GAP FUNCTIONS AND EXISTENCE RESULTS FOR
GENERALIZED VECTOR VARIATIONAL INEQUALITIES

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Abstract. In this paper, the gap function for a new class of generalized vector variational inequalities with point-to-set mappings (for short, GVVI) is introduced and the necessary and sufficient conditions for the GVVI are established. Furthermore, under certain pseudomonotonicity condition and hemicontinuity condition, we obtain the existence theorems for the GVVI. The results presented in this paper are new and extend corresponding results in this field.

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