

Generalized Quasi-Variational Inequalities over Product Spaces

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ABSTRACT

In this paper, we consider quasi-variational inequalities over product of sets and system of quasi-variational inequalities, and prove the equivalence between them. We establish some existence results for a solution to these problems under the relatively B-pseudomonotonicity assumption. We also consider generalized quasi-variational inequalities over product of sets and system of generalized quasi-variational inequalities. By using the existence results for a solution of quasi-variational inequalities over product of sets, we derive the existence results for a solution of generalized quasi-variational inequalities over product of sets and system of generalized quasi-variational inequalities for relatively B-pseudomonotone maps. The results of this paper are new even in the case of usual quasi-variational inequalities or generalized quasi-variational inequalities.

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