

## **PREFACE**

Generalised Integral Transformations are of every increasing interest to Mathematicians working in several different branches of mathematics. Integral Transforms methods are virtually indispensable in solving the problems of electrical communication, radio program and information theory, etc. The mixed Stieltjes transform which we have studied in the present dissertation is a connection with the Stieltjes transform and the Laplace transform for the interval  $(0, \infty)$ . The dissertation entitled "ON MIXED STIELTJES TRANSFORMATION" of generalized functions, consists of four chapters :

**Chapter – 0**, consists of notations and some definitions which are used in subsequent chapters.

**Chapter – I**, is an introductory chapter in which we have given a brief survey of integral transform, basic concept of some integral transforms which are essential for development of the theory of remaining chapters.

**Chapter – II** we have given definition, existence theorem, some important properties of the mixed Stieltjes transformation with derivation and its application.

**Chapter – III**, is the derivation of an inversion theorem for the mixed Stieltjes transformation.

A triple numbering is used for mathematical equations in each chapter. For example ( 2.2.2) denotes second equation in second article of second chapter. References are given at the end of each chapter arranged in alphabetical order. In dissertation, they have been referred to , by putting within rectangular brackets that is [ 3 ] means third reference in list of references at the end of chapter..

Place : Kolhapur

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Date : June 26, 2000.