Multiobjective programming under generalized type I univexity

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Abstract :   Bector introduced the concept of univexity and vector univexity (V-univexity). Recently, Mishra extended univexity to generaliezed type I univexity. In this paper we extend Hanson, Pini and Singh's type I vector invexity (V-type I) to vector generalized univexity type I. Some sufficiency results are established using Lagrange multiplier conditions and under various types of generalized V-univexity type I requirements. Weak, strong and converse duality theorems are proved in the generalized V-univexity type I setting.

Key words and phrases :   Multiobjective programming, generalized convexity, sufficiency, duality.

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