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George Anastassiou (ganastss@memphis.edu), Department of Mathematical Sciences, University of Memphis, Memphis, TN 38152, and **Merve Kester*** (mkester@memphis.edu), University of Memphis, Department of Mathematical Sciences, Memphis, TN 38152. *Uniform Approximation with Rates by Multivariate Generalized Discrete Singular Operators*. Preliminary report.

Here we establish the uniform approximation properties of multivariate generalized discrete versions of Picard, Gauss-Weierstrass, and Poisson-Cauchy singular operators over \mathbb{R} to \mathbb{N} , N greater equal 1. We treat both the unitary and non-unitary cases of the operators above. We give quantitatively the pointwise and uniform convergences of these operators to the unit operator by involving the multivariate higher order modulus of smoothness. (Received February 12, 2015)