1. Introduction and Preliminaries

The Bessel-Maitland function $J_0^\psi(.)$ is a generalization of Bessel function introduced by Ed. Maitland Wright [1] through a series representation as follows:

$$J_0^\psi(z) = \sum_{m=0}^{\infty} \frac{(-z)^m}{\Gamma(c m + \theta + 1)m!}. \quad (z, \theta \in \mathbb{C}, \psi > 0). \quad (1)$$

In fact, Watson’s book [2] finds the application of the Bessel-Maitland function in the diverse field of engineering, chemical and biological sciences, and mathematical physics. Further, Pathak [3] defined generalization of the Bessel-Maitland function $J_0^{\psi,\theta}(.)$ in the form as follows:

$$J_0^{\psi,\theta}(z) = \sum_{m=0}^{\infty} \frac{(\delta)^m z^m}{\Gamma(c m + \theta + 1)m!}. \quad (2)$$

where $z \in \mathbb{C}\backslash(-\infty, 0]$; $c, \theta, \delta \in \mathbb{C}$, $\Re(c) \geq 0, \Re(\theta) \geq -1, \Re(\delta) \geq 0; q \in (0, 1) \cup \mathbb{N}$, and $(\delta)^m$ is known as generalized Pochhammer symbol which is defined as

$$(\delta)_0 = 1, \quad (\delta)^m = \frac{\Gamma(\delta + qm)}{\Gamma(\delta)}. \quad (3)$$

Since the implementation of the Bessel-Maitland function in 1983, a number of extensions and generalizations have been introduced and examined with different applications (see information in [4–9]).

By motivation of these investigations and applications of the Bessel-Maitland function, Suthar et al. [7] defined the generalized Bessel-Maitland function (2) in the following manner:

$$J_0^{\psi,\theta}(z; p) = \sum_{m=0}^{\infty} \frac{\mathcal{B}_p(\delta + qm, c - \delta)(c)^m z^m}{\Gamma(c m + \theta + 1)m!}, \quad (4)$$

where $p > 0, q \in \mathbb{N}, \Re(c) > \Re(\delta) > 0$, which is known as extended generalized Bessel-Maitland function; here, $\mathcal{B}_p(s, t)$ is the extended beta function (see [10]).

$$\mathcal{B}_p(s, t) = \int_0^1 z^{s-1}(1-z)^{t-1}e^{pz(1-z)}dz, \quad (5)$$

For $p = 0$, (5) reduces to beta function (see, e.g., [11], Section 1.1).

Remark 1

(i) The particular case of equation (4), when $p = 0$, reduces to (2) and when $p = q = 0$, reduces to (1).
(ii) When $q = 1, \delta = \theta - 1$ and $z = -\frac{z}{p}$ in (4) reduce to the extended Mittag-Leffler function defined by Ozarslan and Yilmaz ([12], equation (4)).
Definition 1. The space of Lebesgue measurable or real
or complex valued function \( \mathcal{L}(a, b) \) for our study of the sig-
nificance of fractional calculus is defined as follows:
\[
\mathcal{L}(a, b) = \left\{ f : \| f \|_1 = \int_a^b | f(x) | dx < \infty \right\}.
\] (6)

Definition 2. The Riemann–Liouville (R-L) fractional inte-
gral operators \( \mathcal{I}^\alpha_\ell \) and \( \mathcal{I}^{-\alpha}_\ell \) are defined respectively as (see,
e.g., [13]) follows:
\[
\left( \mathcal{I}^\alpha_\ell f(x) \right)(x) = \frac{1}{\Gamma(\ell)} \int_a^x (x - \lambda)^{\ell-1} f(\lambda) d\lambda, \quad (x > a), \quad (7)
\]
\[
\left( \mathcal{I}^{-\alpha}_\ell f(x) \right)(x) = \frac{1}{\Gamma(\ell)} \int_x^b (\lambda - x)^{\ell-1} f(\lambda) d\lambda, \quad (x < b), \quad (8)
\]
where \( f(x) \in \mathcal{L}(a, b) \), \( \ell \in \mathbb{C} \), and \( \Re(\ell) > 0 \).

Definition 3. For \( f(x) \in \mathcal{L}(a, b) \), \( \ell \in \mathbb{C} \), \( \Re(\ell) > 0 \) and \( n = \lceil \Re(\ell) \rceil + 1 \), the Riemann–Liouville fractional differen-
tial operators \( \mathcal{D}^\alpha_\ell \) are defined by (see, e.g., [13])
\[
\left( \mathcal{D}^\alpha_\ell f(x) \right)(x) = \frac{d^n}{dx^n} \left( \mathcal{I}^{(1-\ell)}_\ell f(x) \right). \quad (9)
\]

Also, \( \mathcal{D}^\alpha_\ell \) of order \( 0 < \ell < 1 \) and class \( 0 < n < 1 \) with
reference to \( x \) which is the generalized form of (9) (see
[13–15]) is defined as follows:
\[
\left( \mathcal{D}^\alpha_\ell f(x) \right)(x) = \frac{d^n}{dx^n} \left( \mathcal{I}^{(1-\ell)}_\ell f(x) \right). \quad (10)
\]

On setting \( n = 0 \) in (10), it reduces \( \mathcal{D}^\alpha_\ell \) specified in (9) to
the fractional differential operators.

We found the following baseline findings for our study.

Lemma 1 (Mathai and Haubold [16]). If \( \ell, \mu, u \in \mathbb{C} \), \( \Re(\ell) > 0 \),
\( \Re(u) > 0 \), then
\[
\left( \mathcal{I}^\mu_\ell (\lambda - a)^{\mu-1} \right)(x) = \frac{\Gamma(u)}{\Gamma(\ell + u)} (x - a)^{\ell+\mu-1}. \quad (11)
\]

Lemma 2 (Srivastava and Manocha [17]). If a function \( f(z) \)
is analytic and has a power series representation
\( f(z) = \sum_{n=0}^{\infty} a_n z^n \) in the disc \( |z| < \Re(\ell) \), then
\[
_0\mathcal{D}^\ell_\ell \left[ z^{\ell-1} f(z) \right] = \frac{\Gamma(u)}{\Gamma(\ell + u)} \sum_{m=0}^{\infty} \frac{a_m(u)}{\ell + u} z^m. \quad (12)
\]

Lemma 3 (Srivastava and Tomovski [18]). Let \( x > a \), \( 0 < \ell < 1 \), \( 0 \leq n < 1 \), \( \Re(\delta) > 0 \) and \( \Re(\ell) > 0 \). Then, the
subsequent result holds true for \( \mathcal{L}^\ell_\ell \) as follows:
\[
\mathcal{L}^\ell_\ell \left[ (\lambda - a)^{\ell-1} \right](x) = \frac{\Gamma(\ell)}{\Gamma(\ell + \delta)} (x - a)^{\ell+\delta-1}. \quad (13)
\]

We also provided the subsequent established facts and
rules in this article.

Fubini’s theorem (Dirichlet formula) (Samko et al. [15])
\[
\int_a^b \int_a^x f(z,t) dt = \int_a^b f(z) dz. \quad (14)
\]

We define the following integral operator in terms of
extended generalized Bessel function for \( \delta, \omega \in \mathbb{C} \), \( \Re(\omega) > 0 \) and
\( \Re(\delta) > 0 \) for our further analysis of fractional calculus,
then the integral operator
\[
\left( \mathcal{I}^{\alpha,\omega,\delta}_\ell f(x) \right)(x) = \int_a^x (x - \lambda)^{\delta-1} f(\omega(x - \lambda); p) f(\lambda) d\lambda, \quad (15)
\]
where \( x > a \).

If we put \( p = 0 \) to the operator, then (15) reduces
\[
\left( \mathcal{I}^{\alpha,\omega,\delta}_\ell f(x) \right)(x) = \int_a^x (x - \lambda)^{\delta-1} f(\omega(x - \lambda); p) f(\lambda) d\lambda. \quad (16)
\]

If \( \omega = 0 \), then (16) reduces the integral operator to the
R-L fractional integral operator described in (7).

2. Integral Operators with Extended
Generalized Bessel-Maitland Function in the Kernel

In this part, we consider the composition of the fractional
integral and derivative of Riemann–Liouville and the frac-
tional derivative of Hilfer with the extended generalized
Bessel-Maitland function defined by (4).

Theorem 1. Suppose \( c, \delta, \omega \in \mathbb{C} \), \( \Re(\omega) > 0 \), \( \Re(c) > \Re(\ell) > -1 \),
and \( q, n \in \mathbb{N} \), then the following result holds true:
\[
\frac{d}{dz} \left[ z^{\delta} \int_0^z f_{\delta,q}(\omega z; p) \right] = z^{\delta+n} \int_0^z \frac{\mathcal{B}(\delta + qm, c - \delta)(c)_{qm}(-\omega z; p)}{B(\delta, c - \delta)\Gamma(cm + \delta + 1)m!} \frac{d}{dz} \left[ z^{\delta+n} \right]. \quad (17)
\]

Proof. Using (4), we see that
\[
\left( \frac{d}{dz} \right)^n z^{\delta} \int_0^z f_{\delta,q}(\omega z; p) \right) = \left( \frac{d}{dz} \right)^n z^{\delta} \sum_{m=0}^{\infty} \frac{\mathcal{B}(\delta + qm, c - \delta)(c)_{qm}(-\omega z; p)}{B(\delta, c - \delta)\Gamma(cm + \delta + 1)m!} \frac{d}{dz} \left[ z^{\delta+n} \right]. \quad (18)
\]
Using the identity,
\[
\left( \frac{d}{dx} \right)^n x^m = \frac{\Gamma(m+1)}{\Gamma(m-n+1)} x^{m-n}, \quad m \geq n,
\]
and after simplifying, we have
\[
\left( \frac{d}{dz} \right)^n z^\theta \left( f_{\theta q} \left( \omega \zeta ; p \right) \right) = z^{\theta - n} \sum_{m=0}^{\infty} \beta_{p} \left( \delta + qm, c - \delta \right) c_{qm} \left( -\omega \zeta \right)^m \frac{\Gamma(c + \delta - 1)}{\Gamma(c + \delta + \ell + 1)m!}.
\]

Finally, it can be expressed by using (4) again, and we obtain
\[
\left( \frac{d}{dz} \right)^n z^\theta \left( f_{\theta q} \left( \omega \zeta \right) \right) = z^{\theta - n} f_{\theta - n q} \left( \omega \zeta \right).
\]

**Corollary 1.** Suppose \( \zeta, \theta, c, \delta \in \mathbb{C} \), \( \mathcal{R} (\zeta) > 0, \mathcal{R} (\theta) > -1 \), \( \mathcal{R} (\delta) > 0, p = 0, q \in (0, 1) \cup \mathbb{N} \), and \( n \in \mathbb{N} \), then the following result holds true:
\[
\left( \frac{d}{dz} \right)^n z^\theta \left( f_{\delta q} \left( \omega \zeta \right) \right) = z^{\theta - n} f_{\delta - n q} \left( \omega \zeta \right).
\]

**Theorem 2.** If \( x > a \left( a \in \mathbb{R}_+ = (0, \infty) \right) \), \( \delta, \ell, \theta, \omega \in \mathbb{C} \), \( \mathcal{R} (\theta) > -1, \mathcal{R} (\ell) > 0, p > 0, q \in \mathbb{N} \), then
\[
\mathcal{F}_a \left[ \left( \lambda - a \right)^\theta f_{\delta q} \left( \omega (\lambda - a)^\ell \right) ; p \right] (x) = (x - a)^\theta f_{\delta q} \left( \omega (x - a)^\ell \right) ; p, \quad (23)
\]
\[
\mathcal{G}_a \left[ \left( \lambda - a \right)^\theta f_{\delta q} \left( \omega (\lambda - a)^\ell \right) ; p \right] (x) = (x - a)^\theta f_{\delta q} \left( \omega (x - a)^\ell \right) ; p, \quad (24)
\]
\[
\mathcal{G}_a \left[ \left( \lambda - a \right)^\theta f_{\delta q} \left( \omega (\lambda - a)^\ell \right) ; p \right] (x) = (x - a)^\theta f_{\delta q} \left( \omega (x - a)^\ell \right) ; p, \quad (25)
\]

By use of (11), we have
\[
\mathcal{F}_a \left[ \left( \lambda - a \right)^\theta f_{\delta q} \left( \omega (\lambda - a)^\ell \right) ; p \right] (x) = \sum_{m=0}^{\infty} \beta_{p} \left( \delta + qm, c - \delta \right) c_{qm} \left( -\omega (x - a)^\ell \right)^m \frac{\Gamma(c + \delta - 1)}{\Gamma(c + \delta + \ell + 1)m!} (x - a)^{\theta + \delta + \ell} \quad (27)
\]

This occupies in the (23) statement.

(ii) On using (9), we have
\[
\mathcal{F}_a \left[ \left( \lambda - a \right)^\theta f_{\delta q} \left( \omega (\lambda - a)^\ell \right) ; p \right] (x) = \sum_{m=0}^{\infty} \beta_{p} \left( \delta + qm, c - \delta \right) c_{qm} \left( -\omega (x - a)^\ell \right)^m \frac{\Gamma(c + \delta - 1)}{\Gamma(c + \delta + \ell + 1)m!} (x - a)^{\theta + \delta + \ell} \left( \lambda - a \right)^{\theta + \delta + \ell}
\]
Applying (17), we get

\[
L_{a+}^{\ell} \left[ (\lambda - a)^{\ell} f_{\delta, c} (\omega (\lambda - a)^c ; p) \right] (x) = (x - a)^{\ell - \ell} f_{\delta, c} (\omega (x - a)^c ; p).
\] (30)

This completes the desired proof (24).

(iii) By using (4), we obtain

\[
L_{a+}^{\ell} \left[ (\lambda - a)^{\ell} f_{\delta, c} (\omega (\lambda - a)^c ; p) \right] (x)
= \sum_{m=0}^{\infty} \frac{f_{\delta, c} (\omega (x - a)^c ; p)}{m!} (\omega (x - a)^c)^{m}.
\] (31)

By applying (13), we get

\[
L_{a+}^{\ell} \left[ (\lambda - a)^{\ell} f_{\delta, c} (\omega (\lambda - a)^c ; p) \right] (x)
= \sum_{m=0}^{\infty} \frac{f_{\delta, c} (\omega (x - a)^c ; p)}{m!} (\omega (x - a)^c)^{m}.
\] (32)

which brings in the necessary proof.

3. Some Properties of the Operator \( \mathbf{G}_{a+; \delta, q}^{\omega, c, \ell, \ell}(f) \) (x)

In this section, we derive several continuity properties of the generalized fractional integral operator.

Theorem 3. If \( \delta, \omega \in \mathbb{C}, \mathbb{R} (\zeta) > 0, \mathbb{R} (\varrho) > 0, \mu = 0, q \in \mathbb{N} \), then Theorem 2 reduces respectively to

\[
\mathbf{G}_{a+; \delta, q}^{\omega, c, \ell, \ell}(f) (x) = (x - a)^{\ell - \ell} \mathbf{F}_{\delta, c} (\omega (x - a)^c ; p).
\] (33)

\[
\mathbf{G}_{a+; \delta, q}^{\omega, c, \ell, \ell}(f) (x) = (x - a)^{\ell - \ell} \mathbf{F}_{\delta, c} (\omega (x - a)^c ; p).
\] (34)
Proof. From (4) and (15), we obtain

\[
\left( \mathfrak{F}^{\omega, \delta, c}_{\alpha+\beta, q} \left( (\lambda - a)^{\mu + 1} \right) \right)(x) = \int_a^x (x - \lambda)^\beta \left( (\lambda - a)^{\mu + 1} \right) f^{\delta, c}_{\beta, q}(\omega(x - \lambda)^\gamma; p) \, d\lambda
\]

\[
= \sum_{m=0}^{\infty} \frac{\mathbb{B}_p(\delta + mq, c - \delta)(c)_{mq}}{B(\delta, c - \delta)\Gamma(\delta + m + 1)} \left( \int_a^x (x - \lambda)^{\mu + 1} (\lambda - x)^{\beta + m} \, d\lambda \right)
\]

\[
= \sum_{m=0}^{\infty} \frac{B_p(\delta + mq, c - \delta)(c)_{mq}}{B(\delta, c - \delta)\Gamma(\delta + m + 1)} \left( \int_a^x (x - \lambda)^{\mu + 1} (\lambda - x)^{\beta + m} \, d\lambda \right)
\]

\[
\leq \frac{\int_a^b (x - \lambda)^\beta f^{\delta, c}_{\beta, q}(\omega(x - \lambda)^\gamma; p) \, d\lambda}{\int_a^b (x - \lambda)^\beta \, d\lambda}.
\]

By exchanging the integration order and using Dirichlet formula (14), we have

\[
\left\| \mathfrak{F}^{\omega, \delta, c}_{\alpha+\beta, q} \right\|_1 \leq \sum_{m=0}^{\infty} \frac{B_p(\delta + mq, c - \delta)(c)_{mq}}{B(\delta, c - \delta)\Gamma(\delta + m + 1)} \left( \int_a^x (x - \lambda)^{\mu + 1} (\lambda - x)^{\beta + m} \, d\lambda \right)
\]

\[
\leq \frac{\int_a^b (x - \lambda)^\beta f^{\delta, c}_{\beta, q}(\omega(x - \lambda)^\gamma; p) \, d\lambda}{\int_a^b (x - \lambda)^\beta \, d\lambda}.
\]

This can also be written as

\[
\left\| \mathfrak{F}^{\omega, \delta, c}_{\alpha+\beta, q} \right\|_1 \leq \left\{ (b - a)^{\mu + 1} \sum_{m=0}^{\infty} \frac{B_p(\delta + mq, c - \delta)(c)_{mq}}{B(\delta, c - \delta)\Gamma(\delta + m + 1)} \left( \int_a^x (x - \lambda)^{\mu + 1} (\lambda - x)^{\beta + m} \, d\lambda \right) \right\} \cdot \int_a^b (x - \lambda)^\beta \, d\lambda = \delta \| \phi \|_1.
\]

This completes the desired proof.
Corollary 4. If $\delta, \zeta, \vartheta, \omega \in \mathbb{C}$, $\mathcal{R}(\zeta) > 0$, $\mathcal{R}(\vartheta) > -1$, and $q \in (0, 1) \cup \mathbb{N}$, then

$$\left\| \mathfrak{T}_{\alpha, \beta, \vartheta}^{q, \delta} \phi \right\|_1 \leq \mathfrak{S} \left\| \phi \right\|_1,$$

(43)

where

$$\mathfrak{S} = (b-a)^{\mathcal{R}(\vartheta)+1} \sum_{m=0}^{\infty} \frac{|(\delta)_{m+1}|}{m!} \left[-\omega (b-a)^{\vartheta} \right]^m,$$

(44)

Theorem 5. If $\ell, \delta, \zeta, \vartheta, \omega \in \mathbb{C}$, $\mathcal{R}(\zeta) > 0$, $\mathcal{R}(\vartheta) > -1$, $\mathcal{R}(\delta) > 0$, $\mathcal{R}(\ell) > 0$, $p > 0$, $q \in \mathbb{N}$, and $x > a$, for any function $f \in \mathcal{L}(\zeta, \vartheta)$, then the result holds true:

$$\left( \mathfrak{T}_{\alpha}^\ell \left[ \mathfrak{T}_{\alpha, \beta, \vartheta}^{q, \delta, \iota} f \right] \right)(x) = \left( \mathfrak{T}_{\alpha, \beta, \vartheta}^{q, \delta, \iota} \left[ \mathfrak{T}_{\alpha}^\ell f \right] \right)(x).$$

(45)

$$\left( \mathfrak{T}_{\alpha}^\ell \left[ \mathfrak{T}_{\alpha, \beta, \vartheta}^{q, \delta, \iota} f \right] \right)(x) = \frac{1}{\Gamma(\ell)} \int_a^x (x-\lambda)^{\ell-1} \left[ \mathfrak{T}_{\alpha, \beta, \vartheta}^{q, \delta, \iota} f \right](\lambda) \, d\lambda.$$

(46)

Proof. From (7) and (15), we have

By interchanging the order of integration and using (14), we have

$$\left( \mathfrak{T}_{\alpha}^\ell \left[ \mathfrak{T}_{\alpha, \beta, \vartheta}^{q, \delta, \iota} f \right] \right)(x) = \int_a^x \frac{1}{\Gamma(\ell)} \int_a^x (x-\lambda)^{\ell-1} (\lambda - u)^{\delta, \iota} \left[ \mathfrak{T}_{\alpha, \beta, \vartheta}^{q, \delta} \left( (\omega \lambda - \omega u) ; p \right) f (u) \right] \, d\lambda \, du.$$  

(47)

Setting $\lambda - u = \rho$, we obtain

$$\left( \mathfrak{T}_{\alpha}^\ell \left[ \mathfrak{T}_{\alpha, \beta, \vartheta}^{q, \delta, \iota} f \right] \right)(x) = \int_a^x \frac{1}{\Gamma(\ell)} \int_0^{x-u} (x-u-\rho)^{\ell-1} (\rho)^{\delta, \iota} \left[ \mathfrak{T}_{\alpha, \beta, \vartheta}^{q, \delta} \left( (\omega \rho) ; p \right) \right] f (u) \, d\rho \, du.$$  

(48)

By applying (7) and (23), we get

$$\left( \mathfrak{T}_{\alpha}^\ell \left[ \mathfrak{T}_{\alpha, \beta, \vartheta}^{q, \delta, \iota} f \right] \right)(x) = \int_a^x (x-u)^{\ell} (\omega (x-u) ; p) f (u) \, du,$$

(49)

thus, using (15), we get

$$\left( \mathfrak{T}_{\alpha}^\ell \left[ \mathfrak{T}_{\alpha, \beta, \vartheta}^{q, \delta, \iota} f \right] \right)(x) = \left( \mathfrak{T}_{\alpha, \beta, \vartheta}^{q, \delta} \left[ \mathfrak{T}_{\alpha}^\ell \right] f \right)(x).$$

(50)

To demonstrate the second part, we start from the right side of (45), and using (7) and (15), we have
\[
\left( \mathfrak{T}_{a+;q}^{\alpha;\beta;\delta} \left[ \mathfrak{T}_{a+}^\ell f \right] \right)(x) = \int_a^x (x-\lambda)^{\beta} f_{\beta q}(\omega(x-\lambda)^{\delta}; p) \left[ \mathfrak{T}_{a+}^\ell f \right](\lambda) d\lambda
\]
\[
= \int_a^x \left( (x-\lambda)^{\beta} f_{\beta q}(\omega(x-\lambda)^{\delta}; p) \left( \frac{1}{\Gamma(\ell)} \int_a^\lambda (\lambda-u)^{\ell-1} f(u) du \right) \right) d\lambda
\]
\[
= \int_a^x \left( \frac{1}{\Gamma(\ell)} \int_a^\lambda (\lambda-u)^{\ell-1} (x-\lambda)^{\beta} f_{\beta q}(\omega(x-\lambda)^{\delta}; p) f(u) du \right) d\lambda.
\]

By interchanging the order of integration and using (14), we obtain
\[
\left( \mathfrak{T}_{a+;q}^{\alpha;\beta;\delta} \left[ \mathfrak{T}_{a+}^\ell f \right] \right)(x) = \int_a^x \frac{1}{\Gamma(\ell)} \int_a^x (x-\lambda)^{\beta} (\lambda-u)^{\ell-1} f_{\beta q}(\omega(x-\lambda)^{\delta}; p) d\lambda \times f(u) du.
\]

Setting \(x-\lambda = \rho\), we have
\[
\left( \mathfrak{T}_{a+;q}^{\alpha;\beta;\delta} \left[ \mathfrak{T}_{a+}^\ell f \right] \right)(x) = \int_a^x \frac{\rho^\beta}{\Gamma(\ell)} \int_0^{x-a} (x-u)^{\ell-1} f_{\beta q}(\omega(x-u)^{\delta}; p) dp \times f(u) du.
\]

Again, by using (7) and applying (23), we get
\[
\left( \mathfrak{T}_{a+;q}^{\alpha;\beta;\delta} \left[ \mathfrak{T}_{a+}^\ell f \right] \right)(x) = \int_a^x (x-u)^{\beta} f_{\beta q}(\omega(x-u)^{\delta}; p) f(u) du.
\]

Finally, using (15), we obtain
\[
\left( \mathfrak{T}_{a+;q}^{\alpha;\beta;\delta} \left[ \mathfrak{T}_{a+}^\ell f \right] \right)(x) = \left( \mathfrak{T}_{a+;q}^{\alpha;\beta;\delta} \left[ \mathfrak{T}_{a+}^\ell f \right] \right)(x).
\]

Thus, (50) and (55) complete the desired proof of (45).

4. Concluding Remark and Discussion

The newly defined integral operators involving the extended generalized Bessel-Maitland function is investigated here. Various special cases of the paper’s related results may be analyzed by taking appropriate values of the relevant parameters. For example, as given in remarks (i) and (ii), we obtain the undeniable result due to Gauhar et al. [19, 20]. For a number of other special cases, we refer to [21] and leave the findings to interested readers.

Data Availability

No data used to support the study.

Conflicts of Interest

The authors declare no conflicts of interest.

Authors’ Contributions

All authors contributed equally to the present investigation. All authors read and approved the final manuscript.

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