

## ON A FAMILY OF MULTIVARIABLE POLYNOMIALS DEFINED THROUGH RODRIGUES TYPE FORMULA

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**Abstract.** In this paper, we present a family of multivariable polynomials defined by Rodrigues formula and we discuss their some miscellaneous properties such as generating function and recurrence relation. We also derive various classes of multilateral generating functions for these multivariable polynomials and give some special cases of the results. Furthermore, we also show that some particular cases of the polynomials reduce to the products of Hermite and Laguerre orthogonal polynomials with one variable.

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