

## Some Generating Relations Involving Exton's Multiple Hypergeometric Functions ( $X_2, X_7, K_9, K_{12}, K_{13}$ )

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**Abstract:** In this paper, using Laplace transform technique, we obtain some interesting generating relations associated with double hypergeometric function  $H_4$  of Horn, triple hypergeometric functions  $X_2, X_7$  of Exton,  $F_E, F_G$  of Saran and quadruple hypergeometric functions  $K_9, K_{12}, K_{13}$  of Exton.

**Keywords and Phrases:** Exton's multiple hypergeometric functions, Laplace transform, Multiple Gaussian hypergeometric functions, Horn's functions.

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### 1 Introduction and Preliminaries

If function (continuous or discontinuous)  $f(t)$  is well defined for  $t > 0$  and  $\lim_{t \rightarrow \infty} e^{-bt} f(t) =$  a finite quantity, then operational images (or operational representation) of many classes of Special Functions is the classical Laplace transform

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