

**ON  $q$ -ANALYTIC FUNCTIONS INVOLVING  
CARLSON-SHAFFER OPERATOR**

KHALIDA INAYAT NOOR AND MUHAMMAD ASLAM NOOR

**ABSTRACT.** The Carlson-Shaffer operator is defined as  $L(a, c) = \phi(a, c) * f$ , where  $f$  is analytic in the unit disc and  $\phi(a, c : z)$  denotes incomplete beta function. Using this operator together with the concept of  $q$ -calculus, we introduce and study some new classes of analytic functions. Coefficient results, inclusion relations and some other interesting properties of these classes are investigated.

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*COMSATS University Islamabad  
Department of Mathematics  
Islamabad, Pakistan  
E-mail address: khalidan@gmail.com*

*COMSATS University Islamabad  
Department of Mathematics  
Islamabad, Pakistan  
E-mail address: noormaslam@gmail.com*