APPLICATIONS OF HADAMARD PRODUCT
TO
CERTAIN UNIVALENT ANALYTIC FUNCTIONS

By
BASEM AREF FRASIN
B.Sc. (Mathematics)
Yarmouk University
1987

Thesis submitted in partial fulfillment of the requirements
for the degree of Master of Science (Mathematics) at Yarmouk
University

Thesis Defence Committee.

Dr. Manak Lal Nogra
Chairman: [Signature]

Dr. Mohammad Younis
Member: [Signature]

Dr. Ahmad Al-Rhayyel
Member: [Signature]

May, 1990
ABSTRACT

In this thesis we study various properties of the class of prestarlike functions of order $\alpha$ ($0 \leq \alpha \leq 1$) and the class $E_T(\phi, \psi; \alpha)$ of analytic functions, using Hadamard product. The study of $E_T(\phi, \psi; \alpha)$ gives a unified approach to the study of several existing and new subclasses of analytic univalent functions. Quasi-Hadamard product of certain convex and starlike functions has also been discussed.