

ON A CERTAIN CLASS OF p -VALENT MEROMORPHIC FUNCTIONS WITH ALTERNATING COEFFICIENTS

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Abstract

In this paper we have introduced a new subclass S consisting of functions $f(z) = z^p + \sum_{n=1}^{\infty} a_n z^{p+n}$, $a_n \neq 0$, $p \geq 1$ which are analytic and p -valent in the punctured unit disc $E = \{z : 0 < |z| < 1\}$ with multiple pole at $z = 0$. We derive some basic properties of the function belonging to this class and numerous sharp results including coefficient estimates, growth and distortion theorem, extreme points, convolution theorem and other interesting properties are investigated. The results obtained in this paper are shown to be sharp.

KeyWords : Analytic functions, Univalent and Multivalent Functions, starlike Functions, Meromorphic Functions, Radius of convexity and convolution theorem

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