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SOME RESULTS ON CERTAIN SUBCLASS OF MEROMORPHIC FUNCTIONS ASSOCIATED WITH (p, q)-DERIVATIVE

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Abstract: In the present work, we define a new subclass of meromorphic functions by using newly defined (p, q)-differential operator and some geometrical properties such as Sufficiency criteria, coefficient estimates , distortion bounds, radius of star-likeness, radius of convexity and partial sums are discussed for these subclass.

Keywords and Phrases: Regular and Meromorphic functions, Ruscheweyh and Salagean derivative, Janwoski function and (p, q)-differential operator.

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1. Introduction

Let $\mathcal{C}$ be a complex plane and $\mathcal{M}$ denote the collection of all meromorphic functions f of the form

$$f(z) = \frac{1}{z} + \sum_{n=1}^{\infty} a_n z^n, \ z \in \mathcal{D}^* \tag{1.1}$$

which are regular in punctured open unit disc $\mathcal{D}^* = {}^{\mathcal{D}}/_{\{0\}} = \{z \in \mathcal{C} : 0 < |z| < 1\}$.