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INTEGRAL FORMULAS FOR WRIGHT FUNCTION

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Abstract: The aim of this paper is to present integrals form of Wright function associated with algebraic function, special functions. Results are key to the analysis of the Wright function in various type of integrals.

Keywords and Phrases: Wright function, Jacobi polynomial, Bessels Maitland function, Legendre function and Hypergeometric function.

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1. Introduction

Wright Function.

Wright function is a powerful technique for the solution of problems in mathematics, mathematical physics and engineering. From the early days of the Wright function the subject has been an area of great theoretical research and practical applications and it continues to be in so our day. Many studies related to the Wright function are found in numerous research papers [1, 2, 3, 4, 5, 9, 10, 11, 12, 13, 18]. The generalized hypergeometric Wright function introduced by Wright [17, 18] in terms of generalized hypergeometric function form and defined by

$${}_{p}\Psi_{q}(z) = \sum_{k=0}^{\infty} \frac{\prod_{i=1}^{p} \Gamma(\alpha_{i} + \beta_{i}k)}{\prod_{j=1}^{q} \Gamma(\alpha_{j} + \beta_{j}k)} \frac{z^{k}}{k!}$$

$$(1.1)$$