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A class of generating functions for some polynomials

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Abstract

The present study deals with some new properties for some generalized polynomials. The results obtained here include various families of multilinear and multilateral generating functions, miscellaneous properties and also some special cases for these polynomials.

Key Words: Generating function, Recurrence relation, Hypergeometric function, Pochhammer symbol.

References

- [1] G.B. Djordjević, G.V. Milovanović, Special classes of polynomials, University of Niš, Faculty of Technology, Leskovac, 2014.
- [2] D. Korkmaz-Duzgun, E. Erkus-Duman, The Laguerre type d -orthogonal polynomials, *J. Sci. Arts*, 42 (2018), 95-106.
- [3] K. Dilcher, Polynomials related to expansions of certain rational functions in two variables, *SIAM Math. Anal.*, 19 (1988), 473-483.
- [4] N. Ozmen, E. Erkus-Duman, Some families of generating functions for the generalized Cesaro polynomials, *J. Comput. Anal. Appl.*, 25 (2018), 670-683.
- [5] G.B. Djordjević, Contributions to the theory of polynomials which are defined by recurrence relations, Dissertation, Niš, 1989.
- [6] E.D. Rainville, Special Functions, The Macmillan Company, New York, 1960.