Some estimations of summation-integral-type operators

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In this paper, we study about the Szász-Mirakyan- Kantorovich type operators and obtain the rate of convergence in the sense of local approximation results with the help of modulus of smoothness, second order modulus of continuity, Peetre's K-functional and functions belonging to the Lipschitz class. For computing the order of approximation of the operators, we discuss the weighted approximation properties by using weighted modulus of continuity and prove the theorem.

Keywords: The Szász-Mirakjan operators, the Kantorovich operators, the Korovkin-type approximation results, modulus of smoothness, Peetre's K-functional, weighted modulus of continuity

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