ON A BERNSTEIN TYPE OPERATOR

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Abstract. In this paper on extends to two variables a linear positive of Bernstein type introduced and investigated by Bleiman, Butzer and Hahn [3]. The corresponding operator $U_{m,n}$ defined on the space $C_b(D)$ of B-continuous functions on $D = [0,+\infty) \times [0,+\infty)$ is given at (2.5). On proves that if $f \in C_b(D)$ then $\lim\limits_{m,n\to\infty} U_{m,n} f = f$, uniformly on every compact $[0,a] \times [0,b]$.

Theorem 2.4 shows an evaluation of the order of approximation of the function $f \in C_b(D)$ by $U_{m,n} f$.