ON CERTAIN FAMILIES OF ANALYTIC FUNCTIONS WITH NEGATIVE COEFFICIENTS

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Abstract

We introduce the subclass $T_j(n, m, \lambda, \alpha, \beta)$ of analytic functions with negative coefficients defined by salagean operators D^n and D^{n+m}. In this paper we give some properties of functions in the class $T_j(n, m, \lambda, \alpha, \beta)$ and obtain numerous sharp results including coefficient estimates, distortion theorems, closure theorems and modified Hadamard products of several functions belonging to the class $T_j(n, m, \lambda, \alpha, \beta)$. We also obtain radii of close to convexity, starlikeness and convexity for the functions belonging to the class $T_j(n, m, \lambda, \alpha, \beta)$ and consider integral operators associated with functions belonging to the class $T_j(n, m, \lambda, \alpha, \beta)$.

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Key Words : *Analytic, salagean Operator, Modified Hadamard product, Negative coefficients.*