

N.Gonul

Department of Mathematics, Bulent Ecevit University, Zonguldak, Turkey

Abstract

In this paper we study the order of convergence of a generalization of positive operators by means of the functions from Lipschitz class. We use the test functions $\left(\frac{x}{1+x}\right)^v$ for $v = 0, 1, 2$, a Korovkin type theorem given by [1]. Furthermore we estimate the rate of convergence of these operators. Some figures correspond to obtaining results are given. Finally, the algorithm used in the program has been added.

References

- [1] Cakar O. and Gadjiev A. , On uniform approximation by Bleimann, Butzer and Hahn on all positive semiaxis, Tras. Acad. Sci. Azerb. Ser. Phys. Tech. Math. Sci. 19, 21–26, 1999.
 - [2] Coskun, T. Weighted approximation of continuous functions by sequences of linear positive operators. Proc. Indian Acad. Sci. (Math. Sci.) Vol. 110, No. 4, 357-362, 2000.
 - [3] Dogru O., On Bleimann, Butzer and Hahn type generalization of Balázs operators, Dedicated to Professor D. D. Stancu on his 75th birthday, Studia Univ. "Babeş-Bolyai", Mathematica 47 , 37-45, 2002.
 - [4] Korovkin P.P., Linear Operators and Approximation Theory, Hindustan Publ.Co., Delhi, 1960.
 - [5] Ibragimov I.I., Gadjiev A. D. On a sequence of linear positive operators, Soviet Math. Dokl., v.11, No:4, pp. 1092-1095, 1970.
-