A STUDY OF CONVOLUTION INTEGRAL EQUATION OF FREDHOLM TYPE INVOLVING GENERALIZED H-FUNCTION AND MULTIVARIABLE POLYNOMIALS

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Abstract

In the Present paper, we establish a solution of a certain class of Convolution integral equation of Fredholm type whose kernel involves the product of a general class of multivariable polynomials and the generalized H-function by using Riemann-Liouville and Weyl fractional integral operators. Three interesting corollaries which are also of interest by themselves and believed to be new have also been presented in this paper. The main findings of our paper are quite general in nature and the results obtained by Chaurasia and Shekhawat, Goyal and Mukherjee, Chaurasia and Patni, Srivastava and Raina follow as special cases of our main results.

 $\label{eq:words:form.} \mbox{Key Words: Fredholm integral equations, \overline{H}-function, Multivariable polynomials, Mellin transform.}$

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