

SUFFICIENT OPTIMALITY CONDITIONS AND DUALITY FOR NONLINEAR PROGRAMMING PROBLEMS INVOLVING GENERALIZED F-CONVEX FUNCTIONS

P. PANDIAN

Abstract

A new class of functions, namely $(H; F)$ -convex functions is introduced as a generalization of H -convex functions. Sufficient optimality conditions and various duality results are obtained for a non-linear programming problem under the assumptions of $(H; F)$ -convexity and F -quasi convexity. Further we have extended these results to fractional programming problems.