

Lesson Plane.

Session - 2022-2023

Dr. ASHOK KUMAR.

Dept. Mathematics.

S.M.S.D Govt. College Mangal choudhary.

Class - B.A / BSc. IIIrd Year.

Paper Linear Algebra.

17 Jan to 31 Jan 2023

- * Vector space. subspace.
- * Sum & Direct sum of subspace.
- * Linear span

1 Feb to 28 Feb 2023

- * Linearly Dependent, Linearly Independent subset of a vector space.
- * Finitely generated vector space.
- * Existence of Theorem for basis
- * Homomorphism & Isomorphism of vector space.

1 March to 31 March 2023

- * Linear transformation.
- * Linear form on vector space.
- * Vector space of all the Linear transformation.
- * Dual space.

1 April to 30 April 2023

- * Algebra of linear transformation.
- * Minimal Polynomial of a linear transformation.
- * Singular and non singular linear transformation.
- * Matrix of a linear transformation.

1 May onwards.

- * Inner Product spaces.
- * Cauchy - Schwarz Inequality.
- * orthogonal vectors, orthogonal complements
- * orthogonal basis, Bessel Inequality
- * Gram - Schmitt orthogonalization process
- * Revision and unit test of Linear Algebra