

**A LIE -ALGEBRA AND GENERATING FUNCTION OF TWO
VARIABLES LAGUERRE POLYNOMIALS $L_n^{\beta+n}(x, y)$**

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Abstract

Weisner's group-theoretic method of obtaining generating functions has been utilised the case of modified Laguerre polynomials with two variables and one parameter $L_n^{\beta+n}(x, y)$.

In Section 2, we have derived two linear differential operators. The extended form of the groups generated by operators A_{ij} ($i, j = 1, 2$) are also shown in this section. In Section 3 we have derived some generating functions of $L_n^{\beta+n}(x, y)$ from which several special generating functions can be derives.

Key Words : *Two variables laguerre polynomials, Recurrence relations, Group theoretic, Method and generating relation.*

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