Malaya J. Mat. 4(3)2016 443-443

Malaya Journal of Matematik

MJM an international journal of mathematical sciences with computer applications...

www.malayajournal.org

ISSN : 2319-3786

Erratum: Certain properties of a subclass of harmonic convex functions of complex order defined by Multiplier transformations-Malaya J. Mat. 4(3)2016, 362-372

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In the paper entitled Certain properties of a subclass of harmonic convex functions of complex order defined by Multiplier transformations- Malaya J. Mat. 4(3)2016, 362-372, the presentation of definition of modified Multiplier transformation of harmonic function $f = h + \overline{g}$ as given below.

$$I_\gamma^0 f(z) = D^0 f(z) = h(z) + \overline{g(z)} \tag{1}$$

$$I_\gamma^1 f(z) = \frac{\gamma D^0 f(z) + D^1 f(z)}{\gamma + 1} \tag{2}$$

$$I_\gamma^n f(z) = I_\gamma^1 (I_\gamma^{n-1} f(z)),\ (n \in N_0) \tag{3}$$

$$I_\gamma^n f(z) = z + \sum_{k=2}^{\infty} (\frac{k+\gamma}{1+\gamma})^n a_k z^k + (-1)^n \sum_{k=1}^{\infty} (\frac{k-\gamma}{1+\gamma})^n \overline{b_k z^k}. \tag{4}$$

Also if f is given by (1) then,

$$I_\gamma^n f(z) = f \widetilde{*} \underbrace{(\phi_1(z) + \overline{\phi_2(z)}) \widetilde{*} ...... \widetilde{*} (\phi_1(z) + \overline{\phi_2(z)})}_{n-times} = h * \underbrace{(\phi_1(z) * ... (\phi_1(z)}_{n-times} + \overline{g + \underbrace{(\phi_2(z) * ... (\phi_2(z)))}_{n-times}}, \tag{5}$$

where $*$ denotes the usual Hadamard product or convolution of power series and

$$\phi_1(z) = \frac{(1+\gamma)z - \gamma z^2}{(1+\gamma)(1-z)^2},\ \phi_2(z) = \frac{(\gamma-1)z - \gamma z^2}{(1+\gamma)(1-z)^2} \tag{6}$$

is taken from the article by Yasar and S. Yalçin [1].

References

[1] E. Yasar and S. Yalçin, Certain properties of a subclass of harmonic functions, *Appl. Math. Inf. Sci.*, 7(5)(2013), 1749-1753.

Received: July 10, 2016; *Accepted*: July 17, 2016

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