



**DIFFERENTIAL EQUATION OF GEGENBAUER TYPE
POLYNOMIALS $G_n^{\alpha, m}(x, y, c)$**

Tadayoshi Takebayashi

Received December 14, 2019

Abstract

Djordjević [G. B. Djordjević, A generalization of Gegenbauer polynomial with two variables, Indian J. Pure Appl. Math. (to appear)] (see also [M. A. Pathan and A. K. Waseem, On a class of Humbert-Hermite polynomials, preprint, 2019]) defined a generalized Gegenbauer type polynomials $G_n^{\alpha, m}(x, y)$. We define another Gegenbauer type polynomials $G_n^{\alpha, m}(x, y, c)$, and examine differential equation satisfied by them.

Keywords and phrases: differential equation, Gegenbauer type polynomials.

Pioneer Journal
of Mathematics
and Mathematical
Sciences



Pioneer Scientific
Publisher