

POINTWISE APPROXIMATION BY BÉZIER VARIANT OF AN OPERATOR BASED ON LAGUERRE POLYNOMIALS

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Abstract. In 2013, Öksüzer et al. [Math. Meth. Appl. Sci., Doi: 10.1002/mma.3705] defined the Bézier variant of an operator involving Laguerre polynomials of degree k and studied the rate of convergence of these operators. In the present paper, our aim is to study the degree of approximation of these operators by means of the first order Ditzian-Totik modulus of smoothness and also obtain a quantitative Voronovskaja type theorem and the error in the approximation of functions having derivatives of bounded variation.

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