MT605: MATHEMATICAL PROGRAMMING-I

Syllabus: Separating and supporting hyper-plane convex function; Revised simplex method for linear programming problems; Bounded variable problem; lntegral programming; Gomory's algorithm for all integer programming problem; Branch and bound technique in integer programming; Quadratic forms; l,agrangian function and Lagrangian multiplier; Non-linear programming problem and its fundamental ingredients. Saddle points. Necessary and sufficient condition for Saddle point in NLPP;

UNIT SCHEDULE

Unit 1 Hyper-plane convex function
Unit 2 Revised simplex method
Unit 3 lntegral programming; Gomory's algorithm
Unit 4 lntegral programming; Branch and bound algorithm
Unit 5 Quadratic forms and l,agrangian function
Unit 6 Non-linear programming problem