International J. of Math. Sci. & Engg. Appls. (IJMSEA) ISSN 0973-9424, Vol. 9 No. I (March, 2015), pp. 211-222

## ON SOME SUBCLASSES OF MULTIVALENT FUNCTIONS ASSOCIATED WITH FIXED SECOND COEFFICIENT AND APPLICATIONS OF DIFFERENTIAL SUBORDINATION

## C. SELVARAJ<sup>1</sup> AND S. STELIN<sup>2</sup>

Department of Mathematics, Presidency College, Chennai - 600 005, Tamil Nadu, India Department of Mathematics, Tagore Engineering College, Vandalur, Chennai-600 127, Tamil Nadu, India

## Abstract

In this paper we obtain certain results on multivalent functions, as an application of the principle of subordination, with fixed second coefficient. The influence of the second coefficient of *p*-valent functions is realized in the results obtained.

 $Key \ Words: \ Convex \ p-valent, \ Starlike \ p-valent, \ Fixed \ second \ coefficient, \ Fixed \ initial \ coefficient, \ fixed \ fixed$ 

 $Differential\ subordination.$ 

AMS Subject Classification : Primary 30C80, Secondary 30C45.

© http://www.ascent-journals.com

\_\_\_\_\_