Souvenir International Journal of Basic Sciences and Applied Computing

Volume- 3 Issue- 3 March 2021 Website: www.ijbsac.org ISSN: 2394-367X (online) Published By Blue Eyes Intelligence Engineering and Sciences Publication







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CONTENT

Author (s) Name	Title of the Article	Page No
Mamta Dassani, Mukesh Kushwaha	Some Generalized Results to unify Classical Polynomials	1-1

International Journal of Basic Sciences and Applied Computing (IJBSAC) Volume-3 Issue-3, March 2021, ISSN: 2394-367X (Online)

Published By: Blue Eyes Intelligence Engineering and Sciences Publication (BEIESP)

Author(s): Mamta Dassani, Mukesh Kushwaha

Title of the Article: Some Generalized Results to unify Classical Polynomials

Abstract: Present work of this paper deals with the unification of classical polynomials in which we have defined a generalized polynomial set analogous to that of associated Legendre polynomial by taking 5the use of Operator. Also we have derived explicit form, Operational Formulae generating functions for this function.

Keywords: Classical Polynomials, Legendre Polynomials, Rodrigues Formula, Generating Functions.

References:

- 1. R. Appell., Suriune suite de polynomials ayant toutes leures recinescelles Archivder Math. Uni associated orthogonal polynomials, 1901, pp. 1-44. pp. 69
- 2. P. Appell. and Kampe-de-Feriet., Function hypergeometric and hypershperiques: polynomials Hermite, Gauthier Villars Paris., 1926.
- 3. S.K. Chaterjee., Some operational formula connected with a function defined by a generalized Rodrigue's formula, Acta. Math. ,1966, pp. 379-385.
- 4. S.S. Dhillon., A study of generalization of Special functions of mathematical physics and their applications, Ph.D. thesis B.U. Univ. Jhansi., 1989.
- 5. H.W. Gould and A.T. Hopper., Operational formulas connected with two generalization of Hermite polynomials Duke Math. Jour. 29, 1962, pp 51-64.
- 6. C.M. Joshi and M.L. Prajapati., The operator an a generalization of certain classical polynomials; Kyungpook Math. Jour. 15, 1975, pp 191-199
- 7. A. Singh., A study of special function of Mathematical physics and their applications in combinational analyhsis, Ph.D. thesis, B. Univ. Jhansi. ,1981.
- 8. J.P. Singhal., and K. Savita., On a unification of generalized Humbert and Laguerre polynomials, Jnanabha, Vol. 9/10, 1980, pp. 171-178.
- 9. H.M. Srivastava. and J.P. Singhal., A class of polynomials defined by generalized Rodrigue's formula : Ann. Mat. Pura. App. (14), 40 an 90, 1971, pp. 75-85 and pp. 345-353.
- 10. C.M. Joshi. and J.P. Singhal., Operational formulae associated with a class of polynomials unifying the generalized Laguerre and Hermite polynomials, Riv. Mat. Univ. Pharma (3), 1, 1972, pp. 279-286.

