

P R E F A C E

The Univalent Function theory is quite an old subject of Complex Analysis. Even though it is born around the turn of the century, still it remains an interesting field of current research. A number of mathematicians have made a lot of contributions in the study of univalent functions. This dissertation is concerned with the class S_q of functions holomorphic and q -valent in the unit disc. One of the major problems of the field is the Bieberbach conjecture, dating from the year 1916, which emphasises that the Taylor coefficients of each function of class S , satisfy the inequality $|a_n| \leq n$. For many years this problem has stood as a challenge and has inspired the development of different methods which plays an important role in the whole subject. Recently this conjecture has been settled in America.

There are several surveys of various aspects of the theory of Univalent functions for instance by Gattegno and Ostrowski (1949) and by Hayman 1965.

The present dissertation is mainly concerned with the contributions of q -valent function. The class S_q of q -valent functions is the generalised family of univalent functions and has been extensively studied from all the corners especially by Aouf. With the available literature of q -valent functions at source, the author has obtained the varieties of results of q -valent functions. The present

dissertation is the outcome in the form of generalisation of the results obtained from Aouf, Tuan-Anh, Bhargava-Pandey, Bhoosnurmath-Swamy, Kulkarni-Thakre, Barr et al and has been divided into two chapters.