

APPROXIMATION PROPERTIES OF GENERALIZED BLENDING TYPE LOTOTSKY–BERNSTEIN OPERATORS

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Abstract. In this paper, we introduce a family of blending type Bernstein operators $L_n^{\alpha,s}(f;x)$ which depends on two parameters, α and s . We prove a Korovkin type approximation theorem and obtain the rate of convergence of these operators. We also prove that these operators has monotonicity and convexity preserving properties for each α and s . So far, Lotosky matrices that generates blending type Bernstein operators were ignored. In this paper, we also introduce Lototsky matrices that generates these new family of blending type Bernstein operators.

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