-B.Sc.IVth Sem

Subject-Elements of Mathematics in Everyday Life

Paper-B23-VAC-418

January, 2025 4 th Week 20 Jan-25Jan	Simple interest,Compound interest. Discuss related examples.
26 Jan,2025	Sunday, Republic Day
5 th Week 27Jan– 31 Jan	Equated monthly installment(EMI).Discuss related examples.

KUMARI VIDYAVATI ANAND D.A.V College for Women, Karnal

Lesson Plan for the Even Semester (January to May,2025)

Name of theTeacher–Ms.Silky puri

Class-B.Sc.IVth Sem

Subject-Elements of Mathematics in Everyday Life

Paper-B23-VAC-418

February, 2025 1 st Week 1 Feb, 2025	Direct tax calculation. Discuss related examples.
2 Feb, 2025	Sunday, BasantPanchmi
2 nd Week 3 Feb – 8 Feb	Profit and Loss,Time and Work. Discuss related examples.
9 Feb, 2025	Sunday
3 rd Week 10Feb -15 Feb	Time and Distance.Coding and Decoding. Discuss related examples.
12 Feb, 2025 16 Feb, 2025	Guru RavidasJayanti Sunday
4 th Week 17 Feb-22 Feb	Ratio and Proportion.Trigonometry and its Applications. Discuss related examples.
23 Feb, 2025	Sunday
5 th Week 24 Feb- 28 Feb	Mensuration for practical purposes. Discuss related examples.
26 Feb, 2025	MahaShivratri

KUMARI VIDYAVATI ANAND D.A.V College for Women, Karnal

Lesson Plan for the Even Semester (January to May,2025)

Name of the Teacher– Ms.Silky puri

Class-B.Sc.IVth Sem

Subject-Elements of Mathematics in Everyday Life

Paper-B23-VAC-418

March,2025 1 st Week 1 March, 2025	Sequences and series.
2 March,2025	Sunday
2 nd Week 3 March– 8 March	Arithmetic progression.Geometric progression. Discuss related examples.
3 rd Week 9 March - 16 March	Holi Vacations
4 th Week 17 March–22 March	Permutations and Combinations. Discuss related examples.
23 March,2025	Sunday, Shaheedi Diwas/ Martyrdom Day of Bhagat Singh, Rajguru & Sukhdev
5 th Week 24 March–29 March	Mean ,Mode,Median. Discuss related examples.
30 March,2025	Sunday
6 th Week 31 March, 2025	Id-ul- Fitr

KUMARI VIDYAVATI ANAND D.A.V College for Women, Karnal

Lesson Plan for the Even Semester (January to May,2025)

Name of theTeacher–Ms.Silky puri

Class-B.Sc.IVth Sem

Subject-Elements of Mathematics in Everyday Life

Paper-B23-VAC-418

April,2025 1 st Week 1April –5April	Standard deviation,Variance. Discuss related examples.
6April,2024	Sunday, Ram Navmi
2 nd Week 7April-12April	Bar Graphs,Pie charts,Frequency polygons. Discuss related examples.
10 April, 2025 13April,2025 14April,2025	MahavirJayanti Sunday, Vaisakhi Dr. B.R.AmbedkarJayanti
3 rd Week 15April -19April	Ogive. Discuss related examples.
20April,2025	Sunday
4 th Week 21April -28April	Sessional Exams
27 April, 2025 29 April, 2025 30 April, 2025	Sunday ParshuramJayanti AkshyaTritya

KUMARI VIDYAVATI ANAND D.A.V College for Women, Karnal

Lesson Plan for the Even Semester (January to May,2025)

Name of the Teacher–Ms. Silky puri

Class-B.Sc. IVth Sem

Subject-Elements of Mathematics in Everyday Life

Paper-B23-VAC-418

May,2025 1 st Week 1 May -3 May	Linear equation in two variables. Discuss related examples.
4May ,2025	Sunday
2 nd Week 5May–10 May	Linear programming problems(LPP). Discuss related examples.
11May,2025	Sunday
3 rd Week 12May-17May	Graphical solution. Discuss related examples.
18May ,2025	Sunday
4 th Week 19 May - 24 May	Revision and tests.
25May ,2025	Sunday
5 th Week 26 May - 31 May	Revision and tests.
29May ,2025	MaharanaPartapJayanti
1 June,2025 Onwards	UniversityExaminations

KUMARI VIDYAVATI ANAND D.A.V College for Women, Karnal

Lesson Plan for the Even Semester (January to May, 2025)

Name of the Teacher– Mrs. ANITA

Class- B.B.A. 2nd Semester

Subject- VAC-II Human Values and Ethics

Paper- B-VAC 101

January, 2025 4 th Week 20 Jan-25Jan	Introduction to Value Education: Introduction, Definitions, Meaning, Objectives, Importance. Need, Types of Value Education, Value Education and Life skills, Content for Value Education, Process for Value education.
26 Jan, 2025	Sunday, Republic Day
5 th Week 27Jan– 31 Jan	Understanding the Difference between Skills, Values, Ethics and their Relevance in Life, Classification of Value Education: Introduction, Classification of Value Education, classification of Value Education on the basis of Comparison between Values.

KUMARI VIDYAVATI ANAND D.A.V College for Women, Karnal

Lesson Plan for the Even Semester (January to May, 2025)

Name of the Teacher– Mrs. ANITA

Class- B.B.A. 2nd Semester

Subject- VAC-II Human Values and Ethics

Paper- B-VAC 101

February, 2025 1 st Week 1 Feb, 2025	Ideology: Difference between ideology and values, Components of ideology. The Role of Ideology in Shaping Societal Norms and Policies, The Influence of Values and Ideology on Decision-Making Processes, Concept of Harmony, History of Harmony.
2 Feb, 2025	Sunday, Basant Panchmi
2 nd Week 3 Feb – 8 Feb	Understanding Harmony with Self, Society and Nature, Harmony with Self, with Society, Harmony with Nature, Case Study on Various Types of Value Education: Simplifying Understanding for students.
9 Feb, 2025	Sunday
3 rd Week 10 Feb -15 Feb	Human Values and Ethics: Introduction, Definitions, Meaning, Needs. Basics, Nature Sources, Significance of Human Values in Life, Importance of Ethics, Principle of Ethics.
12 Feb, 2025 16 Feb, 2025	Guru Ravidas Jayanti Sunday
4 th Week 17 Feb-22 Feb	Components of Ethics, Sources of Ethics, Relation Between Values and Ethics. The Relevance of Human Values, Integrity, Meaning, Character Traits Related to Integrity, Types of Integrity. Integrity in Everyday Life.
23 Feb, 2025	Sunday
5 th Week 24 Feb- 28 Feb	Empathy, Characteristics of Empathy, Skills, Types of Empathy. Understanding 'Loksangrah', introduction, Scope, Principles Examples of Loksangrah Initiatives.
26 Feb, 2025	MahaShivratri

KUMARI VIDYAVATI ANAND D.A.V College for Women, Karnal

Lesson Plan for the Even Semester (January to May, 2025)

Name of the Teacher– Mrs. ANITA

Class- B.B.A. 2nd Semester

Subject- VAC-II Human Values and Ethics

Paper- B-VAC 101

March, 2025 1 st Week 1 March, 2025	Understanding 'Brahmavihara', Theory of 'Naya' (Jainism), Types of Naya.
2 March, 2025	Sunday
2 nd Week 3 March – 8 March	Deontology, Definition, Key Concepts and Principles of Deontology, Virtue Ethics, Meaning of Virtue Ethics, Utilitarianism.
3 rd Week 9 March - 16 March	Holi Vacations
4 th Week 17 March – 22 March	Integrated Personality and Well-Being: Understanding the relationship Among Self, Among Identity, Among Personality, understanding Integrated Personality with the Three Gunas, Theory of Sankhya, Integrated Personality through Three Gunas, Implications of three Gunas for Personal Growth.
23 March, 2025	Sunday, Shaheed Diwas/ Martyrdom Day of Bhagat Singh, Rajguru & Sukhdev
5 th Week 24 March – 29 March	Integrated Personality with the four Antah-Karanas, Integration and Self realization of Antah-Karanas Understanding Integrated Personality with Panchkosha (Five Sheaths) in Upanishads.
30 March, 2025	Sunday
6 th Week 31 March, 2025	Id-ul-Fitr

KUMARI VIDYAVATI ANAND D.A.V College for Women, Karnal

Lesson Plan for the Even Semester (January to May, 2025)

Name of the Teacher– Mrs. ANITA

Class- B.B.A. 2nd Semester

Subject- VAC-II Human Values and Ethics

Paper- B-VAC 101

April, 2025 1 st Week 1 April – 5 April	The Five Sheaths, Significance of Integrated Personality, Approaching a Comprehensive Understanding of Well-Being OR Components of Well-Being, The relationship between Well-Being and Happiness, Yogic Way of Cognitive Restructuring.
6 April, 2024	Sunday, Ram Navmi
2 nd Week 7 April – 12 April	Professional Ethics and Global Citizenship: Introduction, Importance of Professional Ethics, Key Principles of Professional Ethics, Nature, Scope, Characteristics, Types of Professional Ethics.
10 April, 2025 13 April, 2025 14 April, 2025	Mahavir Jayanti Sunday, Vaisakhi Dr. B.R. Ambedkar Jayanti
3 rd Week 15 April – 19 April	Understanding Professional Values: Introduction, Definition and Professional Values, Global Citizenship: Values for Global Citizenship: Equality, Justice, Human Dignity.
20 April, 2025	Sunday
4 th Week 21 April – 28 April	Sessional Exams
27 April, 2025 29 April, 2025 30 April, 2025	Sunday Parshuram Jayanti Akshya Tritiya

KUMARI VIDYAVATI ANAND D.A.V College for Women, Karnal

Lesson Plan for the Even Semester (January to May, 2025)

Name of the Teacher– Mrs. ANITA

Class- B.B.A. 2nd Semester

Subject- VAC-II Human Values and Ethics

Paper- B-VAC 101

May, 2025 1 st Week 1 May - 3 May	Competency- Based Education: Introduction, Definition, Key Features, Benefits and Challenges of competency- Based Assessments.
4 May, 2025	Sunday
2 nd Week 5 May – 10 May	Nature and Needs of Competency- Based Education. Types of Competencies, Core Competencies, Functional Competencies, Difference between Functional and Core Competencies.
11 May, 2025	Sunday
3 rd Week 12 May - 17 May	Successful Examples of Competency- Based Education (CBE) Implementation, Role of Assessments in Competency- Based Education (CBE).
18 May, 2025	Sunday
4 th Week 19 May - 24 May	Revision
25 May, 2025	Sunday
5 th Week 26 May - 31 May	Revision
29 May, 2025	Maharana Partap Jayanti
1 June, 2025 Onwards	University Examinations

KUMARI VIDYAVATI ANAND D.A.V College for Women, Karnal

Lesson Plan for the Even Semester (January to May, 2025)

Name of the Teacher– Mrs. ANITA

Class- B.C.A. 2nd Semester

Subject- VAC-II Human Values and Ethics

Paper- B-VAC 101

January, 2025 4 th Week 20 Jan-25Jan	Introduction to Value Education: Introduction, Definitions, Meaning, Objectives, Importance. Need, Types of Value Education, Value Education and Life skills, Content for Value Education, Process for Value education.
26 Jan, 2025	Sunday, Republic Day
5 th Week 27Jan– 31 Jan	Understanding the Difference between Skills, Values, Ethics and their Relevance in Life, Classification of Value Education: Introduction, Classification of Value Education, classification of Value Education on the basis of Comparison between Values.

KUMARI VIDYAVATI ANAND D.A.V College for Women, Karnal

Lesson Plan for the Even Semester (January to May, 2025)

Name of the Teacher– Mrs. ANITA

Class- B.C.A. 2nd Semester

Subject- VAC-II Human Values and Ethics

Paper- B-VAC 101

February, 2025 1 st Week 1 Feb, 2025	Ideology: Difference between ideology and values, Components of ideology. The Role of Ideology in Shaping Societal Norms and Policies, The Influence of Values and Ideology on Decision-Making Processes, Concept of Harmony, History of Harmony.
2 Feb, 2025	Sunday, Basant Panchmi
2 nd Week 3 Feb – 8 Feb	Understanding Harmony with Self, Society and Nature, Harmony with Self, with Society, Harmony with Nature, Case Study on Various Types of Value Education: Simplifying Understanding for students.
9 Feb, 2025	Sunday
3 rd Week 10 Feb -15 Feb	Human Values and Ethics: Introduction, Definitions, Meaning, Needs. Basics, Nature Sources, Significance of Human Values in Life, Importance of Ethics, Principle of Ethics.
12 Feb, 2025 16 Feb, 2025	Guru Ravidas Jayanti Sunday
4 th Week 17 Feb-22 Feb	Components of Ethics, Sources of Ethics, Relation Between Values and Ethics. The Relevance of Human Values, Integrity, Meaning, Character Traits Related to Integrity, Types of Integrity. Integrity in Everyday Life.
23 Feb, 2025	Sunday
5 th Week 24 Feb- 28 Feb	Empathy, Characteristics of Empathy, Skills, Types of Empathy. Understanding ‘Loksangrah’, introduction, Scope, Principles Examples of Loksangrah Initiatives.
26 Feb, 2025	MahaShivratri

KUMARI VIDYAVATI ANAND D.A.V College for Women, Karnal

Lesson Plan for the Even Semester (January to May, 2025)

Name of the Teacher– Mrs. ANITA

Class- B.C.A. 2nd Semester

Subject- VAC-II Human Values and Ethics

Paper- B-VAC 101

March, 2025 1 st Week 1 March, 2025	Understanding 'Brahmavihara', Theory of 'Naya' (Jainism), Types of Naya.
2 March, 2025	Sunday
2 nd Week 3 March– 8 March	Deontology, Definition, Key Concepts and Principles of Deontology, Virtue Ethics, Meaning of Virtue Ethics, Utilitarianism.
3 rd Week 9 March - 16 March	Holi Vacations
4 th Week 17 March–22 March	Integrated Personality and Well- Being: Understanding the relationship Among Self, Among Identity, Among Personality, understanding Integrated Personality with the Three Gunas, Theory of Sankhya, Integrated Personality through Three Gunas, Implications of three Gunas for Personal Growth.
23 March, 2025	Sunday, Shaheedi Diwas/ Martyrdom Day of Bhagat Singh, Rajguru & Sukhdev
5 th Week 24 March–29 March	Integrated Personality with the four Antah-Karanas, Integration and Self realization of Antah- Karanas Understanding Integrated Personality with Panchkosha (Five Sheaths) in Upanishads.
30 March, 2025	Sunday
6 th Week 31 March, 2025	Id-ul- Fitr

KUMARI VIDYAVATI ANAND D.A.V College for Women, Karnal

Lesson Plan for the Even Semester (January to May, 2025)

Name of the Teacher– Mrs. ANITA

Class- B.C.A. 2nd Semester

Subject- VAC-II Human Values and Ethics

Paper- B-VAC 101

April, 2025 1 st Week 1 April – 5 April	The Five Sheaths, Significance of Integrated Personality, Approaching a Comprehensive Understanding of Well-Being OR Components of Well-Being, The relationship between Well-Being and Happiness, Yogic Way of Cognitive Restructuring.
6 April, 2024	Sunday, Ram Navmi
2 nd Week 7 April – 12 April	Professional Ethics and Global Citizenship: Introduction, Importance of Professional Ethics, Key Principles of Professional Ethics, Nature, Scope, Characteristics, Types of Professional Ethics.
10 April, 2025 13 April, 2025 14 April, 2025	Mahavir Jayanti Sunday, Vaisakhi Dr. B.R. Ambedkar Jayanti
3 rd Week 15 April – 19 April	Understanding Professional Values: Introduction, Definition and Professional Values, Global Citizenship: Values for Global Citizenship: Equality, Justice, Human Dignity.
20 April, 2025	Sunday
4 th Week 21 April – 28 April	Sessional Exams
27 April, 2025 29 April, 2025 30 April, 2025	Sunday Parshuram Jayanti Akshya Tritiya

KUMARI VIDYAVATI ANAND D.A.V College for Women, Karnal

Lesson Plan for the Even Semester (January to May, 2025)

Name of the Teacher– Mrs. ANITA

Class- B.C.A. 2nd Semester

Subject- VAC-II Human Values and Ethics

Paper- B-VAC 101

May, 2025 1 st Week 1 May - 3 May	Competency- Based Education: Introduction, Definition, Key Features, Benefits and Challenges of competency- Based Assessments.
4 May, 2025	Sunday
2 nd Week 5 May – 10 May	Nature and Needs of Competency- Based Education. Types of Competencies, Core Competencies, Functional Competencies, Difference between Functional and Core Competencies.
11 May, 2025	Sunday
3 rd Week 12 May - 17 May	Successful Examples of Competency- Based Education (CBE) Implementation, Role of Assessments in Competency- Based Education (CBE).
18 May, 2025	Sunday
4 th Week 19 May - 24 May	Revision
25 May, 2025	Sunday
5 th Week 26 May - 31 May	Revision
29 May, 2025	Maharana Partap Jayanti
1 June, 2025 Onwards	University Examinations

KUMARI VIDYAVATI ANAND D.A.V College for Women, Karnal

Lesson Plan for the Even Semester (January to May, 2025)

Name of the Teacher– Ms. Anita

Class- PGDCA 2ND SEM

Subject- Mathematical foundations for Computer Science

Paper- M24-CAP-207

January, 2025 4 th Week 20 Jan-25Jan	Sets: Set theory: Basic concept, set operations, cardinality and notation.
26 Jan, 2025	Sunday, Republic Day
5 th Week 27Jan– 31 Jan	Relations and its representations, Properties of binary relation- Reflexive, symmetric, asymmetric, transitive, Equivalence,

KUMARI VIDYAVATI ANAND D.A.V College for Women, Karnal

Lesson Plan for the Even Semester (January to May, 2025)

Name of the Teacher– Ms. Anita

Class- PGDCA 2ND SEM

Subject- Mathematical foundations for Computer Science

Paper- M24-CAP-207

February, 2025 1 st Week 1 Feb, 2025	Inverse & Composition of a relation, closure of relations , its types,
2 Feb, 2025	Sunday, Basant Panchmi
2 nd Week 3 Feb – 8 Feb	Partial ordering relation, Hasse diagram, minimal elements, upper bound, lower bound,
9 Feb, 2025	Sunday
3 rd Week 10 Feb -15 Feb	Lattices Functions: definition, floor functions, ceiling functions, surjective, injective and bijective functions,
12 Feb, 2025 16 Feb, 2025	Guru Ravidas Jayanti Sunday
4 th Week 17 Feb-22 Feb	Inverse Function, Composition of Functions, recursive Functions, Pigeon hole principles and its application.
23 Feb, 2025	Sunday
5 th Week 24 Feb- 28 Feb	Addition and multiplication of matrices, Laws of matrix algebra, Singular and non- singular matrices,
26 Feb, 2025	MahaShivratri

KUMARI VIDYAVATI ANAND D.A.V College for Women, Karnal

Lesson Plan for the Even Semester (January to May, 2025)

Name of the Teacher– Ms. Anita

Class- PGDCA 2ND SEM

Subject- Mathematical foundations for Computer Science

Paper- M24-CAP-207

March, 2025 1 st Week 1 March, 2025	Inverse of a matrix, System of linear equations, Eigen values and Eigen vectors
2 March, 2025	Sunday
2 nd Week 3 March– 8 March	Diagonalization of a square matrix. Interpolation, Numerical,
3 rd Week 9 March - 16 March	Holi Vacations
4 th Week 17 March–22 March	Integration and Differentiation
23 March, 2025	Sunday, Shaheedi Diwas/ Martyrdom Day of Bhagat Singh, Rajguru & Sukhdev
5 th Week 24 March–29 March	Statistical Methods: Definition and scope of Statistics, concepts of statistical population and sample,
30 March, 2025	Sunday
6 th Week 31 March, 2025	Id-ul- Fitr

KUMARI VIDYAVATI ANAND D.A.V College for Women, Karnal

Lesson Plan for the Even Semester (January to May, 2025)

Name of the Teacher– Ms. Anita

Class- PGDCA 2ND SEM

Subject- Mathematical foundations for Computer Science

Paper- M24-CAP-207

April, 2025 1 st Week 1 April – 5 April	Data: Quantitative and qualitative, attributes, variables scales of measurement nominal, ordinal,
6 April, 2024	Sunday, Ram Navmi
2 nd Week 7 April – 12 April	Interval and ratio. Presentation: tabular and graphical, including histogram and ogives.
10 April, 2025 13 April, 2025 14 April, 2025	Mahavir Jayanti Sunday, Vaisakhi Dr. B.R. Ambedkar Jayanti
3 rd Week 15 April – 19 April	Measures of Central Tendency: Mean, Median, Mode. Measures of Dispersion: range, quartile deviation, mean deviation, standard deviation, coefficient of variation, Moments, Skewness and kurtosis,
20 April, 2025	Sunday
4 th Week 21 April – 28 April	Sessional Exams
27 April, 2025 29 April, 2025 30 April, 2025	Sunday Parshuram Jayanti Akshya Tritiya

KUMARI VIDYAVATI ANAND D.A.V College for Women, Karnal

Lesson Plan for the Even Semester (January to May, 2025)

Name of the Teacher– Ms. Anita

Class- PGDCA 2ND SEM

Subject- Mathematical foundations for Computer Science

Paper- M24-CAP-207

May, 2025 1 st Week 1 May - 3 May	Bivariate data: Definition, scatter diagram, simple, partial and multiple correlation (3 variables only),
4 May, 2025	Sunday
2 nd Week 5 May – 10 May	Rank correlation. Simple linear regression, principle of least squares and fitting of polynomials and exponential Curves.
11 May, 2025	Sunday
3 rd Week 12 May - 17 May	Probability: Introduction, random experiments, sample space, events and algebra of events,
18 May, 2025	Sunday
4 th Week 19 May - 24 May	Definitions of Probability- Classical, statistical and axiomatic. Conditional Probability, laws of addition and multiplication, independent events,
25 May, 2025	Sunday
5 th Week 26 May - 31 May	Theorem of total probability, Bayes' theorem and its applications. Revision.
29 May, 2025	Maharana Partap Jayanti
1 June, 2025 Onwards	University Examinations

KUMARI VIDYAVATI ANAND D.A.V College for Women, Karnal

Lesson Plan for the Even Semester (January to May, 2025)

Name of the Teacher– Manju Rani

Class- M.Sc. Mathematics

Subject- Field Theory

Paper- M24-MAT-201

January, 2025 4 th Week 20 Jan-25Jan	Irreducible polynomial, Eisenstein criterion and its examples. Gauss lemma.
26 Jan,2025	Sunday, Republic Day
5 th Week 27Jan– 31 Jan	Fields Extensions And Degree of An Extension. And its theorem.

KUMARI VIDYAVATI ANAND D.A.V College for Women, Karnal

Lesson Plan for the Even Semester (January to May, 2025)

Name of the Teacher– Manju Rani

Class- M.Sc. Mathematics

Subject- Field Theory

Paper- M24-MAT-201

February, 2025 1 st Week 1 Feb, 2025	Algebraic And Transcendental Elements And Theorems Based On it.
2 Feb, 2025	Sunday, Basant Panchmi
2 nd Week 3 Feb – 8 Feb	Algebraic Extensions And Its Theorems. Finitely Generated Algebraic Extensions.
9 Feb, 2025	JANAMASHTMI
3 rd Week 10 Feb -15 Feb	Conjugate element. Theorems Based on Conjugate Elements.
12 Feb, 2025 16 Feb, 2025	Guru Ravidas Jayanti Sunday
4 th Week 17 Feb-22 Feb	Algebraic Closure And Algebraically Closed Fields, Theorems Based on it.
23 Feb, 2025	Sunday
5 th Week 24 Feb- 28 Feb	Splitting Fields And its Theorems. And its related example.
26 Feb, 2025	Maha Shivratri

KUMARI VIDYAVATI ANAND D.A.V College for Women, Karnal

Lesson Plan for the Even Semester (January to May, 2025)

Name of the Teacher– Manju Rani

Class- M.Sc. Mathematics

Subject- Field Theory

Paper- M24-MAT-201

March,2025 1 st Week 1 March, 2025	Normal Extensions and Its Theorems.
2 March,2025	Sunday
2 nd Week 3 March– 8 March	Continued theorem, Finite field.
3 rd Week 9 March - 16 March	Holi Vacations
4 th Week 17 March–22 March	Common root , multiple roots, prime field, Characterization of prime field.
23 March,2025	Sunday, Shaheedi Diwas/ Martyrdom Day of Bhagat Singh, Rajguru & Sukhdev
5 th Week 24 March–29 March	Separable extension and its theorem.
30 March,2025	Sunday
6 th Week 31 March, 2025	Id-ul- Fitr

KUMARI VIDYAVATI ANAND D.A.V College for Women, Karnal

Lesson Plan for the Even Semester (January to May, 2025)

Name of the Teacher– Manju Rani

Class- M.Sc. Mathematics

Subject- Field Theory

Paper- M24-MAT-201

April,2025 1 st Week 1April –5April	Primitive element, Theorem of Primitive Element. Perfect Field and Its Theorems.
6April,2024	Sunday, Ram Navmi
2 nd Week 7April-12April	Automorphism group, fixed field. Galois extensions, Galois group of an extension and its theorems.
10 April, 2025 13April,2025 14April,2025	Mahavir Jayanti Sunday, Vaisakhi Dr. B.R. Ambedkar Jayanti
3 rd Week 15April -19April	Dedekind Lemma, Fundamental Theorem of Galois Theory.
20April,2025	Sunday
4 th Week 21April -28April	Fundamental Theorem Of Algebra. Roots of unity. Cyclic extension. Klein four group, Frobenius automorphism of a finite field ,Cyclotomic Polynomials and Their Irreducibility Over Q and theorems Based On It
27 April, 2025 29 April, 2025 30 April, 2025	Sunday Parshuram Jayanti Akshya Tritya

KUMARI VIDYAVATI ANAND D.A.V College for Women, Karnal

Lesson Plan for the Even Semester (January to May, 2025)

Name of the Teacher– Manju Rani

Class- M.Sc. Mathematics

Subject- Field Theory

Paper- M24-MAT-201

May,2025 1 st Week 1 May -3 May	Sessional Exams
4May ,2025	Sunday
2 nd Week 5May–10 May	Sessional Exams
11May,2025	Sunday
3 rd Week 12May-17May	Construction with Ruler and Compass, its related theorem. Symmetric function, Elementary symmetric function.
18May ,2025	Sunday
4 th Week 19 May Onwards	University Examinations

KUMARI VIDYAVATI ANAND D.A.V College for Women, Karnal

Lesson Plan for the Even Semester (January to May, 2025)

Name of the Teacher– Deepika

Class- M. Sc. (Maths) Sem. - II

Subject- Measure and Integration

Paper- M24-MAT-202

January, 2025 4 th Week 20 Jan-25 Jan	Lebesgue outer measure, Elementary properties of outer measure, Measurable sets and their properties.
26 Jan, 2025	Sunday, Republic Day
5 th Week 27 Jan– 31 Jan	Lebesgue measure of sets of real numbers, Algebra of measurable sets.

KUMARI VIDYAVATI ANAND D.A.V College for Women, Karnal

Lesson Plan for the Even Semester (January to May, 2025)

Name of the Teacher– Deepika

Class- M. Sc. (Maths) Sem. - II

Subject- Measure and Integration

Paper- M24-MAT-202

February, 2025 1 st Week 1 Feb, 2025	Borel sets and their measurability.
2 Feb, 2025	Sunday, Basant Panchmi
2 nd Week 3 Feb – 8 Feb	Characterization of measurable sets in terms of open, closed, F_σ and G_δ sets, Existence of a non measurable set
9 Feb, 2025	Sunday
3 rd Week 10Feb -15 Feb	Lebesgue measurable functions and their properties Characteristic functions, Simple functions
12 Feb, 2025 16 Feb, 2025	Guru Ravidas Jayanti Sunday
4 th Week 17 Feb-22 Feb	approximation of measurable function by a sequence of simple functions, Functions as nearly continuous functions
23 Feb, 2025	Sunday
5 th Week 24 Feb- 28 Feb	Borel measurability of a function, Class Discussion
26 Feb, 2025	Maha Shivratri

KUMARI VIDYAVATI ANAND D.A.V College for Women, Karnal

Lesson Plan for the Even Semester (January to May, 2025)

Name of the Teacher– Deepika

Class- M. Sc. (Maths) Sem. - II

Subject- Measure and Integration

Paper- M24-MAT-202

March,2025 1 st Week 1 March, 2025	Test
2 March,2025	Sunday
2 nd Week 3 March– 8 March	Littlewood's three principles, measurable functions as nearly continuous functions, Lusin's theorem, Almost uniform convergence.
3 rd Week 9 March - 16 March	Holi Vacations
4 th Week 17 March–22 March	Egoroff's theorem, convergence in measure, F. Riesz theorem
23 March,2025	Sunday, Shaheedi Diwas/ Martyrdom Day of Bhagat Singh, Rajguru & Sukhdev
5 th Week 24 March–29 March	Shortcomings of Riemann integral, Lebesgue integral of a bounded function over a set of finite measure and its properties.
30 March,2025	Sunday
6 th Week 31 March, 2025	Lebesgue integral as a generalization of Riemann integral

KUMARI VIDYAVATI ANAND D.A.V College for Women, Karnal

Lesson Plan for the Even Semester (January to May, 2025)

Name of the Teacher– Deepika

Class- M. Sc. (Maths) Sem. - II

Subject- Measure and Integration

Paper- M24-MAT-202

April, 2025 1 st Week 1April –5April	Bounded convergence theorem, Lebesgue theorem regarding points of discontinuity of Riemann integral functions, Integral of a non negative function, Group discussion
6April,2024	Sunday, Ram Navmi
2 nd Week 7April-12April	Fatou's lemma, Monotone convergene theorem, Integration of series, the general Lebesgue integral, Lebesgue convergence theorem, Differentiation and Integration: Differentiation of monotone functions
10 April, 2025 13 April,2025 14 April,2025	Mahavir Jayanti Sunday, Vaisakhi Dr. B. R. Ambedkar Jayanti
3 rd Week 15 April -19 April	Vitali's covering lemma, the four Dini derivatives.
20 April, 2025	Sunday
4 th Week 21 April -28 April	Lebesgue differentiation theorem, Functions of bounded variation and their representation as a difference of monotone functions, Group Discussion, Differentiation of integral, Absolutely continuous functions and their properties, Convex functions.
27 April, 2025 29 April, 2025 30 April, 2025	Sunday Parshuram Jayanti Akshya Tritya

KUMARI VIDYAVATI ANAND D.A.V College for Women, Karnal

Lesson Plan for the Even Semester (January to May, 2025)

Name of the Teacher– Deepika

Class- M. Sc. (Maths) Sem. - II

Subject- Measure and Integration

Paper- M24-MAT-202

May, 2025 1 st Week 1 May -3 May	Sessionals
4 May ,2025	Sunday
2 nd Week 5 May–10 May	Sessionals
11 May, 2025	Sunday
3 rd Week 12 May-17 May	Jensen's inequality, The L_p spaces, Group Discussion
18 May , 2025	Sunday
4 th Week 19 May - 24 May	University Exams

KUMARI VIDYAVATI ANAND D.A.V College for Women, Karnal

Lesson Plan for the Even Semester (January to May, 2025)

Name of the Teacher– Deepika

Class- M. Sc. (Maths) Sem. - II

Subject- Topology

Paper- M24-MAT-203

January, 2025 4 th Week 20 Jan-25Jan	Definition and examples of topological spaces, neighbourhoods, neighbourhood system of a point and its properties.
26 Jan,2025	Sunday, Republic Day
5 th Week 27Jan– 31 Jan	interior point and interior of a set, interior as an operator and its properties, definition of a closed set as complement of an open set, limit point (accumulation point)

KUMARI VIDYAVATI ANAND D.A.V College for Women, Karnal

Lesson Plan for the Even Semester (January to May, 2025)

Name of the Teacher– Deepika

Class- M. Sc. (Maths) Sem. - II

Subject- Topology

Paper- M24-MAT-203

February, 2025 1 st Week 1 Feb, 2025	Test
2 Feb, 2025	Sunday, Basant Panchmi
2 nd Week 3 Feb – 8 Feb	Derived set of a set, adherent point (closure point) of a set, closure of a set, closure as an operator and its properties, dense sets and separable spaces.
9 Feb, 2025	Sunday
3 rd Week 10 Feb -15 Feb	Base for a topology and its characterization, base for neighbourhood system, sub-base for a topology.
12 Feb, 2025 16 Feb, 2025	Guru Ravidas Jayanti Sunday
4 th Week 17 Feb-22 Feb	Relative (induced) topology and subspace of a topological space.
23 Feb, 2025	Sunday
5 th Week 24 Feb- 28 Feb	Alternate methods of defining a topology using properties of neighbourhood system, interior operator, closed sets, Kuratowski closure operator.
26 Feb, 2025	Maha Shivratri

KUMARI VIDYAVATI ANAND D.A.V College for Women, Karnal

Lesson Plan for the Even Semester (January to May, 2025)

Name of the Teacher– Deepika

Class- M. Sc. (Maths) Sem. - II

Subject- Topology

Paper- M24-MAT-203

March,2025 1 st Week 1 March, 2025	Comparison of topologies on a set, about intersection and union of topologies.
2 March,2025	Sunday
2 nd Week 3 March– 8 March	The collection of all topologies on a set as a complete lattice, First countable, second countable, their relationships and hereditary property, Countability of a collection of disjoint open sets in a separable and a second countable space
3 rd Week 9 March - 16 March	Holi Vacations
4 th Week 17 March–22 March	Lindelof theorem, Definition, examples, find characterizations of continuous functions
23 March,2025	Sunday, Shaheedi Diwas/ Martyrdom Day of Bhagat Singh, Rajguru & Sukhdev
5 th Week 24 March–29 March	composition of continuous functions, Open and closed functions closed functions, homeomorphism.
30 March,2025	Sunday
6 th Week 31 March, 2025	Id-ul- Fitr

KUMARI VIDYAVATI ANAND D.A.V College for Women, Karnal

Lesson Plan for the Even Semester (January to May, 2025)

Name of the Teacher– Deepika

Class- M. Sc. (Maths) Sem. - II

Subject- Topology

Paper- M24-MAT-203

April, 2025 1 st Week 1 April – 5 April	Tychonoff product topology, projection maps, their continuity and openness, Characterization of product topology as the smallest topology such that the projections are continuous.
6 April, 2024	Sunday, Ram Navmi
2 nd Week 7 April – 12 April	Continuity of a function from a space into a product of spaces. Connectedness and its characterization, Connected subsets and their properties, C
10 April, 2025 13 April, 2025 14 April, 2025	Mahavir Jayanti Sunday, Vaisakhi Dr. B.R. Ambedkar Jayanti
3 rd Week 15 April – 19 April	Continuity and connectedness, Components, Locally connected spaces. T_0 , T_1 , T_2 spaces, productive property of T_1 and T_2 spaces. Regular and T_3 separation axioms, their characterization and basic properties i.e. hereditary and productive properties.
20 April, 2025	Sunday
4 th Week 21 April – 28 April	Quotient topology with respect to a map, continuity of function with domain a space having quotient topology, about Hausdorffness of quotient space.
27 April, 2025 29 April, 2025 30 April, 2025	Sunday Parshuram Jayanti Akshya Tritiya

KUMARI VIDYAVATI ANAND D.A.V College for Women, Karnal

Lesson Plan for the Even Semester (January to May, 2025)

Name of the Teacher– Deepika

Class- M. Sc. (Maths) Sem. - II

Subject- Topology

Paper- M24-MAT-203

May, 2025 1 st Week 1 May - 3 May	Sessional
4 May, 2025	Sunday
2 nd Week 5 May - 10 May	Sessional
11 May, 2025	Sunday
3 rd Week 12 May - 17 May	Completely regular and Tychonoff spaces, their hereditary and productive properties, Embedding lemma, Embedding theorem. Normal and T ₄ spaces, Urysohn's Lemma, complete regularity of a regular normal space, Tietze's extension theorem (statement only).
18 May, 2025	Sunday
4 th Week 19 May - 24 May	University Exams
25 May, 2025	Sunday

KUMARI VIDYAVATI ANAND D.A.V College for Women, Karnal

Lesson Plan for the Even Semester (January to May, 2025)

Name of the Teacher– Manju Rani

Class- M.Sc.(Math) Sem-II

Subject- Advanced Differential Equations

Paper-M24-MAT-204

January, 2025 4 th Week 20 Jan-25Jan	Definition and notations of linear differential system, Linear homogenous system, Definition of fundamental matrix and Adjoint system. Reduction of the order of a homogeneous system.
26 Jan,2025	Sunday, Republic Day
5 th Week 27Jan– 31 Jan	Non-homogeneous linear system. Variation of constant, Linear system with constant coefficients.

KUMARI VIDYAVATI ANAND D.A.V College for Women, Karnal

Lesson Plan for the Even Semester (January to May, 2025)

Name of the Teacher– Manju Rani

Class- M.Sc.(Math) Sem-II

Subject- Advanced Differential Equations

Paper-M24-MAT-204

February, 2025 1 st Week 1 Feb, 2025	TEST
2 Feb, 2025	BasantPanchmi
2 nd Week 3 Feb – 8 Feb	Linear system with constant coefficients continued, Linear system with periodic coefficients, Floquet theory.
9 Feb, 2025	Sunday
3 rd Week 10Feb -15 Feb	System of differential equations; Preliminary concepts, Differential equation of order n and its equivalent system of differential equations, Existence and uniqueness of solutions of system of differential equations.
12 Feb, 2025 16 Feb, 2025	Guru Ravidas Jayanti Sunday
4 th Week 17 Feb-22 Feb	Continued it.
23 Feb, 2025	Sunday
5 th Week 24 Feb- 28 Feb	Discussion with students.
26 Feb, 2025	Maha Shivratri

KUMARI VIDYAVATI ANAND D.A.V College for Women, Karnal

Lesson Plan for the Even Semester (January to May, 2025)

Name of the Teacher– Manju Rani

Class- M.Sc.(Math) Sem-II

Subject- Advanced Differential Equations

Paper-M24-MAT-204

March,2025 1 st Week 1 March, 2025	TEST
2 March,2025	Sunday
2 nd Week 3 March– 8 March	Dependence of solutions on initial conditions and parameters: Preliminaries, continuity and differentiability of solution of a system of differential equations as a function of initial parameters.
3 rd Week 9 March - 16 March	Holi Vacations
4 th Week 17 March–22 March	Dependence of solutions on initial conditions and parameters: Preliminaries, continuity and differentiability of solution of a system of differential equations as a function of initial parameters continued
23 March,2025	Sunday, Shaheedi Diwas/ Martyrdom Day of Bhagat Singh, Rajguru & Sukhdev
5 th Week 24 March–29 March	Autonomous systems, the critical points. Types of critical points: Node, Center, Saddle point, Spiral point, Stability of critical points.
30 March,2025	Sunday
6 th Week 31 March, 2025	Id- ul- Fitr

KUMARI VIDYAVATI ANAND D.A.V College for Women, Karnal

Lesson Plan for the Even Semester (January to May, 2025)

Name of the Teacher– Manju Rani

Class- M.Sc.(Math) Sem-II

Subject- Advanced Differential Equations

Paper-M24-MAT-204

April,2025 1 st Week 1April –5April	Discussion on student's problems. Critical points and paths of linear systems: basic theorems and their applications.
6April,2024	Sunday, Ram Navmi
2 nd Week 7April-12April	Critical points and paths of non-linear systems: basic theorems and their applications. Non-linear conservative systems. Potential energy function.
10 April, 2025 13April,2025 14April,2025	Mahavir Jayanti Sunday, Vaisakhi Dr. B.R. Ambedkar Jayanti
3 rd Week 15April -19April	Benedixson's non-existence theorem, Half-path , Limit set. Stability of linear and non-linear systems: System of equations with coefficients, linear equation with constant coefficients
20April,2025	Sunday
4 th Week 21April -28April	Lyapunov Stability: Stability of solution of a differential system, Positive Definite and semidefinite function
27 April, 2025 29 April, 2025 30 April, 2025	Sunday Parshuram Jayanti Akshya Tritya

KUMARI VIDYAVATI ANAND D.A.V College for Women, Karnal

Lesson Plan for the Even Semester (January to May, 2025)

Name of the Teacher– Manju Rani

Class- M.Sc.(Math) Sem-II

Subject- Advanced Differential Equations

Paper-M24-MAT-204

May,2025 1 st Week 1 May -3 May	Sessional Exams
4May ,2025	Sunday
2 nd Week 5May–10 May	Sessional Exams
11May,2025	Sunday
3 rd Week 12May-17May	Lyapunov's theorems on stability, Stability of quasi- linear systems. Boundedness of solution of a second order differential equation
18May ,2025	Sunday
4 th Week 19 May Onwards	University Examinations

KUMARI VIDYAVATI ANAND D.A.V College for Women, Karnal

Lesson Plan for the Even Semester (January to May, 2025)

Name of the Teacher – Ms.Monila Bansal

Class- M.Sc. SemII NEP

Subject- Mathematics

Paper-Computer Programming with MATLAB(M24-MAT-205)

January, 2025 4th Week 20 Jan-25 Jan	Introduction to MATLAB programming Basics of Programming Anatomy of a program Constants, Characters, Variables
26 Jan, 2025	Sunday, Republic Day
5th Week 27 Jan – 31 Jan	Data types; Assignments; Operators; functions; Examples of expressions; Entering long statements; Command line editing. Good programming style Working with vectors: Defining a Vector, Accessing elements within a vector, Basic operations on vectors; Mathematical functions

KUMARI VIDYAVATI ANAND D.A.V College for Women, Karnal

Lesson Plan for the Even Semester (January to May, 2025)

Name of the Teacher – Ms. Monila Bansal

Class- M.Sc. Sem II NEP

Subject- Mathematics

Paper-Computer Programming with MATLAB(M24-MAT-205)

February, 2025 1 st Week 1 Feb, 2025	Strings; String functions; Cell array; Creating cell array; Concatenation. Working with Matrices: Generating matrices; Mathematical operations and functions; Deleting rows /columns; Linear algebra; Arrays; Multivariate data; Scalar expansion; Logical subscripting;
2 Feb, 2025	Sunday, Basant Panchmi
2 nd Week 3 Feb – 8 Feb	Input and output: Save/Load functions, M-files, The find function; The format function; Suppressing output
9 Feb, 2025	Sunday
3 rd Week 10 Feb - 15 Feb	Flow Control: if and else, switch and case, for loop, while loop, continue. break, try – catch, return. Data Structures: Multidimensional arrays
12 Feb, 2025 16 Feb, 2025	Guru Ravidas Jayanti Sunday
4 th Week 17 Feb-22 Feb	Cell arrays, Characters and text; Structures, Scripts and Functions: Scripts; Functions; Types of functions Global variables; Passing string arguments to functions
23 Feb, 2025	Sunday
5 th Week 24 Feb- 28 Feb	The eval function; Function handles; Function functions; Vectorization; Preallocation. Linear Differential equation of order n with constant coefficient; Characteristic roots, fundamental set
26 Feb, 2025	Maha Shivratri

KUMARI VIDYAVATI ANAND D.A.V College for Women, Karnal

Lesson Plan for the Even Semester (January to May, 2025)

Name of the Teacher – Ms.Monila Bansal

Class- M.Sc. SemII NEP

Subject- Mathematics

Paper-Computer Programming with MATLAB(M24-MAT-205)

March, 2025 1 st Week 1 March, 2025	Graphics: Plotting process; Graph components; Figure tools; Arranging graphs within a figure; Selecting plot types; Plot editing mode,
2 March, 2025	Sunday
2 nd Week 3 March – 8 March	Using functions to edit graphs; Modifying a graph data source; Modify a graph to enhance the presentation; Printing a graph; Exporting a graph.
3 rd Week 9 March - 16 March	Holi Vacations
4 th Week 17 March – 22 March	Basic Plotting Functions: Creating a plot; Multiple data sets in one graph; Specifying line styles and colors; Plotting lines and markers; Imaginary and complex data; Adding plots to existing graph
23 March, 2025	Sunday, Shaheedi Diwas/ Martyrdom Day of Bhagat Singh, Rajguru & Sukhdev
5 th Week 24 March – 29 March	Figure windows; Multiple plots in one figure; Controlling the axes; Axis labels and titles, Saving figures
30 March, 2025	Sunday
6 th Week 31 March, 2025	Id-ul- Fitr

KUMARI VIDYAVATI ANAND D.A.V College for Women, Karnal

Lesson Plan for the Even Semester (January to May, 2025)

Name of the Teacher – Ms. Monila Bansal

Class- M.Sc. Sem II NEP

Subject- Mathematics

Paper-Computer Programming with MATLAB (M24-MAT-205)

April, 2025 1 st Week 1 April – 5 April	Mesh and Surface Plots: Visualizing functions of two variables; Reading/writing images.
6 April, 2024	Sunday, Ram Navmi
2 nd Week 7 April - 12 April	Printing and Handle Graphics: Using the handle; Graphics object; Setting object Properties; Specifying the axes or figure, Finding the handles of existing objects. Animations: Erase mode method, Creating movies.
10 April, 2025 13 April, 2025 14 April, 2025	Mahavir Jayanti Sunday, Vaisakhi Dr. B.R. Ambedkar Jayanti
3 rd Week 15 April - 19 April	Symbolic Math: Symbolic objects; Creating symbolic variables and expressions; The findsym Command; The default symbolic variable; Constructing real and complex variables; Creating abstract functions; Creating symbolic math functions; Creating an M-file.
20 April, 2025	Sunday
4 th Week 21 April - 28 April	Calculus: Limits; Differentiation; Integration; Symbolic summation; Taylor series; Examples; Simplifications and substitutions, Variable- precision arithmetic examples
27 April, 2025 29 April, 2025 30 April, 2025	Sunday Parshuram Jayanti Akshya Tritya

KUMARI VIDYAVATI ANAND D.A.V College for Women, Karnal

Lesson Plan for the Even Semester (January to May, 2025)

Name of the Teacher – Ms. Monila Bansal

Class- M.Sc. Sem II NEP

Subject- Mathematics

Paper-Computer Programming with MATLAB(M24-MAT-205)

May , 2025 1 st Week 1 May - 3 May	Sessional Exams
4 May , 2025	Sunday
2 nd Week 5 May – 10 May	Sessional Exams
11 May, 2025	Sunday
3 rd Week 12 May - 17 May	Linear Algebra: Basic algebraic operations; Linear algebraic operations; Eigenvalues; Jordan canonical form; Singular value decomposition; Eigenvalue trajectories. Solving Equations: System of algebraic equations, System of differential equations
18 May , 2025	Sunday

KUMARI VIDYAVATI ANAND D.A.V College for Women, Karnal

Lesson Plan for the Even Semester (January to May, 2025)

Name of the Teacher– Ms. Anita

Class- M.Sc. (Math) 1st Year

Subject- Constitutional Human and Moral Values and IPR

Paper- M24-CHM-201

January, 2025 4 th Week 20 Jan-25 Jan	Constitutional Values: Historical Perspective of Indian Constitution.
26 Jan, 2025	Sunday, Republic Day
5 th Week 27 Jan– 31 Jan	Basic Values enshrined in the Preamble of the Indian Constitution; Concept of Constitutional Morality.

KUMARI VIDYAVATI ANAND D.A.V College for Women, Karnal

Lesson Plan for the Even Semester (January to May, 2025)

Name of the Teacher– Ms. Anita

Class- M.Sc. (Math) 1st Year

Subject- Constitutional Human and Moral Values and IPR

Paper- M24-CHM-201

February, 2025 1 st Week 1 Feb, 2025	Patriotic Values and Ingredients Nation Building.
2 Feb, 2025	Sunday, Basant Panchmi
2 nd Week 3 Feb – 8 Feb	Patriotic Values and Ingredients Nation Building.
9 Feb, 2025	Sunday
3 rd Week 10 Feb -15 Feb	Fundamental Rights and Duties, Directive Principles of the State Policy.
12 Feb, 2025 16 Feb, 2025	Guru Ravidas Jayanti Sunday
4 th Week 17 Feb-22 Feb	Directive Principles of the State Policy, Humanistic Values: Humanism, Human Virtues and Civic Sense.
23 Feb, 2025	Sunday
5 th Week 24 Feb- 28 Feb	Social Responsibilities of Human Beings; Ethical ways to deal with human aspirations; Harmony with society.
26 Feb, 2025	Maha Shivratri

KUMARI VIDYAVATI ANAND D.A.V College for Women, Karnal

Lesson Plan for the Even Semester (January to May, 2025)

Name of the Teacher– Ms. Anita

Class- M.Sc. (Math) 1st Year

Subject- Constitutional Human and Moral Values and IPR

Paper- M24-CHM-201

March, 2025 1 st Week 1 March, 2025	Nature idea of International Peace and Brotherhood (Vasudhaiva Kutumbakam), Moral Values and Professional Conduct: Understanding Morality,
2 March, 2025	Sunday
2 nd Week 3 March– 8 March	Understanding Morality and Moral Values; Moral Education,
3 rd Week 9 March - 16 March	Holi Vacations
4 th Week 17 March–22 March	Character Building; Ethics of Relations: Personal, Social and Professional,
23 March, 2025	Sunday, Shaheed Diwas/ Martyrdom Day of Bhagat Singh, Rajguru & Sukhdev
5 th Week 24 March–29 March	Introduction to Gender Sensitization, Affirmative approach towards Weaker Sections (SCs, STs, OBCs, EWS & Das).
30 March, 2025	Sunday
6 th Week 31 March, 2025	Id-ul- Fitr

KUMARI VIDYAVATI ANAND D.A.V College for Women, Karnal

Lesson Plan for the Even Semester (January to May, 2025)

Name of the Teacher– Ms. Anita

Class- M.Sc. (Math) 1st Year

Subject- Constitutional Human and Moral Values and IPR

Paper- M24-CHM-201

April, 2025 1 st Week 1 April – 5 April	Affirmative approach towards Weaker Sections (SCs, STs, OBCs, EWS & Das).
6 April, 2024	Sunday, Ram Navmi
2 nd Week 7 April - 12 April	Ethical Conduct in Higher Education Institutions; Professional Ethics.
10 April, 2025 13 April, 2025 14 April, 2025	Mahavir Jayanti Sunday, Vaisakhi Dr. B.R. Ambedkar Jayanti
3 rd Week 15 April - 19 April	Intellectual Property Rights: Meaning, Origins.
20 April, 2025	Sunday
4 th Week 21 April - 28 April	Nature of Intellectual Property Rights (IPRs); Different Kinds of IPRs- Copyright Patent. Trademark, Trade Secret/Design, Design
27 April, 2025 29 April, 2025 30 April, 2025	Sunday Parshuram Jayanti Akshya Tritiya

KUMARI VIDYAVATI ANAND D.A.V College for Women, Karnal

Lesson Plan for the Even Semester (January to May, 2025)

Name of the Teacher– Ms. Anita

Class- M.Sc. (Math) 1st Year

Subject- Constitutional Human and Moral Values and IPR

Paper- M24-CHM-201

May, 2025 1 st Week 1 May - 3 May	Sessional Exams.
4 May, 2025	Sunday
2 nd Week 5 May – 10 May	Sessional Exams
11 May, 2025	Sunday
3 rd Week 12 May - 17 May	Traditional Knowledge; Infringement and Offences of IPRs- Remedies and Penalties; Basics of Plagiarism Policy of UGC.
18 May, 2025	Sunday
4 th Week 19 May, 2025 ONWARDS	University Examinations

KUMARI VIDYAVATI ANAND D.A.V College for Women, Karnal

Lesson Plan for the Even Semester (January to April, 2025)

Name of the teacher– Manju Rani

Class- M.Sc. (Mathematics) Sem-4

Subject- General Measure And Integration Theory

Paper-MM 507

January, 2025 1 st Week 1 Jan – 4 Jan	Measures, some properties of measures.
5 Jan, 2025 6 Jan, 2025	Sunday Shri Guru Gobind Singh Ji Jayanti
2 nd Week 6 Jan – 11 Jan	Outer measures, extension of measures.
12 Jan, 2025	Sunday
3 rd Week 13 Jan – 18 Jan	Uniqueness of extension, completion of a measure.
19 Jan, 2025	Sunday
January, 2025 4 th Week 20 Jan-25 Jan	Measurable functions, combinations of measurable functions,
26 Jan, 2025	Sunday, Republic Day
5 th Week 27 Jan– 31 Jan	Limits of measurable functions, localization of measurability, simple functions.

KUMARI VIDYAVATI ANAND D.A.V College for Women, Karnal

Lesson Plan for the Even Semester (January to April, 2025)

Name of the teacher– Manju Rani

Class- M.Sc. (Mathematics) Sem-4

Subject- General Measure And Integration Theory

Paper-MM 507

February,2025 1 st Week 1 Feb, 2025	TEST
2 Feb, 2025	Sunday, Basant Panchmi
2 nd Week 3 Feb – 8 Aug	Measure spaces, almost everywhere convergence, fundamental almost everywhere, convergence in measure.
9 Feb, 2025	Sunday
3 rd Week 10Feb -15 Feb	Measure spaces, almost everywhere convergence, fundamental almost everywhere, convergence in measue.
12 Feb, 2025 16 Feb, 2025	Guru Ravidas Jayanti Sunday
4 th Week 17 Feb-22 Feb	Integration with respect to a measure: Integrable simple functions, non-negative integrable functions.
23 Feb, 2025	Sunday
5 th Week 24 Feb- 28 Feb	Integrable functions, indefinite integrals, the monotone convergence theorem, mean convergence.
26 Feb,2025	Maha Shivratri

KUMARI VIDYAVATI ANAND D.A.V College for Women, Karnal

Lesson Plan for the Even Semester (January to April, 2025)

Name of the teacher– Manju Rani

Class- M.Sc. (Mathematics) Sem-4

Subject- General Measure And Integration Theory

Paper-MM 507

March,2025 1 st Week 1 March, 2025	Revision
2 March,2025	Sunday
2 nd Week 3 March– 8 March	Product Measures: Rectangles, Cartesian product of two measurable spaces, measurable rectangle, sections, the product of two finite measure spaces, the product of any two measure spaces.
3 rd Week 9 March - 16 March	Holi Vacations
4 th Week 17 March–22 March	Product of two σ - finite measure spaces; iterated integrals, Fubini's theorem. a partial converse to the Fubini's theorem.
23 March,2025	Sunday, Shaheedi Diwas/Martyrdom Day of Bhagat Singh, Rajguru & Sukhdev
5 th Week 24 March–29 March	Signed Measures: Absolute continuity, finite signed measure, contractions of a finite signed measure, purely positive and purely negative sets, comparison of finite measures. Lebesgue decomposition theorem.
30 March,2025	Sunday
6 th Week 31 March, 2025	Id-ul- Fitr

KUMARI VIDYAVATI ANAND D.A.V College for Women, Karnal

Lesson Plan for the Even Semester (January to April, 2025)

Name of the teacher– Manju Rani

Class- M.Sc. (Mathematics) Sem-4

Subject- General Measure And Integration Theory

Paper-MM 507

April,2025 1 st Week 1April –5April	Hahn decomposition, Jordan decomposition, upper variation, lower variation, total variation, domination of finite signed measures.
6April,2024	Sunday
2 nd Week 7April-12April	The Radyon-Nikodym theorem for a finite measure space, the Radon-Nikodym theorem for a σ - finite measure space.
10 April, 2025 13April,2025 14April,2025	Mahavir Jayanti Sunday Dr. B.R. Ambedkar Jayanti
3 rd Week 15April -19April	Integration over locally compact spaces: continuous functions with compact support, G_δ 's and F_σ 's, Baire sets, Baire function, Baire-sandwich theorem.
20April,2025	Sunday
4 th Week 21April -26April	Baire measure, Borel sets, Regularity of Baire measures, Regular Borel measure.
27April,2025	Sunday
5 th Week 28April, 2025	Integration of continuous functions with compact support, Riesz-Markoff's theorem.
29 April, 2025 30 April, 2025	Parshuram Jayanti Akshya Tritya

KUMARI VIDYAVATI ANAND D.A.V College for Women, Karnal

Lesson Plan for the Even Semester (January to April, 2025)

Name of the Teacher – Ms. Monila Bansal

Class-M.Sc.(F) Sem-IV

Subject- Partial Differential equation

Paper- MM-508

January, 2025 1 st Week 1 Jan – 4 Jan	PDE of kth order: Definition, examples and classifications. Initial value problems of Transport equations Homogeneous and non-homogeneous Transport equation
5 Jan, 2025 6 Jan, 2025	Sunday Shri Guru Gobind Singh Ji Jayanti
2 nd Week 6 Jan – 11 Jan	Harmonic functions and their properties Fundamental solutions of Laplace's Equation Poisson's equation and its solution
12 Jan, 2025	Sunday
3 rd Week 13 Jan – 18 Jan	Mean value formula of Laplace's Equation Strong maximum principle Uniqueness theorem
19 Jan, 2025	Sunday
January, 2025 4 th Week 20 Jan-25 Jan	Local estimates for harmonic function Liouville's theorem
26 Jan, 2025	Sunday, Republic Day
5 th Week 27 Jan – 31 Jan	Harnack's inequality Green's function and its derivation

KUMARI VIDYAVATI ANAND D.A.V College for Women, Karnal

Lesson Plan for the Even Semester (January to April, 2025)

Name of the Teacher – Ms. Monila Bansal

Class-M.Sc.(F) Sem-IV

Subject- Partial Differential equation

Paper- MM-508

February, 2025 1 st Week 1 Feb, 2025	Representation formula using Green's function
2 Feb, 2025	Sunday, Basant Panchmi
2 nd Week 3 Feb – 8 Aug	Symmetry of Green's function Green's function for a half space Green's function for a ball
9 Feb, 2025	Sunday
3 rd Week 10 Feb - 15 Feb	Energy methods uniqueness theorem Dirichlet's principle
12 Feb, 2025 16 Feb, 2025	Guru Ravidas Jayanti Sunday
4 th Week 17 Feb-22 Feb	Heat Equation and its physical interpretation Fundamental solution of heat equation
23 Feb, 2025	Sunday
5 th Week 24 Feb- 28 Feb	Heat Equation and its physical interpretation Fundamental solution of heat equation
26 Feb, 2025	Maha Shivratri

KUMARI VIDYAVATI ANAND D.A.V College for Women, Karnal

Lesson Plan for the Even Semester (January to April, 2025)

Name of the Teacher – Ms. Monila Bansal

Class-M.Sc.(F) Sem-IV

Subject- Partial Differential equation

Paper- MM-508

March, 2025 1 st Week 1 March, 2025	Mean value formula for heat equation Strong maximum principle and uniqueness
2 March, 2025	Sunday
2 nd Week 3 March – 8 March	Energy methods Wave equation- Physical interpretation. Solution for one dimensional wave equation. D'Alemberts formula and its applications reflection method Solution by spherical means Euler-Poisson_Darboux equation
3 rd Week 9 March - 16 March	Holi Vacations
4 th Week 17 March – 22 March	Kirchhoff's formulas Poisson's formulas
23 March, 2025	Sunday, Shaheedi Diwas/Martyrdom Day of Bhagat Singh, Rajguru & Sukhdev
5 th Week 24 March – 29 March	Solution of non-homogeneous wave equation for $n=1,3$ Energy method. Uniqueness of solution, finite propagation speed of wave equation. Non-linear first order PDE- complete integrals, envelopes Characteristics of (i) linear, (ii) quasilinear, (iii) fully non-linear first order partial differential equations
30 March, 2025	Sunday
6 th Week 31 March, 2025	Id-ul- Fitr

KUMARI VIDYAVATI ANAND D.A.V College for Women, Karnal

Lesson Plan for the Even Semester (January to April, 2025)

Name of the Teacher – Ms. Monila Bansal

Class-M.Sc.(F) Sem-IV

Subject- Partial Differential equation

Paper- MM-508

April, 2025 1 st Week 1 April – 5 April	Hamilton Jacobi equations (calculus of variations Hamilton's ODE) Representation of Solutions- Separation of variables Similarity solutions (Plane and traveling waves, solitons, similarity under Scaling) Fourier Transform
6 April, 2024	Sunday
2 nd Week 7 April - 12 April	Laplace Transform Converting non linear into linear PDE Cole-Hop Transform, Potential functions, Hodograph and Legendre
10 April, 2025 13 April, 2025 14 April, 2025	Mahavir Jayanti Sunday Dr. B.R.Ambedkar Jayanti
3 rd Week 15 April - 19 April	Sessional Exams
20 April, 2025	Sunday
4 th Week 21 April - 26 April	Sessional Exams
27 April, 2025	Sunday
5 th Week 28 April, 2025	Revision of the syllabus
29 April, 2025 30 April, 2025	Parshuram Jayanti Akshya Tritya

KUMARI VIDYAVATI ANAND D.A.V College for Women, Karnal

Lesson Plan for the Even Semester (January to April, 2025)

Name of the Teacher– Deepika

Class- M. Sc. (F) Sem-IV

Subject- Mechanics of Solids

Paper-MM-509(opt (i))

January, 2025 1 st Week 1 Jan – 4 Jan	Two dimensional problems: Plane stress, Generalized plane stress.
5 Jan, 2025 6 Jan, 2025	Sunday Shri Guru Gobind Singh Ji Jayanti
2 nd Week 6 Jan – 11 Jan	Airy stress function, General solution of bi-harmonic equation.
12 Jan, 2025	Sunday
3 rd Week 13 Jan – 18 Jan	Stresses and displacements in terms of complex potentials.
19 Jan, 2025	Sunday
January, 2025 4 th Week 20 Jan-25 Jan	First and second boundary-value problems in plane elasticity, Existence and uniqueness of the solutions.
26 Jan, 2025	Sunday, Republic Day
5 th Week 27 Jan– 31 Jan	Waves: Propagation of waves in an isotropic elastic solid medium.

KUMARI VIDYAVATI ANAND D.A.V College for Women, Karnal

Lesson Plan for the Even Semester (January to April, 2025)

Name of the Teacher– Deepika

Class- M. Sc. (F) Sem-IV

Subject- Mechanics of Solids

Paper-MM-509(opt (i))

February,2025 1 st Week 1 Feb, 2025	Waves of dilatation and distortion, Plane waves.
2 Feb, 2025	Sunday, Basant Panchmi
2 nd Week 3 Feb – 8 Feb	Elastic surface waves: Rayleigh waves and Love waves.
9 Feb, 2025	Sunday
3 rd Week 10Feb -15 Feb	Extension: Extension of beams, bending of beams by own weight and terminal couples.
12 Feb, 2025 16 Feb, 2025	Guru Ravidas Jayanti Sunday
4 th Week 17 Feb-22 Feb	Bending of beams by own weight and terminal couples, Bending of rectangular beams.
23 Feb, 2025	Sunday
5 th Week 24 Feb- 28 Feb	Torsion: Torsion of cylindrical bars, Torsion and stress functions, Lines of shearing stress, Torsion of anisotropic beams.
26 Feb,2025	Maha Shivratri

KUMARI VIDYAVATI ANAND D.A.V College for Women, Karnal

Lesson Plan for the Even Semester (January to April, 2025)

Name of the Teacher– Deepika

Class- M. Sc. (F) Sem-IV

Subject- Mechanics of Solids

Paper-MM-509(opt (i))

March,2025 1 st Week 1 March, 2025	Lines of shearing stress, Torsion of anisotropic beams.
2 March,2025	Sunday
2 nd Week 3 March– 8 March	Simple problems related to circle, ellipse and equilateral triangle, Problem discussion.
3 rd Week 9 March - 16 March	Holi Vacations
4 th Week 17 March–22 March	Variational methods: Theorems of minimum potential energy.
23 March,2025	Sunday, Shaheedi Diwas /Martyrdom Day of Bhagat Singh, Rajguru & Sukhdev
5 th Week 24 March–29 March	Sessional Exams
30 March,2025	Sunday
6 th Week 31 March, 2025	Theorems of minimum complementary energy

KUMARI VIDYAVATI ANAND D.A.V College for Women, Karnal

Lesson Plan for the Even Semester (January to April, 2025)

Name of the Teacher– Deepika

Class- M. Sc. (F) Sem-IV

Subject- Mechanics of Solids

Paper-MM-509(opt (i))

April,2025 1 st Week 1April –5April	Theorem of minimum complementary energy, Reciprocal theorem of Betti and Rayleigh.
6April,2024	Sunday
2 nd Week 7April-12April	Deflection of elastic string central line of a beam and elastic membrane.
10 April, 2025 13April,2025 14April,2025	Mahavir Jayanti Sunday Dr. B. R. Ambedkar Jayanti
3 rd Week 15April -19April	Solution of Euler's equation by Ritz, Galerkin and Kantorovich methods.
20April,2025	Sunday
4 th Week 21April -26April	Sessional Exams
27April,2025	Sunday
5 th Week 28April, 2025	Sessional Exams.
29 April, 2025 30 April, 2025	Parshuram Jayanti Akshya Tritya

KUMARI VIDYAVATI ANAND D.A.V College for Women, Karnal

Lesson Plan for the Even Semester (January to April, 2025)

Name of the Teacher – Ms. Monila Bansal

Class- M.Sc.(F) Sem-IV

Subject- Mathematics

Paper- Fluid Mechanics-II(MM-510)

January, 2025 1 st Week 1 Jan – 4 Jan	Equations of continuity in cylindrical and spherical coordinates Equation of motion in cylindrical and spherical coordinates
5 Jan, 2025 6 Jan, 2025	Sunday Shri Guru Gobind Singh Ji Jayanti
2 nd Week 6 Jan – 11 Jan	Two-dimensional inviscid incompressible flows, Stream function Irrotational motion in two dimensions Complex velocity potential Sources and sinks in two dimension Doublets and their images
12 Jan, 2025	Sunday
3 rd Week 13 Jan – 18 Jan	Milne-Thomson circle theorem Applications of circle theorem Two-dimensional irrotational motion produced by motion of circular cylinder
19 Jan, 2025	Sunday
January, 2025 4 th Week 20 Jan-25 Jan	Two dimensional motion : Motion due to elliptic cylinder in an infinite mass of liquid Continued Kinetic energy of liquid contained in rotating elliptic cylinder circulation about elliptic cylinder
26 Jan, 2025	Sunday, Republic Day
5 th Week 27 Jan – 31 Jan	Theorem of Blasius Theorem of Kutta and Joukowski

KUMARI VIDYAVATI ANAND D.A.V College for Women, Karnal

Lesson Plan for the Even Semester (January to April, 2025)

Name of the Teacher – Ms. Monila Bansal

Class- M.Sc.(F) Sem-IV

Subject- Mathematics

Paper- Fluid Mechanics-II(MM-510)

February, 2025 1 st Week 1 Feb, 2025	Stoke's stream functions of some basic flows
2 Feb, 2025	Sunday, Basant Panchmi
2 nd Week 3 Feb – 8 Aug	Three –dimensional motion : Motion of a sphere through a liquid at rest at infinity Liquid streaming past a fixed sphere Equation of motion a sphere
9 Feb, 2025	Sunday
3 rd Week 10 Feb - 15 Feb	Alembert's paradox impulsive motion
12 Feb, 2025 16 Feb, 2025	Guru Ravidas Jayanti Sunday
4 th Week 17 Feb-22 Feb	initial motion of liquid contained in the intervening space between two concentric spheres
23 Feb, 2025	Sunday
5 th Week 24 Feb- 28 Feb	initial motion of liquid contained in the intervening space between two concentric spheres
26 Feb, 2025	Maha Shivratri

KUMARI VIDYAVATI ANAND D.A.V College for Women, Karnal

Lesson Plan for the Even Semester (January to April, 2025)

Name of the Teacher – Ms. Monila Bansal

Class- M.Sc.(F) Sem-IV

Subject- Mathematics

Paper- Fluid Mechanics-II(MM-510)

March, 2025 1 st Week 1 March, 2025	Kelvin's proof of permanence
2 March, 2025	Sunday
2 nd Week 3 March – 8 March	Motions due to circular and rectilinear vortices Infinite rows of line vortices
3 rd Week 9 March - 16 March	Holi Vacations
4 th Week 17 March – 22 March	Dynamic Similarity Buckingham pi theorem Prandtl's boundary layer Reynolds number
23 March, 2025	Sunday, Shaheedi Diwas/Martyrdom Day of Bhagat Singh, Rajguru & Sukhdev
5 th Week 24 March – 29 March	boundary layer equations in two dimensions Blasius solution Boundary layer thickness. Displacement thickness
30 March, 2025	Sunday
6 th Week 31 March, 2025	Id-ul- Fitr

KUMARI VIDYAVATI ANAND D.A.V College for Women, Karnal

Lesson Plan for the Even Semester (January to April, 2025)

Name of the Teacher – Ms. Monila Bansal

Class- M.Sc.(F) Sem-IV

Subject- Mathematics

Paper- Fluid Mechanics-II(MM-510)

April, 2025 1 st Week 1 April – 5 April	Karman integral conditions Separation of boundary layer
6 April, 2024	Sunday
2 nd Week 7 April - 12 April	Numerical related to displacement thickness,momentum thickness,coefficient of skin friction...
10 April, 2025 13 April, 2025 14 April, 2025	Mahavir Jayanti Sunday Dr. B.R.Ambedkar Jayanti
3 rd Week 15 April - 19 April	Sessional Exams
20 April, 2025	Sunday
4 th Week 21 April - 26 April	Sessional Exams
27 April, 2025	Sunday
5 th Week 28 April, 2025	Revision of the syllabus
29 April, 2025 30 April, 2025	Parshuram Jayanti Akshya Tritya

KUMARI VIDYAVATI ANAND D.A.V College for Women, Karnal

Lesson Plan for the Even Semester (January to April, 2025)

Name of the Teacher – Ms. Monila bansal

Class- M.Sc.(F) semIV

Subject- Mathematics

Paper- Mathematical Aspects of Seismology

January, 2025 1 st Week 1 Jan – 4 Jan	Introduction of seismology General form of progressive waves
5 Jan, 2025 6 Jan, 2025	Sunday Shri Guru Gobind Singh Ji Jayanti
2 nd Week 6 Jan – 11 Jan	Harmonic waves, Plane waves The wave equation Principle of superposition Special types of solutions: Progressive and Stationary type solutions of wave equation
12 Jan, 2025	Sunday
3 rd Week 13 Jan – 18 Jan	Equation of telegraphy Exponential form of harmonic waves D' Alembert's formula
19 Jan, 2025	Sunday
January, 2025 4 th Week 20 Jan-25 Jan	Inhomogeneous wave equation Dispersion: Group velocity, relation between phase velocity and group velocity Reduction of equation of motion to wave equations P and S waves and their characteristics Polarisation of plane P and S waves Snell's law of reflection and Refraction
26 Jan, 2025	Sunday, Republic Day
5 th Week 27 Jan – 31 Jan	Polarisation of plane P and S waves Snell's law of reflection and Refraction

KUMARI VIDYAVATI ANAND D.A.V College for Women, Karnal

Lesson Plan for the Even Semester (January to April, 2025)

Name of the Teacher – Ms. Monila bansal

Class- M.Sc.(F) semIV

Subject- Mathematics

Paper- Mathematical Aspects of Seismology

February, 2025 1 st Week 1 Feb, 2025	Reflection of plane P and SV waves at a free surface
2 Feb, 2025	Sunday, Basant Panchmi
2 nd Week 3 Feb – 8 Aug	Partition of reflected energy Reflection at critical angles
9 Feb, 2025	Sunday
3 rd Week 10 Feb - 15 Feb	Reflection and reflection of plane P,SV and SH waves at an interface Liquid-Liquid interface
12 Feb, 2025 16 Feb, 2025	Guru Ravidas Jayanti Sunday
4 th Week 17 Feb-22 Feb	Liquid-Solid interface Solid-Solid interface
23 Feb, 2025	Sunday
5 th Week 24 Feb- 28 Feb	Rayleigh Waves Love waves Stoneley waves
26 Feb, 2025	Maha Shivratri

**KUMARI VIDYAVATI ANAND D.A.V College for Women,
Karnal**

**Lesson Plan for the Even Semester
(January to April, 2025)**

Name of the Teacher – Ms. Monila bansal

Class- M.Sc.(F) semIV

Subject- Mathematics

Paper- Mathematical Aspects of Seismology

March, 2025 1 st Week 1 March, 2025	Two dimensional Lamb's problems in an isotropic elastic solid: Area sources and Line sources in an unlimited elastic solid A normal force acts on the surface of a semi-infinite elastic solid
2 March, 2025	Sunday
2 nd Week 3 March – 8 March	Tangential forces acting on the surface of a semi-infinite elastic solid Three dimensional Lamb's problems in an isotropic elastic solid: Area sources and Point sources in an unlimited elastic solid
3 rd Week 9 March - 16 March	Holi Vacations
4 th Week 17 March – 22 March	Area source and Point source on the surface of semiinfinite elastic solid Haskell matrix method for Love waves in multilayered medium
23 March, 2025	Sunday, Shaheedi Diwas/Martyrdom Day of Bhagat Singh, Rajguru & Sukhdev
5 th Week 24 March – 29 March	Spherical waves: Expansion of a spherical wave into plane waves: Sommerfield's Integral Kirchoff's solution of the wave equation Poissons's formula Helmholtz's formula
30 March, 2025	Sunday
6 th Week 31 March, 2025	Id-ul- Fitr

**KUMARI VIDYAVATI ANAND D.A.V College for Women,
Karnal**

**Lesson Plan for the Even Semester
(January to April, 2025)**

Name of the Teacher – Ms. Monila bansal

Class- M.Sc.(F) semIV

Subject- Mathematics

Paper- Mathematical Aspects of Seismology

April, 2025 1st Week 1 April – 5 April	Introduction to Seismology: Location of earthquakes Aftershocks and Foreshocks, Earthquake magnitude
6 April, 2024	Sunday
2nd Week 7 April - 12 April	Revision of the syllabus
10 April, 2025 13 April, 2025 14 April, 2025	Mahavir Jayanti Sunday Dr. B.R.Ambedkar Jayanti
3rd Week 15 April - 19 April	Sessional Exams
20 April, 2025	Sunday
4th Week 21 April - 26 April	Sessional Exams
27 April, 2025	Sunday
5th Week 28 April, 2025	Revision of the syllabus
29 April, 2025 30 April, 2025	Parshuram Jayanti Akshya Tritya