Statistical approximation properties of Stancu type q-Baskakov-Kantorovich operators

ABSTRACT

In the present paper, we consider Stancu type generalization of Baskakov-Kantorovich operators based on the q-integers and obtain statistical and weighted statistical approximation properties of these operators. Rates of statistical convergence by means of the modulus of continuity and the Lipschitz type function are also established for said operators. Finally, we construct a bivariate generalization of the operator and also obtain the statistical approximation properties.

Keyword: Statistical approximation properties; Stancu type; q-Baskakov-Kantorovich operators