UNIT-I: LINEAR ALGEBRA

UNIT-II: LINEAR PROGRAMMING PROBLEMS
Basic Linear programming Concepts and Formulation of Linear Programming Problems – Its structure and variables, Nature of feasible, basic and optimal solution, Graphic Solution of Linear Programming Problems, Introduction to Simplex Method of Linear Programming Problems, Maximization case – All Constraints of the type ≤, Maximization case – Mixed Constraints, Minimization case - All Constraints of the type ≥, Minimization case - Mixed Constraints, Special cases in Simplex (Degeneracy, Multiple Solution etc.), Sensitivity Analysis, Duality Theory – Formulation, Solution and Interpretation, Two phase simplex and Dual Simplex, Solution of LPP through Microsoft Excel, Concept of a game; Strategies – Simple and Mixed; Value of a game; Saddle point solution; simple applications.