

Govt. College Nigah (Karnal)

Lesson Plan (Session - 2023-24)

Class - B.A. 4th Semester

Paper - Special Functions and Integral Transforms

Subject - Mathematics

Unit	Topics
January 2024	Laplace Transform, First and Second Shifting Property, Differentiation and Integration of Laplace Transform, Inverse Laplace Transform, Convolution Theorem.
February 2024	Fourier Transform, Fourier Transform of Derivatives Convolution Theorem, Fourier sine Transform and Fourier Cosine Transform and their Inverses.
March 2024	Power Series, Series solution of differential Equations, Bessel Equation, Bessel Functions Orthogonality of Bessel Functions.
April 2024	Legendre and Hermite differential Equations and their solutions, Recurrence relations Rodrigue's Formula for Legendre and Hermite Polynomials.

  
VINOD KUMAR

Govt. College Nijehu (Karnal)

Lesson Plan (Session - 2023-24)

Class - B.A. 4th Semester

Subject - Mathematics

Paper - Programming in C and Numerical methods

Unit	Topics
January 2024	Solution of Algebraic and Transcendental equations: Bisection method, Regula-Falsi method, Secant method, Newton-Raphson's method
February 2024	Simultaneous linear algebraic equations: Gauss-elimination method, Gauss-Jordan method, Triangulization method, Crout's method, Jacobi method, Gauss-Seidel's method
March 2024	Programmer's model of a Computer, Algorithms, Flow charts, Data Types, Operator and expressions
April 2024	Decision statements, logical and Conditional statements, Loops, Switch statements and Case control structures. Strings, Character data type, Arithmetic operations on characters, Structures and Pointers, Arrays.

Vinod  
VINOD KUMAR

Govt. College Nigodhu (Karnal)

Lesson Plan (Session-2023-24)

Class - B.A. 4th Semester

Subject - Mathematics

Paper - Sequence and Series

Unit	Topics
January 2024	Neighbourhood of a Point, Topology of real number, Open set, closed set, Limit point.
February 2024	Sequence, Bounded sequence, Limit Point of a sequence, Convergent sequence, Types of Sequences, Cauchy's theorem.
March 2024	Sequences and Series, Types of Series Convergent series, Various tests
April 2024	Alternating Series, Able test, Weierstrass M-test.