

**CERTAIN RESULTS INVOLVING  $q$ -HYPERGEOMETRIC SERIES  
AND RAMANUJAN'S MOCK THETA FUNCTIONS**

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**Abstract:** In this paper certain transformation formulas for  $q$ -hypergeometric series have been established. In another section of this paper, results involving mock theta functions have also been established.

**Keywords and Phrases:**  $q$ -hypergeometric series, transformation formula, mock theta functions, truncated hypergeometric series, summation formula.

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**1. Introduction, Notations and Definitions**

The  $q$ -shifted factorial for  $|q| < 1$  is defined as,

$$(a; q)_0 = 1$$