

SYLLABUS :-

Baseline model, linear programming problem, convex sets, convex functions and their properties, basic feasible solution, optimal solution, related theorems. Graphical method for solving two and three variable problems, simplex method, Big M method, degenerate LP problem, product form of inverse of a matrix, revised simplex method, duality theorems, complementary slackness principle, primal-dual simplex algorithm, sensitivity analysis, parametric programming, linear integer programming problem, Gomory cutting plane method, branch and bound algorithm, 0-1 implicit enumeration, transportation problem, assignment problem with their solution methodologies. Theory of games, two-person zero-sum games with and without saddle-points, pure and mixed strategies, graphical method of solution of a 2ï¿½n game, solution of an mï¿½n game by simplex method.