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NEW APPLICATIONS OF A q-CALCULUS OPERATOR REGARDING NEW SUBCLASSES OF ANALYTIC FUNCTIONS

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Abstract: In the present article, a new subclasses of analytic function is introduced by making use of linear multiplier fractional q-differentiable operator. For functions belonging to these classes we obtained coefficient estimates, extreme points, q- Bernardi integral operator and many more properties.

Keywords and Phrases: Analytic functions, Univalent functions, Bernardi Operator, Linear Multiplier Fractional q-Differentialble Operator.

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1. Introduction

Let $\mathcal{A}$ denote the class of functions of the form

$$\phi(\tau) = \tau + \sum_{l=2}^{\infty} r_l \tau^l \tag{1.1}$$

which are analytic and univalent in the open unit disc $\mathcal{U}$.