

SUBCLASS OF COMPLEX VALUED p -VALENT HARMONIC STARLIKE FUNCTION

S. M. KHAIRNAR AND N. H. MORE

Abstract

In this paper we introduce a new subclass of complex-valued p -valent harmonic functions that are sense-preserving, and starlike in the unit disk. The coefficient condition is also shown to be necessary if the coefficients of the analytic part of the harmonic functions are negative and the coefficients of the co-analytic part of the harmonic functions are positive. We also investigate the extreme points, distortion theorems, convolution and convex combination conditions for the class $S_H(p, \alpha, \beta)$.

Keywords: Convolution, Distortion, Extreme points, Analytic function

AMS Subject Classification: 30C45, 30C50