

1125-90-701

Balendu Bhooshan Upadhyay* (bhooshan@nitmanipur.ac.in), Assistant Professor,
Department of Mathematics, National Institute of Technology Manipur, Imphal, 795004, India. *On
relations between vector variational inequality and nonsmooth vector optimization problems via
strict minimizers.*

This paper deals with the relations between vector variational inequality problems and nonsmooth vector optimization problems using the concepts of efficient and strict minimizers of order m in terms of Clarke subdifferential. Gordan's theorem of alternative is employed to identify the vector critical points, the strict minimizers of order m and the solutions of the weak vector variational inequality problems under generalized strong convexity assumptions. The results presented in this paper are more general than those existing in the literature. In particular, the results of the paper extend and unify some earlier results to the nonsmooth case as well as to a more general class of functions. (Received September 09, 2016)