1046-49-2099 **Qingxia Li*** (qingxia@math.lsu.edu), Deapartment of Mathematics, Louisiana State University, Baton Rouge, LA 70803, and **Peter Wolenski** (wolenski@math.lsu.edu), Department of Mathematics, Louisiana State University, Baton Rouge, LA 70803. *Multiobjective optimization and nonlinear programming.*

In this paper, first we derive necessary conditions with the equality constraints subject to any cone by introducing value functions. We also derive necessary and sufficient conditions to a maximum function constrained by inequalities involving differentiable functions through a saddle value function with the aid of the Lagrangian multipliers. A concrete example is also given to display Tanino's results with his concept of subgradients to multiobjective functions. (Received September 17, 2008)