

Corrigendum to

“ON PARTIAL QUASI-BILATERAL GENERATING FUNCTIONS INVOLVING GEGENBAUER POLYNOMIALS”, by A. Das and A. K. Chongdar, published in Rev. Acad. Canar. Cienc., XVIII (Núms. 1-2), 71-78 (2006) (publicado en agosto de 2007).

The Editor-in-Chief and the Editorial Board of this Journal regret that, due to a production error, some mistakes appear in the first page of the above-mentioned paper. Now we include the correct version of this first page.

ON PARTIAL QUASI-BILATERAL GENERATING FUNCTIONS INVOLVING GEGENBAUER POLYNOMIALS.

A. Das¹ & A. K. Chongdar²

Abstract : In this article, we have obtained a generalization of a known result on quasi-bilateral generating relation involving Gegenbauer polynomials from the existence of partial quasi-bilateral generating relation of the polynomial under consideration. Some particular cases of interest are also discussed here.

1. Introduction:

In [1] the term “partial quasi-bilateral generating function” is defined as follows:

$$G(x, z, w) = \sum_{n=0}^{\infty} a_n w^n P_{m+n}^{(\alpha)}(x) Q_r^{(m+n)}(z),$$

where the coefficients, a_n are quite arbitrary and $P_{m+n}^{(\alpha)}(x), Q_r^{(m+n)}(z)$ are two particular special functions of orders $m+n, r$ and of parameters α and $m+n$ respectively. In particular, when $Q_r^{(m+n)}(z) = P_r^{(m+n)}(z)$, then it is “partial quasi-bilinear”.

In this note, we would like to show that the existence of a partial quasi-bilinear generating function implies the existence of a more general generating function from the group- theoretic view-point.

In [2] Chongdar proved the following theorem on bilateral generating function involving Gegenbauer polynomials by group theoretic method.

Theorem 1: If

$$G(x, t) = \sum_{n=0}^{\infty} a_n C_n^{\lambda}(x) t^n,$$

then

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