Optimality and duality for nondifferentiable multiobjective programming under generalized α-univexity

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Abstract - The aim of this paper is to study a nondifferentiable multiobjective programming problem with inequality constraints. In this paper we introduce the concept of α-univex, weak strictly pseudo α-univex, strong pseudo α-univex, weak quasi α-univex, weak pseudo α-univex and strong quasi α-univex functions. By utilizing these new notions we derive a Fritz John type sufficient optimality condition and establish Mond-Weir type and general Mond-Weir type duality results for the nondifferentiable multiobjective programming problem.

Key words and phrases : α-univexity, nondifferentiable multiobjective programming, duality.

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