# P R E F A C E

The present dissertation is the outcome of the work carried out by me in the field of "INTEGRAL TRANSFORMS OF GENERALIZED FUNCTIONS".

This dissertation consists of three Chapters each divided into some sections. The first Chapter is a brief survey of Integral Transforms and Generalized Integral Transformations.

In the second Chapter, the suitable testing function space $K_{\eta, \mu, ab}$ which contains the kernel function of two-dimensional Meijer-Bessel transformations have been studied. Two-dimensional Meijer-Bessel transform has been extended to a certain class of generalized functions. Analyticity Theorem, Boundedness Theorem have been proved for the generalized Meijer-Bessel transformation. This chapter also represents the inversion formula and uniqueness theorem for the generalized two-dimensional Meijer-Bessel transformation.

The third Chapter is devoted to the Generalized Hankel and Meijer Transforms. This chapter represents the drivation of K-inversion theorem from Hankel-inversion theorem.

A triple numbering system is used for all lemmas, theorems and formulae. For example, (2.3-1) denotes first formula of third section in second Chapter. References are given at the end and are arranged in the alphabetical order. In the text, they have been referred to, by putting within rectangular brackets the serial number of the references that is [2, P.140] means page 140 of the second reference.

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