

P R E F A C E

The study of Univalent Functions today consists of the investigations of certain families of functions holomorphic or meromorphic and univalent in the prescribed domain, which may be simply or multiply connected especially from the aspects of the values which they assume and extremal problems for their coefficients in power series expansions, function values and derivatives. The theory of Univalent functions is an old subject born around the turn of the century, yet it remains an active field of current research. Progress has been especially rapid in recent years. **One** of the major problems of the field is Rieherbach Conjecture, dating from the year 1916, which asserts that the Taylor coefficients of each function of class S satisfy the inequality $|a_n| \leq n$, for many years this problem has stood a challenge. Recently it has been settled.



One of the basic questions in theory of functions of complex variable is the study of holomorphic function based on the nature of the mappings produced by these univalent functions. Our aim in the investigations of study of univalent functions is entirely quantitative in character.

There are three chapters in dissertation. In the first chapter we present all the definitions and terminology concerned with Univalent functions in our course of investigation. We also site graphical representation, wherever it is possible for us.

The second chapter is mainly dealt with the study of univalent functions with negative coefficients. A fruitful attempt is made in designing the varieties of properties of univalent functions for different subfamilies of univalent functions.

Our principle concern lies in the determination of regions of univalence, particularly that of convexity and close- to - convexity; of certain derivatives or integrals

that involve the polynomials of degree n all of whose zeros lie outside the unit circle; and functions belonging to known subclasses of univalent functions. This has been dealt in third chapter.

Lemmas and theorems in each chapter have been consecutively numbered.

Each chapter preceeds by abstract and ends with the list of references.