



DIFFERENTIAL EQUATIONS OF GENERALIZED
HUMBERT POLYNOMIALS

$$P_{n,m}^p(x, y, a, b, c)$$

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Abstract

Pathan et al. [M. A. Pathan, M. G. Bin-Saad and F. Al-Sarahi, On matrix polynomials associated with Humbert polynomials, J. Korean Math. Soc. 21(3) (2014), 207-218] (see also [H. M. Srivastava, W. A. Khan and H. Haroon, Some expansions for a class of generalized Humbert matrix polynomials, Revista de la Real Academia de Ciencias Exactas, Físicas y Naturales, Serie A. Matemáticas 113(4) (2019), 3619-3634]) defined the generalized Humbert matrix polynomials $P_{n,m}^A(x, y, a, b, c)$.

We define the generalized Humbert polynomials $P_{n,m}^p(x, y, a, b, c)$ and examine differential equations satisfied by them.

Keywords and phrases: differential equations, generalized Humbert polynomials.

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