1010-41-98 **Vijay Gupta*** (vijaygupta2001@hotmail.com), School of Applied Sciences, Netaji Subhas Institute of Technology, Sector 3 Dwarka, 110075 New Delhi, NCT Delhi, India. *Some problems in approximation for certain Durrmeyer type operators.*

The present paper is based on a Durrmeyer type integral modification of the well known Baskakov operators. Here we consider the modification of Baskakov operators with the weights of Beta basis functions. We study some results in simultaneous approximation (approximation of derivative of function by the corresponding order derivative of the operator). We establish a point wise convergence, an asymptotic formula of Voronovskaja type, an estimation of error and an inverse result for these new modified Baskakov operators. These operators have the interesting properties like exponential type operators. These operators reproduce not only the constant functions but also the linear functions, so one may consider the iterative combinations easily due to Micchellie, to improve the order of approximation. (Received August 22, 2005)