



NEW RESULTS ON THE \mathcal{M} -TRANSFORM ASSOCIATED WITH THE INCOMPLETE I -FUNCTIONS AND GENERALIZED S -FUNCTION WITH APPLICATION

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Abstract. In this paper, \mathcal{M} -transform is employed to derive the image formula associated with the product of incomplete I -functions and the generalized S -function. Furthermore, image formulas are established for several significant and useful special cases of these generalized S -functions and the incomplete I -functions. The results obtained are of a general nature, and by assigning particular values to the parameters involved, a wide range of previously known as well as novel results can be deduced as special cases. Further, we present the solution of the fractional kinetic equation involving the incomplete I -function, employing the \mathcal{M} -transform as an application.

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