

LESSON PLAN

January 2026 to May 2026 (up to Even session)

Name of the Assistant/Associate Professor: Mrs. RAVINDER

Class and Semester: B.A. first year (2nd Semester)

Course Code: B-21- VAC-101

Paper: Human Values and Ethics

January 2026 :-

Topics:- Understanding the need, content and process for Value Education, Classification of Value Education, understanding Personal Values, Social Values, and Moral Values & Spiritual Values;

Nature and need of competency based education; Types of Competencies,

partnership building, Core Competencies: communication, teamwork,

planning and achieving goals,

Functional Competencies: analytical thinking, knowledge sharing and learning, decision making,

Learning Objectives:- Students should be aware of the difference among skills, values and ethics and their respective needs in life.

Feb 2026

Topics :- Understanding the difference between ideology and values.

Understanding Harmony with self, Society and Nature. Meaning and nature of human values;

Significance of human values in life; Relation between values and ethics.

Relevance of Human values: Integrity, Empathy, Loksangrah, Brahmavihara.

Theory of Naya (Jainism), Deontology, Virtue Ethics, Utilitarianism

Learning Objective:- Students will be able to learn meaning and nature of human values;

March 2026

Topics Understanding the relationship among: Self, Identity and Personality.

Understanding Integrated Personality – with the three gunas theory of Sankhya, the four

Antah-karanas (inner instruments) in Yoga, and Panchkosha (five sheaths) in

Upanishad. Approaching comprehensive understanding of well-being and its relation to Happiness.

Learning Objective:- Students will be able to learn about Self, Identity and Personality.

April 2026

Topics- Nature, characteristics and scope of professional ethics; Types of Professional Ethics;

Professional Values: Trusteeship, Inclusiveness, Commitment, Sustainability, Accountability,

Transparency, Impartiality.

Values for Global Citizenship: Equality, Justice, and Human Dignity.

Learning Objective:- Students will be able to learn about Professional Ethics and Professional Values.

May 2026

Revision of all syllabus

Learning Objective:- Students will be able to learn about types of Competencies.

Ravinder
4/2/26

LESSON PLAN

January 2026 to May 2026 (up to Even session)

Name of the Assistant/Associate Professor: Mrs. RAVINDER

Class and Semester: B.A. first year (2nd Semester)

Course Code: B23- SEC-203

Paper: Calculation Skills with Vedic Mathematics I

January 2026 :-

Topics:- History of Vedic Mathematics and introduction to its Sutras and Upsutras.
Addition in Vedic Mathematics: Without Carrying, Dot method subtraction in
Vedic Mathematics: Nikhilam Navatashcaramam Dashatah (All from 9 last 10).
Fraction: Addition and Subtraction.

Feb 2026

Topics:- Multiplication of two numbers of two digits
(Ekadhikena Purvena method), Multiplication of two numbers of
three digits, (Ekanyunena Purvena method, Urdhva Tiryagbhyam
method, Nikhilam Navatashcaramam Dashatah method),
Combined Operations, Generating Tables (Nikhilam).

March 2026

Topics:- Division: Nikhilam Navatashcaramam Dashatah (two digits divisor),
Paravartya Yojyet Method (three digits divisor). Divisibility: Ekadhikena Purvena
Method (two digits divisor), Eknunen Purvena Method (two digits divisor) LCM,
HCF.

April 2026

Topics- Squares of any two digits numbers: Base method, Squares of numbers
ending in 5: Ekadhikena Purvena Method. Square Roots: Dwandwa Yoga (Duplex)
Method, Square root (four digit number). Cubing: Yavadunam Method, Cube root
(six digit numbers)

May 2026

Revision of all syllabus

Ravinder
4/2/26

LESSON PLAN

January 2026 to May 2026 (up to Even session)

Name of the Assistant/Associate Professor: Mrs. RAVINDER

Class and Semester: B.A. final year (6th Semester)

Course Code: B23- MAT-601

Paper: Numerical Analysis

January 2026 :-

Topics:- Round-off error and computer arithmetic, Local and global truncation errors, Algorithms and convergence. Numerical methods for solving algebraic and transcendental equations

Feb 2026

Topics :- Bisection method, False position method, Fixed point iteration method, Newton-Raphson method and Secant method. Newton's iterative method for finding nth root of a number.

Numerical methods for solving simultaneous linear equations: Gauss-elimination method, Gauss-Jordan method, Triangularization method (LU decomposition method), Crout's method, Cholesky decomposition method. Iterative methods: Jacobi's method, Gauss-Seidal method, Relaxation method.

March 2026

Topics:- Finite Differences operators and their relations. Interpolation with equal intervals: Gregory's Newton forward and backward difference interpolations.

Interpolation with unequal intervals: Newton's divided difference formulae, Lagrange's Interpolation formulae.

Central Differences: Gauss forward and Gauss backward interpolation formulae, Sterling formula, Bessel's formula. Piecewise linear interpolation, Cubic spline interpolation.

Numerical Differentiation: First and second derivative of a function using interpolation formulae.

April 2026

Topics- Numerical Integration: Newton-Cote's Quadrature formula, Trapezoidal rule, Simpson's one-third and three-eighth rule, Chebychev formula, Gauss Quadrature formula.

Numerical solution of ordinary differential equations: Single step methods-Picard's method, Taylor's series method, Euler's method, Runge - Kutta Method.

Multiple step methods: Predictor-corrector method, Modified Euler's method, Milne-Simpson's method.

May 2026

Revision of all syllabus

Ravinder

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LESSON PLAN

January 2026 to May 2026 (up to Even session)

Name of the Assistant/Associate Professor: Mrs. RAVINDER

Class and Semester: B.A. final year (6th Semester)

Course Code: B23- MAT-607

Paper: Mathematical Explorations in Numbers and Shapes

January 2026 :-

Topics:- Number Systems and Basic Geometry: Natural numbers, integers, rational and irrational numbers, real numbers, number line, properties of operations, basic shapes (points, lines, angles, triangles, polygons, circles).

Feb 2026

Topics:- Prime numbers, HCF, LCM, divisibility rules, Euclidean algorithm, Fibonacci sequence, perfect and amicable numbers, magic squares, tessellations, geometric patterns, congruence, similarity

March 2026

Topics:- Modular arithmetic, congruences, digital roots, casting out nines, coordinate geometry (distance formula, slope, section formula, symmetry, transformations, map and layout applications).

April 2026

Topics- Surface area and volume of solids (cube, cylinder, cone, sphere, cuboid), real-life applications (packaging, architecture), check-digit systems (ISBN, Credit card), mathematical games and puzzles.

May 2026

Revision of all syllabus

Ravinder
4/1/26

Lesson Plan (w.e.f. January 2026 to May 2026)


Name of Assistant Professor:- Mrs. Surksha

Class and Semester: B.A. 1st year (2nd Semester)

Paper Name:- Environmental Studies

Paper code:- B23-VAC-201

Month	Topics covered
January-2026	<ul style="list-style-type: none">• Introduction to environmental studies: Multidisciplinary nature of environmental studies; Scope and importance; Concept of sustainability and sustainable development.• Ecosystems: Definition, structure and function of ecosystem;• Energy flow in an ecosystem: food chains, food webs,• Major ecosystems types: Forest ecosystem, Grassland ecosystem, Desert ecosystem and Aquatic ecosystem (lakes, rivers, oceans).
February 2026	<ul style="list-style-type: none">• Natural resources: Renewable and Non- renewable Resources.• Land resources: Land degradation and soil erosion.• Forest resources: Importance of forests,• Deforestation: causes and impacts on environment.• Water resources: Use and over- exploitation of surface and ground water.• Energy resources: Renewable and non- renewable energy sources.• Biodiversity and Conservation: Definition and its types, Endangered and endemic species of India. Threats to biodiversity: Habitat loss, poaching of wildlife, man wild life conflicts, biological invasions;• Assignment – 1
March 2026	<ul style="list-style-type: none">• Conservation of biodiversity: In-situ and Ex- situ conservation of biodiversity.• Ecosystem and biodiversity services: Ecological, economic, social, ethical, aesthetic and informational values.• Environmental pollution Environmental pollution: types, causes, effects and controls; Air, water, soil and noise pollution.• Solid waste management: Sources, methods of disposal: Landfill, incineration and composting.• Climate change, global warming, ozone layer depletion, acid rain and impacts on human communities and agriculture.
April 2026	<ul style="list-style-type: none">• Environmental Policies & Practices Environmental laws: Environment (Protection) Act, 1986, Air (Prevention & Control of Pollution) Act, 1981, Water (Prevention and control of Pollution) Act, 1974.• Human health population growth: Impacts on environment, human and welfare. Resettlement and rehabilitation of project affected person.• Disaster management: floods, earthquake, cyclones, landslides drought.• Environmental ethics: Role of Indian and other religions and cultures in environmental conservation.• Assignment – 2
May 2026	<ul style="list-style-type: none">• Revision and Test


03/02/2026
(Mrs SURKSHA)

LESSON PLAN
January 2026 to May 2026

Name of the Assistant/Associate Professor: Mrs. SURKSHA

Class and Semester: B.A. 2nd year (4th Semester)

Subject Code : B23-MAT-406

Paper: Basic Algebra & Quantitative Techniques

January -2026

Topics Symmetric, Skew symmetric, Hermitian and skew Hermitian matrices, Elementary operations on matrices, Rank of a matrix, Inverse of a matrix, Linear dependence and independence of rows and columns of matrix.

Learning Objective:- Gain the knowledge about matrix and rank of matrix etc.

February -2026

Topics Eigen values, Eigen vectors and characteristic equation of a matrix. Applications of matrices to a system of linear (both homogeneous and non-homogeneous) equations

.Learning Objective:- learn Applications of matrices

First Assignment on the topic of Eigen Values and Eigen Vectors.

March -2026

Topics Mean, Mode, Median, Standard deviation, Variance. Bar graphs, Pie charts, Frequency polygons.

Learning Objective:- learn the concept and applications of Mean, Mode, Median

Second Assignment on Mean, Mode and Median.

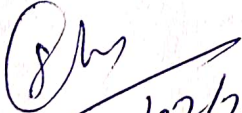
April- 2026

Topics- Basics of operational research. Linear programming problems (LPP): Formulation, Graphical solution, Simplex method.

Learning Objective:- learn the concept of Linear programming problems

May-2026


Revision of the syllabus.


 25/02/2024
 (Mrs. SURKSHA)

LESSON PLAN

January 2026 to May 2026

Name of the Assistant/Associate Professor: Mrs. SURKSHA
Class and Semester: B.Com. 1st year (2nd Semester)
Subject Code : (B23-COM-204)
Paper: BUSINESS MATHEMATICS-II
<p>January -2026</p> <p>Topics Differentiation; derivative of simple functions and other functions (excluding trigonometric functions) having applications in business studies; Maxima and minima of Revenue, Cost, Demand, Production, Profit functions and other functions related to business and commerce.</p> <p>Learning Objective:- Gain the knowledge to find derivatives simple functions related to commerce problems, attain skills to use application of derivatives in evaluating maxima and minima.</p>
<p>February -2026</p> <p>Topics Integration: Definite and indefinite (simple functions excluding trigonometric functions), basic rules of integration, application of integration in commercial and business problems</p> <p>Learning Objective:- learn to find integration of simple functions related to commerce and economic problems.</p> <p>First Assignment on the topic of integration.</p>
<p>March -2026</p> <p>Topics - Binomial Theorem; Permutations and Combinations.</p> <p>Learning Objective:- Learn the concept and applications of permutations and combinations .</p> <p>Second Assignment on the topic of binomial theorem.</p>
<p>April- 2026</p> <p>Topics- Linear programming: Formulation of linear programming problems (LPP) and their solution by graphical and simplex methods, Applications of linear programming in solving problems related to business and commerce.</p> <p>Learning Objective:- learn the concept of Linear programming and formulation of linear programming problems related to business and commerce</p>
<p>May-2026</p> <p>Revision of the syllabus.</p>


 05/02/2024
 (Mrs SURKSHA)

Lesson Plan (w.e.f. January, 2026 to May, 2026)


Name of Assistant Professor:- Mrs. Surksha

Department – Mathematics

Semester - II

Paper :- Algebra and Number Theory

Month	Topics covered
January- February 2026	Symmetric, Skew symmetric, Hermitian and skew Hermitian matrices, Elementary operations on matrices, Rank of a matrix, Inverse of a matrix, 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, Minimal polynomial of a matrix, Cayley-Hamilton theorem and its use in finding the inverse of a matrix, Unitary and orthogonal matrix
March 2026	Assignment-1. Relations between the roots and coefficients of general polynomial equation in one variable, Solutions of polynomial equations having conditions on roots, Common roots and multiple roots, Transformation of equations, Nature of the roots, Descartes rule of sign
April 2026	Assignment-2. Solutions of cubic equations (Cardon's method), Biquadratic equations and their solutions. Divisibility, Greatest common divisor (gcd), Least common multiple (lcm), Prime numbers, Fundamental theorem of arithmetic. Linear congruences, Fermat's theorem, Euler's theorem, Wilson's theorem and its converse,
May 2026	Chinese Remainder theorem, Linear Diophantine equations in two variables. Revision


02/02/2026
Mrs. SURKSHA


Signature