

CERTAIN NEW SUB-CLASSES OF k -UNIFORMLY CONVEX AND STARLIKE FUNCTIONS WITH RESPECT TO OTHER POINTS

B. SRUTHA KEERTHI¹ AND BHUVANESWARI RAJA²

¹ Department of Applied Mathematics,
Sri Venkateswara College of Engineering,
Sriperumbudur, Chennai - 602105, India

² Department of Mathematics,
Aalim Muhammed Salegh College of Engineering,
Nizara Educational Campus, Muthapudupet,
Avadi IAF, Chennai - 600 055, India

Abstract

In this paper, we introduce new subclasses of k -uniformly convex and starlike functions with respect to other points. In this work, we provide necessary and sufficient conditions, coefficient estimates, distortion bounds, extreme points and radii of close-to-convexity, starlikeness and convexity for these classes. Also, we obtain integral means of inequalities with the extremal functions for these classes.

Key Words : *Analytic, Starlike, Convex, Coefficient estimates, Integral means of inequalities.*

AMS Subject Classification : 30C45.