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CERTAIN COEFFICIENT INEQUALITIES FOR THE CLASSES OF q-STARLIKE AND q-CONVEX FUNCTIONS

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Abstract: In this paper we determine certain coefficient inequalities for the classes of q-starlike and q-convex function and find the sufficient conditions for generalized Bessel function to belonging in these classes.

Keywords and Phrases: Univalent functions, q-convex functions, q-starlike functions, q-derivative operator, and generalized Bessel function.

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1. Introduction and Preliminaries

The study of the q-calculus has captivated the ardent attention of researchers and in Science and Engineering the q-calculus introduces an important role.

Recently, Rehman et al. [17] investigated some subclasses of q-starlike functions including numerous coefficient inequalities and a sufficient condition. Furthermore, Srivastava et al. [18, 20, 21, 23] published a series of studies concentrating on the