

Acronyms

$\mathbb{K}$	field of characteristic 0 (typically $\mathbb{R}$ or $\mathbb{C}$)
$(b_i)_i$	numerical sequence of elements of $\mathbb{K}$ with $b_0 = 0$ and $b_1 \neq 0$
$X_\infty \equiv X = (x_0, \dots, x_n, \dots)^T$	infinite column vector of entries $x_i, i = 0, 1, \dots$
$X_n = (x_0, \dots, x^n)^T$	column vector of entries $x^i \in \mathbb{K}, i = 0, 1, \dots, n$
$\mathcal{P}$	set of polynomials with coefficients in $\mathbb{K}$
$\mathcal{P}_n$	set of polynomials of coefficients in $\mathbb{K}$ with <i>degree</i> $\leq n$
$\{p_n\}_n$	sequence of polynomials with degree $p_n = n$
$p_n(x)$	polynomial of <i>degree</i> n in the variable x
$f(x) := \sum_{i=1}^{\infty} b_i \frac{x^i}{i!}$	generating function of $(b_i)_i$, formal power series, δ -series
$(\hat{b}_i)_i$	conjugate sequence of $(b_i)_i$
$\bar{f}(x) := \sum_{i=1}^{\infty} \hat{b}_i \frac{x^i}{i!}$	compositional inverse of $f(x)$, formal power series, δ -series
$P := (p_{i,j})$	infinite lower triangular Binomial-type matrix
$\hat{P} := (\hat{p}_{i,j})$	conjugate matrix of P
$(a_i)_i$	numerical sequence of elements of $\mathbb{K}$ with $a_0 \neq 0$
$g(x) := \sum_{i=0}^{\infty} a_i \frac{x^i}{i!}$	generating function of (a_i) , invertible power series
$(\hat{a}_i)_i$	conjugate sequence of $(a_i)_i$
$\frac{1}{g(x)} = \sum_{i=0}^{\infty} \hat{a}_i \frac{x^i}{i!}$	generating function of $(\hat{a}_i)_i$, reciprocal power series of $g(x)$
$A := (a_{i,j})$	infinite lower triangular Appell-type matrix
$\hat{A} := (\hat{a}_{i,j})$	conjugate matrix of A
$A_n := (a_{i,j})$	matrix of order n
$S := (s_{i,j})$	infinite lower triangular Sheffer-type matrix
$S := (g(x), f(x))$	exponential Riordan matrix
$\hat{S} := (\hat{s}_{i,j})$	conjugate matrix of S
$O := (o_{i,j})$	infinite lower triangular odd Lidstone-type matrix
$E := (e_{i,j})$	infinite lower triangular even Lidstone-type matrix
$(x)_n$	lower factorial polynomial of order n
$S(n, k)$	Stirling number of second kind
$s(n, k)$	Stirling number of first kind
$\phi_n(x)$	exponential polynomial of degree n
$\{L_n^{(a)}\}_n$	Laguerre polynomial sequence
$\{p_n := n!L_n^{(-1)}\}_n$	binomial Laguerre polynomial sequence
$x^{(n)}$	central factorial polynomial of degree n
$\{a_n\}_n$	Appell sequence
$\mathcal{D}$	derivation matrix
$\mathcal{I}$	integration matrix
$P_n(f)(x)$	polynomial operator of order n
$\{B_n\}_n$	Bernoulli polynomial sequence

$\{\hat{B}_n\}_n$	conjugate Bernoulli polynomial sequence
B_n	Bernoulli number
$\{E_n\}_n$	Euler polynomial sequence
$\{\hat{E}_n\}_n$	conjugate Euler polynomial sequence
$\{H_n\}_n$	Hermite polynomial sequence
$\{S_n\}_n$	Sheffer sequence
$\{B_{n,h}^{\text{II}}\}_n$	Bernoulli polynomial sequence of second kind
$\{\mathcal{B}_n\}_n$	generalized Boole polynomial sequence
$\{C_n\}_n$	Poisson–Charlier polynomial sequence
$\text{OLP}(x)$	set of odd Lidstone-type polynomial sequence
$\text{ELP}(x)$	set of even Lidstone-type polynomial sequence
$\{\Lambda_n\}_n$	Lidstone polynomial sequence of first type
$\{\mathcal{E}_n\}_n$	odd Lidstone–Euler polynomial sequence
$\{V_n\}_n$	Lidstone polynomial sequence of second type
$\{\mathcal{S}_n\}_n$	even Lidstone–Euler polynomial sequence
$\mathbb{N}$	set of non negative integer