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APPROXIMATION OF FUNCTIONS IN L_p-NORM BY KANTOROVICH MODIFICATIONS OF SOME CLASSICAL OPERATORS

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Abstract

The approximation of functions in L_p-norm by Kantorovich modifications of classical Baskakov, Szász-Mirakjan and Meyer-König and Zeller operators is discussed. By defining appropriate K-functionals the direct theorems and some strong converse inequalities of type B in terms of the K-functionals are proved. Also, the characterization of the K-functionals by moduli of smoothness is discussed.

Keywords: Kantorovich, Baskakov, Szász-Mirakjan, Meyer-König and Zeller, direct theorems, strong converse inequalities, K-functional.

AMS Classification: 41A36, 41A17, 41A25, 41A27.

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