

Govt. College Alewa, JIND

LESSON-PLAN (Session 2025-26) ODD SEMESTER

Name of Teacher: Parveen

Designation: Assistant professor

Subject: Business Mathematics

Class: B.com 1st Semester

Sr. No.	Months	Topics to be covered	Remarks if any,
1	August, September	Set Theory: Representation of sets, equivalent sets, power set, complement of a set. Venn Diagrams: Union and intersection of sets, De-Morgan's laws; Logical statements and truth tables.	
2	September, October	Logarithms: Laws of operation, log tables; Arithmetic and geometric progression. Matrices and Determinants: Definition of a matrix, order, equality, types of matrices; Operations on matrices: Addition, multiplication and multiplication with a scalar and their simple properties.	Class Test, Group Discussion
3	October	Determinant of a square matrix (upto 3 x 3 order): Properties of determinants, minors, co-factors and applications of determinants in finding the area of triangle, adjoint and inverse of a square matrix, solutions of a system of linear equations by examples.	Assignment
4	November	Compound interest and annuities: Different types of interest rates, types of annuities, present value and amount of an annuity (including the case of continuous compounding), valuation of simple loans and debentures, problems related to sinking funds	Group Discussion and quiz will be organized

Note: The class test, mid-term exam and Assignments are taken as per the guidelines of the University.

Govt. College Alewa, JIND

LESSON-PLAN (Session 2025-26) ODD SEMESTER

Name of Teacher: Parveen

Designation: Assistant professor

Subject: Calculus

Class: B.A/Physical Science 1st Semester

Sr. No.	Months	Topics to be covered	Remarks if any,
1	August, September	Epsilon delta definition of limit and continuity of a real valued function, Basic properties of limits, Types of discontinuities, Differentiability of functions, Application of L'Hospital rule to indeterminate forms, Successive differentiation, Leibnitz theorem, Taylor's and Maclaurin's series expansion with different forms of remainder.	
2	September, October	Asymptotes: Horizontal, vertical and oblique asymptotes for algebraic curves, Asymptotes for polar curves, Intersection of a curve and its asymptotes, Curvature and radius of curvature of curves (cartesian, parametric, polar & intrinsic forms), Newton's method, Centre of curvature and circle of curvature.	Class Test, Group Discussion
3	October	Multiple points, Node, Cusp, Conjugate point, Tests for concavity and convexity, Points of inflexion, Tracing of curves, Reduction formulae.	Assignment
4	November	Rectification, intrinsic equation of a curve, Quadrature, Area bounded by closed curves, Volumes and surfaces of solids of revolution.	Group Discussion and quiz will be organized

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Govt. College Alewa, JIND

LESSON-PLAN (Session 2025-26) ODD SEMESTER

Name of Teacher: Parveen

Designation: Assistant professor

Subject: Human Value and Ethics

Class: B.A/Physical Science/Medical Science 1st Semester

Sr. No.	Months	Topics to be covered	Remarks if any,
1	August, September	Introduction to value education: Definitions of value education, Meaning of value education, Objective of value education, Importance of value education, Need of value education, Types of value education, Value education and life skills, Content and process of value education Classification of value education: On the basis of comparison between values, Components of Ideology, Concept of Harmony, Understanding harmony with self, society, and nature.	
2	Sept. – Oct.	Human value and ethics: Definition, meaning, needs, nature, sources, significance, and basics of human values. Importance, principal, components, sources, types of ethics. Relation between values and ethics. The Relevance of human values: Integrity, meaning Of Integrity Character, Traits Related to Integrity, Types of Integrity, Integrity In Everyday Life. Empathy Characteristics of Empathy. Skills of Empathy, Types of Empathy. Understanding 'Loksangrah', Examples of Loksangrah Initiatives. Understanding 'Brahmvihara', Theory of 'Naya' (Jainism),Types of Naya, Deontology, Key Concepts and Principles of Deontology. Virtue Ethics. Meaning of Virtue Ethics.	Assignment

3	October	<p>Integrated personality and well-being involve understanding the interrelationships among self, identity, and personality. This integration can be explored through various philosophical and psychological frameworks, including the Three Gunas of Sankhya theory, which offer insights into personal growth, and the four Antahkaranas of Yoga, which guide self-realization. Similarly, the Panchkosha (five sheaths) from the Upanishads illustrate different layers of human existence that need to be harmonized for complete integration. Together, these perspectives emphasize that true well-being and happiness arise from the balanced development and unification of all dimensions of personality and consciousness.</p> <p>Importance, key principal, nature, scope, characteristics, types, and understanding of Professional ethics. Value of global citizens.</p>	Class Test will be taken
4	November	<p>Competency- based Education: definition, key feature, benefits, challenges, nature, needs, and types. Difference between Functional and core competencies.</p> <p>Dhyana and Yoga: Yogic way of cognitive Restructuring, Bhramadhya Dhyana, Chakra Dhyana, Preksha Dhyana, Sakshi Bhava Dhyana, Vipassana, Yogi Nidra, Partipaksha Bahva and Benefits of yoga.</p>	Group Discussion and quiz will be organized

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